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C O N T E N T S

FOREIGN DIRECT INVESTMENT (FDI) IN ROMANIA. EMPIRICAL EVIDENCE USING RESTRICTED AND UNRESTRICTED ECM MODELS

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Abstract
This article examines the FDI in Romania using the autoregressive distributed lag model (ARDL) compared with conventional (error correction model) ECM. The results based on the bounds testing procedure implemented by Pesaran in 2001, confirm that a stable, long-run relationship exists between FDI and GDP, trade and labour in Romania. Our results also reveal that after applying the ARDL model we obtain the same results of long run association as in applying the conventional ECM models.

Keywords*: FDI, ECM model, ARDL model*

Jel classification*: C50, E27, F21*

1. Introduction

Two significant periods are to discuss about for Romania, as regarding the FDI story. The first one includes nearly the whole 90ies decade. It was a period of what is today called insignificant FDI and investors; the other was the opposite and the year 2000 of it was conclusive, together with contemporary development. FDI was also more tigthly connected to home investments. Top multinationals world-wide were finally present in Romania as well and Romania's FDI-related landscape radically changed (Andrei, 2008). Then, ten years later, in 2009 and next 2010 the FDI inflow changed once more, but this time in the negative way due to crisis, but maybe not only.

Back to the 2003-2010 years interval, the Romania's FDI inflow met a relatively stable growth up to 2004, then speeded up on 2004-2007, as concomitantly with EU's important two waves extension. Actually, the country succeeded on multinationals' interest later one decade later than its neighbour countries. In 2004-2005 the country that had missed FDI ten years earlier was receiving the highest inflow in the region. It was a moment in which FDI inflow and economic growth were really going hand in hand for Romania (Andrei 2008). But there also was the moment of EU and especially Euro-zone member investor countries' domination in Romania. However, there wasn't any individual investor

country's domination in this case (Andrei 2002-2010). Then the 2010 decline of FDI (after having performed 2004, 2006 and 2008 peaks) was reducing the inflow by some 22%, as compared to the previous 2009. Then, FDI seem to meet a certain recovery in recent years 2011 and 2012, but the heights of before crisis are yet expected to come back.

Figure 1: FDI evolution 1991-2012
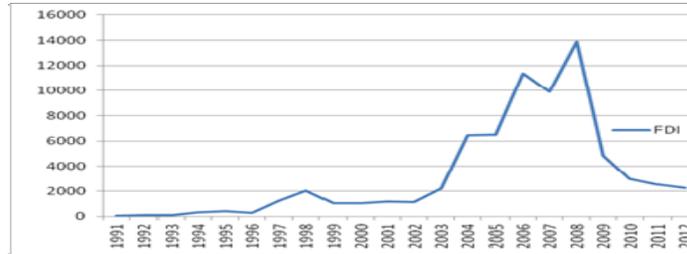
See nearly the same for GDP growth in Figure 2 about the end of period:

Figure 2: Real GDP growth evolution 1991-2012
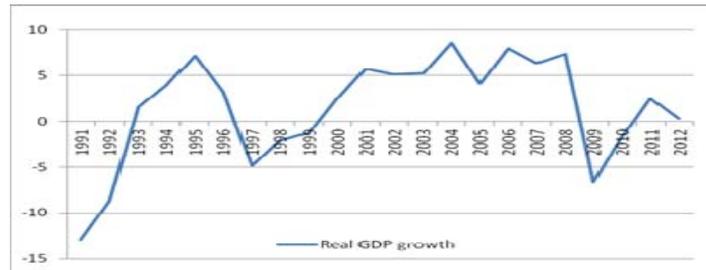
As a result for the same 1991-2012 interval the FDI/GDP ratio that obviously varies:

Figure 3: FDI/GDP and real GDP growth 1991-2012
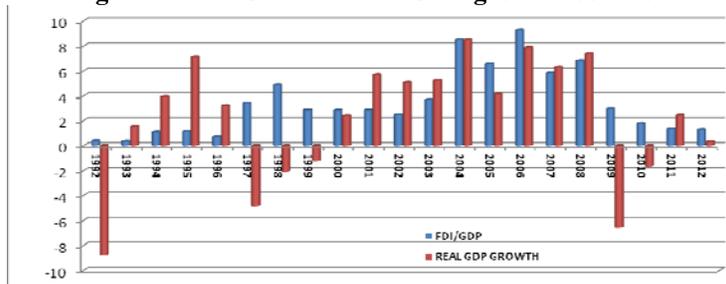
And apart from the above imports and exports annual average growth rates in Figure 4:

Figure 4 : Imports, exports on annual average growth rates 1991-2012
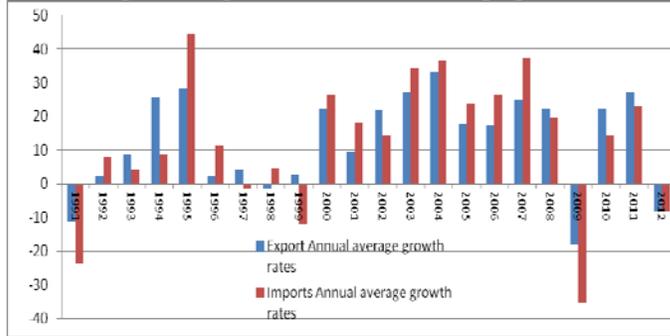
Also, in 2012[1], the EU **labor market** was still driven by the economic crisis. Key figures for the EU did not improve: they either continued to show negative trends (i.e. rising unemployment), or remained relatively stable in relation to the year before (i.e. employment level). In addition, developments in the labor market did not affect Member States in the same way or to the same extent. As a result, the differences between EU Member State investors increased.

Labor force total in Romania was last measured 10.200 (thousands) in 2012, according to the World Bank. Total labor force comprises people ages 15 and older who meet the International Labor Organization definition of the economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed or economically inactive.

Figure 5: Evolution of total labor force (absolute value in thousands)
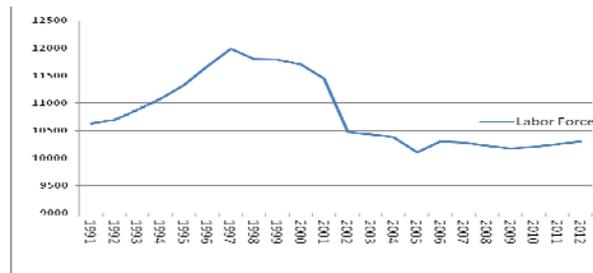
2. Data definitions and sources:

This paper uses annual time series data for FDI (as related to GDP), real GDP growth, Export (annual average growth rates), Imports (annual average growth rates) and labour force (annual growth). All data are collected from UNCTAD

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[1] *According to Eurostat , 2014*

statistics on 2014 that would also ensure relevance and substance of data [20], [21], [22].

3. Results - Augmented Dickey-Fuller test statistic for unit roots

Before running ARDL, it is important to know the stationary status of all variables to determine the order of integration; this is needed to ensure that no one of the variables is I (2) because in this case this model will collapse.   Usually,   most economic variables are non-stationary. It is therefore important for the research to test for stationary before generalizing any relationship. So we are starting to test for the presence of unit roots using the Augmented Dickey-Fuller tests [9]. The test reveals that all the variables are non-stationary.

Figure 6: non stationary data
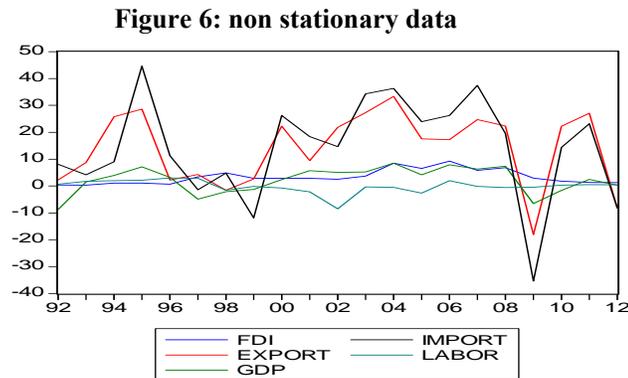
The Augmented Dickey-Fuller (ADF) test was used for testing the stationarity of data. This is the basic test for checking the unit root in the series. There are three types of different conditions in the ADF test which could be applied to any time series. First, random process includes no intercept (c) and trend (t). Second, random process includes intercept (c) but no trend (t). Third, random process includes intercept (c) and trend (t). It was found that second condition will be most suitable for the data series in this study. So, unit root test applied first on non-stationary data reveals that series had unit roots and need to be differenced. After first difference all the variables become stationary as Augmented Dickey-Fuller test statistic show below. The value of ADF test for differenced data is lower than test critical values for 1%, 5% and 10 % significance level a p value is less than 5% for all the variables which prove the absence of unit roots in series.

Figure 7: differenced and stationary data
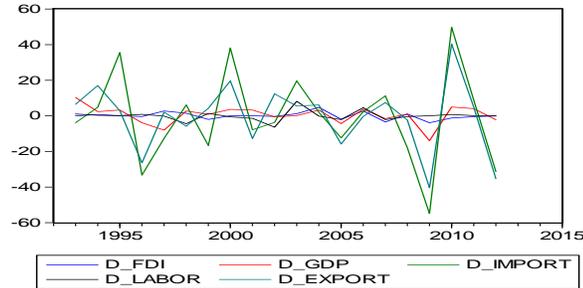
4. Bound testing Autoregressive distributed lag model (ARDL)

Bound testing Autoregressive distributed lag model (ARDL) or Unrestricted Error Correction Model (UECM) has some special advantage over other relevant alternatives. Firstly, this approach is simple to analyse and to run as it allows to OLS once lag order can be identified. Secondly, it can be run irrespective to the order of the variables –either I (0) or I (1). Finally, for small or finite sample data it is relatively efficient method but the limitation of this method is that this procedure will collapse in the presence of I(2) series. In this approach, the long run relationship and the short run dynamic interactions among the variables can be tested using ARDL or bound testing estimating method. The model for this approach has the following form:

$$\Delta yt = \beta 0 + \Sigma \ \beta i\Delta yt\text{-}i + \Sigma\gamma j\Delta x1t\text{-}j + \Sigma\delta k\Delta x2t\text{-}k + \Sigma\delta k\Delta x3t\text{-}k + \Sigma\delta k\Delta x4t\text{-}k + \theta 0yt\text{-}1 + \theta 1x1t\text{-}1 + \theta 2 \ x2t\text{-}1 + \theta 3 \ x3t\text{-}1 + \theta 3 \ x3t\text{-}1 + et \ \ ; \ \ \ (I)$$

This "unrestricted" error-correction model (ECM) will be a particular type of ARDL model. We can see from the form of the generic ARDL model given in equation (1), that such models are characterised by having lags of the dependent variable, as well as lags (and perhaps the current value) of other variables, as the regressors. In our case there are five variables that we are interested in modelling: a dependent variable, FDI, and four other explanatory variables, export, import, labour and Gdp. More generally, there will be (k + 1) variables - a dependent variable, and k other variables. According to general form of ARDL model, we can estimate the equation:

$$D\_FDI = C(1) + C(2)*FDI(\text{-}1) + C(3)*GDP(\text{-}1) + C(4)*IMPORT(\text{-}1) + C(5)*EXPORT(\text{-}1) + C(6)*LABOR(\text{-}1) + C(7)*D\_FDI(\text{-}1) + C(8)*D\_GDP(\text{-}1) + C(9)*D\_IMPORT(\text{-}1) + C(10)*D\_EXPORT(\text{-}1) + C(11)*D\_LABOR(\text{-}1) \ \ \ \ \ \ (II)$$

Substituted Coefficients:

D_FDI = 0.8396460399 - 0.5853343992*FDI(-1) - 0.5500832185*GDP(-1)
+ 0.2814084076*IMPORT(-1) - 0.1010625384*EXPORT(-1) -
0.4609606387*LABOR(-1) - 0.1178460332*D_FDI(-1) -
0.09192556544*D_GDP(-1) - 0.1338046687*D_IMPORT(-1) +
0.1104144066*D_EXPORT(-1) + 0.4440361292*D_LABOR(-1)
(III)

The value of coefficients of FDI (-1), GDP (-1), Import (-1) and Export (-1)
are negative and significant, which is a condition for long run association between
the dependent FDI and independent variables. Also on the short run, import and
labour coefficients are significant.
We obtained the long run coefficients but we have to find the long run and
short run effects (equilibrium effects). We will normalize the equation (II), on FDI
dividing all the coefficients of independent variable by the dependent FDI (-1).

Long run effects	- (c3/c2) = 0, 9397	- (c5/c2) = 0, 1726	- (c6/c2) = 0, 7875
Short run effects	- (c9/c2) = 0, 2285	- (c11/c2) = - 0,7586	-

Validity of the model is proven by tests applied on residuals. Residuals
series must be normally distributed, with no serial correlation and homoskedastic.
We will use the LM test to test the null hypothesis that the errors are independent
as series, against the alternative hypothesis, and we obtain that there is no serial
correlation of the residuals for 10% significance level(p= 0,06.) Also to test the
normal distribution of the residuals, we used Jarque Berra test and with the p value
of 0, 59 we can accept the null hypothesis of normal distribution.

We also check for heteroskedasticity of the errors through Breusch-Pagan-Godfrey
test and the results of p= 0, 85 allow us to accept the null hypothesis of
homoscedasticity. Our results also reveal that after incorporating the CUSUM and
CUSUM of squares tests, ARDL model is stable.

Figure 8.1: CUSUM test
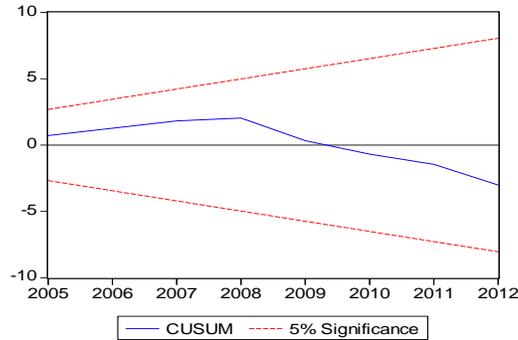
Figure 8.2: CUSUM test of squares
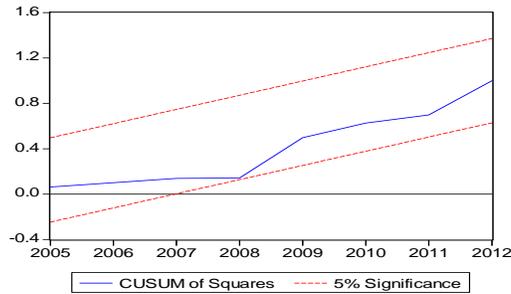
Before proceeding to the Bounds we plotted the unrestricted ECM

Figure 9: Actual / Fitted / Residuals- Graph
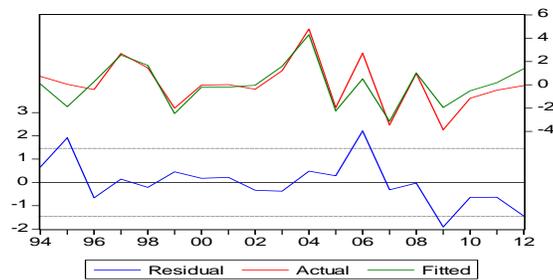
There are two steps to be taken for implementing the ARDL approach of co-integration. First, we need to test the existence of long run relationship among the variables in the system where null hypothesis is to have no cointegration or no long run relationship among the variables in system, and the alternative hypothesis is the existence of co-integration. According to Pesaran, [16], [17], [18], F-statistic value is not standard, and suggests different critical values for this system. For each cases there are two critical values-one upper bound and a lower bound considering

the integrated order of the variables, either I(1) or I(0) respectively. If the computed F-statistic is higher than the appropriate upper bound of the critical values, the null hypothesis of no integration is rejected; and if it is less than the lower bound then, null cannot be rejected; if it is within this two bounds then the test is inconclusive regarding integration between or among the variables.

Table 1: Wald test for long run association between variables

Wald Test:			
Equation: ARDL			
Test Statistic	**Value**	**df**	**Probability**
F-statistic	**5.328779**	**(4, 8)**	**0.0217**
Chi-square	**21.31512**	**4**	**0.0003**
Null Hypothesis Summary:			
Normalized Restriction (= 0)	Value	Std. Err.	
C(2) - C(6)	-0.12437	0.225256	
C(3) - C(6)	-0.08912	0.287178	
C(4) - C(6)	0.742369	0.226019	
C(5) - C(6)	0.359898	0.199188	

For our data, we perform a "Bounds Test" to see if there is evidence of a long-run relationship between the variables. Under Wald test we reject null hypothesis H0: $c2=c3=c4=c5 = 0$ and we accept H1 of cointegration between variables.

For $k = 4$ (four dependent), we are testing the asymptotic critical value bounds for the F-statistic for the existence of a levels relationship (case III: unrestricted intercept and no trend page 300, Pesaran et al. 2001). We haven't constrained the intercept of our model, and there is no linear trend term included in the ARDL. The lower and upper bounds for the F-test statistic at the 10%, 5%, and 1% significance levels are represented in the table:

Table 2: Bounds Test

Critical value	0.100		0.050		0.025		0.010	
Integration degree: I(0)/I(1)	Lower Bound Value	Upper Bound Value	Lower Bound Value	Upper Bound Value	Lower Bound Value	Upper Bound Value	Lower Bound Value	Upper Bound Value
Bound values	2.45	3.52	2.86	4.01	3.25	4.49	3.74	5.06

Source: "Bounds testing approaches to the analysis of level relationships", Pesaran et al.2001, page 300

As the value of our F-statistic 5.38, exceeds the upper bound at the 5% significance level, we can conclude that there is evidence of a long-run relationship

between the two time-series (at this level of significance or greater). We also apply the Wald test in order to test if the lags of independent variables could be "0" The null hypothesis H0: $c_7=c_8=c_9=c_{10}=c_{11}=0$ is rejected and this fact demonstrate that there is also a short run association between FDI and the rest of the variables.

Table 3: Wald test for short run association between variables

Wald Test:			
Equation: ARDL			
Test Statistic	**Value**	**df**	**Probability**
F-statistic	**3.549862**	**(5, 8)**	**0.0549**
Chi-square	**17.74931**	**5**	**0.0033**
Normalized Restriction (= 0)		Value	Std. Err.
C(7)		-0.11785	0.208959
C(8)		-0.09193	0.124721
C(9)		-0.13381	0.052834
C(10)		0.110414	0.063965
C(11)		0.444036	0.15273

5. Conditional ECM (error correction model)

In order to compare the modern procedure of ARDL with the traditional ECM we will follow the two steps procedure:

  a) we estimate the long-run equilibrium relationship between the variables:
  $$y_t = \alpha_0 + \alpha_1 x_{1t} + \alpha_2 x_{2t} + v_t \quad ; \quad \text{estimate by OLS} \quad \text{(IV)}$$
  b) we estimate the usual ECM:
  $$\Delta y_t = \beta_0 + \Sigma\, \beta_i \Delta y_{t-i} + \Sigma \gamma_j \Delta x_{1t-j} + \Sigma \delta_k \Delta x_{2t-k} + \varphi z_{t-1} + e_t$$
  $$\text{where } z_{t-1} = (y_{t-1} - a_0 - a_1 x_{1t-1} - a_2 x_{2t-1}), \quad \text{(V)}$$

For our data, we first estimate the levels model, by OLS, and construct the residuals series, RESIDECM1 (-1) in order to fit a regular (restricted) ECM:
D_FDI = C(1) + C(2)*D_GDP(-1) + C(3)*D_EXPORT(-1) + C(4)*D_IMPORT(-1) + C(5)*D_LABOR(-1) + C(6)*RESIDECM1(-1)
(VII)

Substituted Coefficients:
D_FDI = 0.2226592587 - 0.2418564386*D_GDP (-1) + 0.01764625981*D_EXPORT (-1) + 0.01382678029*D_IMPORT (-1) + 0.1913166855*D_LABOR (-1) - 0.5176759587*RESIDECM1 (-1)

The coefficient of the error-correction term, RESIDECM1 (-1), is negative (-0, 51) and significant (p value =0.0186). This is what we expected if there is cointegration between FDI, export, import, and labour and Gdp. The magnitude of this coefficient implies that nearly 51% of any disequilibrium between FDI and the rest of variables is corrected within one period (one year).Our restricted ECM plot looks like:

Figure 10: Actual / Fitted / Residuals- Graph
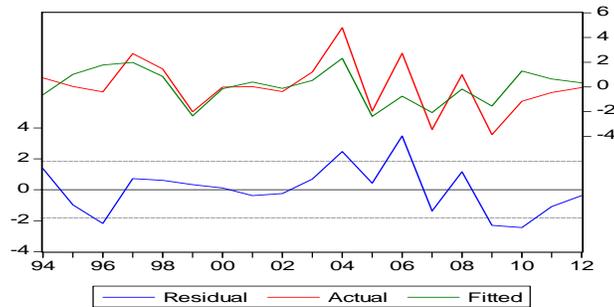
Validity of the model is proving by tests applied on the residuals. Residuals series must be normally distributed, with no serial correlation and homoskedastic. We will use the LM test to test the null hypothesis that the errors are serially independent, (p=0, 42) against the alternative hypothesis, and we obtain that there is no serial correlation of the residuals.

Also to test the normal distribution of the residuals, we used Jarque Berra test and with the p value of 0, 85 we can accept the null hypothesis of normal distribution. We also check for heteroskedasticity of the errors through Breusch-Pagan-Godfrey test and the results. We can accept the null hypothesis of homoscedasticity (p=0,81).

Conclusions:

The purpose of this paper was to analyse and test relationship among certain economic indicators in Romania by using restricted ECM models and ARDL approach of cointegration introduced by Pesaran. This study contributes to clarify cointegrating between foreign direct investment, economic growth, exports, imports and labour force in Romanian case. This paper identified that there is strong statistical indication of long run relationship between foreign direct investment and the rest of the variables in both models restricted and unrestricted ECM models.

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ECONOMIC CONVERGENCE, PART OF ADVANCED EUROPEAN INTEGRATION

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Abstract

In 1961, in the earlier stage of the European integration, Bela Balassa proposed a five successive phase model about it as a foresight. Today, the half century experience on integration and corresponding literature issued just lets us see rather two big phases (instead of five). The one would be the incipient integration, that came to enlarge the economic openness and internationalization and shaped on: (i) free trade area (FTA) and (ii) customs union; the other would be the advanced integration, in which internationalization would be replaced by the unique-common market and other two commandments would replace or just reshape the older FTA and customs union into: (iii) economic convergence and (iv) optimal currency area. This paper limits its focus on the economic convergence, its current description-analysis in the literature and condition inside the EU.

Keywords: Integration; European type integration; incipient & advanced integration phases; customs union; economic convergence; monetary union; fiscal union; optimum currency area

Jel classification: A10; B15; B25

1. Definition and perception

There are three definitions of the economic convergence in the literature [10]: (i) *synchronization* of business cycles – against *asymmetry shocks*[1]; (ii) *similarity of economic structures* – e.g. weight of agriculture and industry in total GDP; (iii) *similarity of productivity and non-tradable weight* in the total economy. [14, p.6] completes such portraying through considering the internal distinction among: *real, nominal* and *institutional* types of convergence – of which the *economic* convergence stops to the first two of these.

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[1] This is a term rather strongly used for the other concept approached in this paper -- i.e. the *optimum currency area* --, but this remark is for once more illustrating the proximity between these two concepts in the today understanding.

Equally through its conceptual approaching, convergence equalizes a *structural similarity* between national economies [8[1], pp. 17-19], assumes a list of *quantifying indicators[2]* [8p. 19] and lays in the proximity of other (economic) terms like: similitude, harmonizing, complementarity and even redundancy [8 p. 21].

The same literature indicates three *perceptions* of the economic convergence. The one points on the 'market forces' and stays related to the neoclassical theory of economic growth – that will be approached below. The second one in line considers rather a 'non-convergence' finding of the contemporary era – and the last chapter of this paper will also detail about it. Thirdly and finally, convergence is seen as possible on the competition market, but the difference from the neoclassic view here consists in the presence of *policies* instrumented (developed) for convergence implementing and presumably appropriate [14, p.7].

2. Classification

The α type convergence sees what is meant by *structural similarity* between economies. This type of convergence is considered able to absorb the *asymmetric shocks[3]*, but equally insufficiently clarified as in theory – i.e. what kind of structural similarity is about? – and in methodology – e.g. what about economies of different dimensions ? Are regional non-similarities also able to induce convergence [8, p. 26 and the following]?

The β type convergence is pretty different story. It focuses on the link between the 'classical' and qualitative view on the convergence dynamic, on the one hand, and 'catching-up' type processes – that display different dynamics on shorter terms in favour of less developed and developing countries – on the other. As in its larger sense, the β convergence regards all about economic 'speeds', meaning that it even starts from the dynamic *of a national economy towards its own equilibrium,* as the primary definition of convergence.

The same type of convergence reaches its own regression equation and coefficient [27, pp. 58] and breaks down into: β *-absolute -- higher growth for developing economies, as compared to the developed ones;* β *- group --* β absolute**,** plus considering countries' grouping on criteria of similarity in industrial technologies, institutions and economic policies applied; β **-conditioned --** the previous, plus additionally considering the vector of determinant factors of growth.

Criticism for this zone of convergence classifying comes from other several analyses. [24] here accuses the 'Galton type error' related to self-correlation statistics. [5]pretend that even the β type convergence, in its literal definition, might see itself wrongly reflected by its found coefficient and [11] argues that it can be well replaced by the *variation coefficient of per capita GDP* within the region. [5, pp. 57-58] suggest that this above three (sub) types of the β convergence would actually base on the need created for such an internal

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[1] And on-line: http://www.edinga.ro/files/studii/7_ro.pdf
[2] See also below details.
[3] As once more related to the optimum currency area (OCA).

distinction, as directly, and notice, as the basic truth, that the β convergence doesn't prove able to replace another type, the *σ type convergence* – that is the similarity regarding per capita GDP and directly related economic indicators, the 'catching-up' process equally considered [8, pp.. 27-28].

As concretely, the *σ type convergence* calculates through the per capita GDP *coefficient of variation[1]* [11] or *standard deviation* ([6, pp. 283-287) and includes two series of indicators for value dispersion (from average values): the (a) *simple* ones -- basic dispersion and amplitude – and (b) *synthetic* ones – linear and squared average dispersions, variation coefficient [22 pp. 1-4]. Note that such negative assessment that all the σ coefficients basically develop clears the way for assessing 'catching-up' as ' *the higher the dispersion, the higher its speed, the more positive evolving throughout de facto conversion'* (i.e. the β-type conversion, actually the per capita GDP/ [14, p. 14 and 27].

The other two types of convergence in debate are ∂ and γ types [8, pp. 27-28]. The previous regards the similarity of *real convergence* factors [10, p. 4]. These factors do group into third levels. The basic one sees just the common currency that countries trade in-between [13]. The second one comprises "common language(s), colonial history, remaining political links". The "third category of factors" mean what [10, p. 4] calls "accidents of history" …"that influences both currency choices and trade links".

Finally, the latter γ type convergence regards the business cycles synchronizing. [8, p. 28] generally agrees the literature's arguing about its essential role in 'turning the asymmetric into symmetric shocks', bout slightly doubts its long-life in practical terms.

Scheme-Tabel 1. Types of real economic convergence

TYPE	SUB-TYPE	BRIEF DESCRIPTION
α	X	structural similarity between economies.
β	X	links between: / 'classical' and qualitative view on the convergence dynamic and /'catching-up' type processes (that display different dynamics on shorter terms in favour of less developed and developing countries)
X	*β – absolute*	higher growth for developing economies, as compared to the developed ones
X	*β – group*	*β* absolute, plus considering countries' grouping on criteria of similarity in industrial technologies, institutions and economic policies applied
x	*β conditioned*	the previous, plus additionally considering the vector of determinant factors of growth.

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[1] *Transversal*, but also *chronological* data series are here used [14, pp. 21-22].

σ	X	calculates through the per capita GDP coefficient of variation
∂	X	regards the similarity of *real convergence* factors (Frankel 2004, p. 4). These factors do group into third levels. The basic one sees just the common currency that countries trade in-between (Glick & Rose 2001).
γ	x	regards the business cycles synchronizing. Dinga 2008, p. 28) generally agrees the literature's arguing about its essential role in 'turning the asymmetric into symmetric shocks', bout slightly doubts its long-life in practical terms.

3. Real convergence criteria

The description regarding the nominal convergence and its Maastricht (1992) criteria won't be here repeated[1]. And unlike [8], I find the EU's (actually, ECB's) absence from any debate about real convergence criteria enough consistent with the Organization's general attitude on this topic. I here remind the *nominal* convergence criteria and so the basic distinction between these and the *real convergence criteria* for the reason of mentioning [8, pp. 36-39]'s contribution to drawing a list of what the author calls *inter-conditioning* criteria between the *nominal* and *real* groups of them. This is what the author calls 'nominal-real transmission channels' and three such general indicators are here enumerated.

The *real interest rate* [8, pp. 36-37] deals with components of both the aggregate demand (consumption, government expenditure) and supply (investments[2]). Secondly, the *inflation rate* is the way of affecting (reducing, when inflation rises) the money purchasing power, so the aggregate demand, but indirectly the aggregate supply, as well. And thirdly, the *exchange rate* takes a behaviour similar to the one of wages – as nominal and real, similarly to the exchange rate --, the difference made consisting in the proximity of the exchange rate to the openness degree of the economy [8, p. 37].

Lastly, Table 2 enumerates the *real convergence criteria* by individual and groups [8, pp. 45-47], then the author organizes them into three *'classes'* of criteria [8, pp. 48-49], but these classes do not match the previous list of individual criteria.

Scheme-**Table 2   Real convergence criteria**

GROUP	ITEM	OF WHICH:	NOTATION
(a)	general indicators		
		population	P
		active population	Pa
		people employed	EMP

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[1] See my opinion about in [1] that these Criteria didn't arise from any scientific debate that the European Monetary Institute (EMI), its following European Central Bank (ECB) or other EU forum would ever largely or publicly propose.

[2] I see investments on the aggregate supply side as arguable.

		average number of employees	EMPav
		on regions and activities	
		GDP- domestic supply	GDPs
		GDP- sources	GDPk
		GDP-distribution	GDPq
		exports	X
		imports	M
		government	G
(b)	revenues & expenditures		
		households' revenue	HR
		gross nominal wages	Wagn
		net nominal wages	Wann
		gross nominal labour costs	LCgn
		households' expenditure	HE
(c)	others		
		net savings	Sn
		domestic demand	Dd
		domestic absorption	Ad
		direct fiscal pressure	DFP

Source: *[8, pp. 45-47]*

The class of *(i)* '***catching-up'*** criteria includes items like average domestic supply, openness degree of the economy and average gross wage. The class of *(ii)* ***sustaining*** criteria includes: the net savings rate, labor productivity in commercial sectors, GDP-distribution and the sold of the current account of the external balance of payments. Lastly, the *(iii) resilience* class of criteria contains items like national revenue on activities, domestic absorption, employment rate and government.

4. Criticism, controversies and other aspects

As the above title suggests, this paragraph belongs to debatable aspects, as update. So, there will be about three directions of studies drawn on the economic convergence concept so far in the same literature.

4.1 Neoclassics, Solow and the 'anti-convergence'

This aspect might well have had its place as introduction of all the above descriptions, due to its historical and bibliographical dimensions. Roughly, studies of convergence did start in the mid 1950s in the neoclassical zone of thinking. [29] has his own (famous) theory that bases the today convergence description, as both economic equilibrium reached and 'catching-up' processes: *the same **saving-investment rate** help growth and development at different degrees – i.e. it is*

converse to the capital stock that this rate relates to. In other words, the capital stock agglomeration lowers the returns to investment, as much as less developed economies or those destructed by wars and other external causes, on the opposite, are, conversely, able to acquire higher returns on the same investment made. The Solow's model's restrictions are those of: (a) equal saving-investment rates for all countries and (b) general decreasing returns on capital stock. Plus, a 'steady state' to be reached by all economies – when zero growth rate of capital stock related to the unit of labour – is also concluded.

[19] illustrates the Solow's theory of growth at least by the extreme post-war cases of Germany and Japan, with their 'catching-up' developed economies, but many other authors share a fully different position than that. [30] founds that empirics never confirmed this neoclassic theory and others point to the *enlarging development gaps,* as a contrary world-wide trend, as enough obvious. The poor countries of the Third World see themselves forced to internationally specialize in basic product(ion)s, the international factors' mobility closed stops convergence trends as well and the revenue multiplier plays for reach countries and equally against the poor and developing areas [21;30;16] all of these as a true 'anti-convergence' phenomenon of the contemporary era [14, pp. 7-15]. New and newly-based models point to the 'out of use' for the neoclassic thinking on growth-convergence in diverse ways – e.g. associating to the physical capital or to β-σ parameters like 'convergence speed' for the negative value of parameters, or 'convergence-divergence' for value dispersion [2; 18 /pp. 2-42; 26].

The current literature in the area sees itself splitting into pros and cons, but not only. On the pros side, the ones reconsider growth motors like savings and growth of population [20; 15], others play the same for capital and labour mobility [3]. On the opposite side, authors rather see divergence between large groups of countries, versus some existing 'clubs of convergence' [4; 9; 25]. A rather third position belongs to authors like [12] : convergence might be real in practice, but for countries that prove some similarities 'ab initio' – or, this is what there has already been called above the *conditioned* convergence, but also might be called 'multi-polar' convergence.

4.2 The Balassa-Samuelson effect

This is a controversy face to the convergence issue made by a theory actually shared by a longer series of authors[1]. The **Balassa-Samuelson effect** predicts that *countries experiencing productivity increases would meet price increases* meanwhile [10, p. 14]. The purchasing power parity (PPP) proves productivity-based and this effect is double-based: first, the so-called "Penn-effect" sees the (same) goods' price higher in the richer, than in poorer countries; second, the so-called "Balassa–Samuelson hypothesis" sees all economies producing both tradable and non-tradable goods and the productivity level and rates stay more variable for tradable zone all over. In such an order, immediate causes of this effect do easily

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[1] See the Ricardo–Viner–Harrod–Balassa–Samuelson–Penn–Bhagwati effect $[17; 28,$ p. 201].

multiply: variation of productivity among countries for both tradable and non-tradable sectors; variation of differences in the same productivity between tradable and non-tradable goods within the same country; persistence and weight of the non-tradable sector in the home economy; the direct productivity-incomes correlation; even high transportation costs wherever the good is cheaper. The "Penn-effect" finalized sees the PPP deviations as: *the higher the income, the higher the price level* [7] and [22].

5. Specific developments in the European Union

The EU appeared aware of the about realities from the very beginning – that was why its basic Treaties did associate convergence with *cohesion* [21]. The attractiveness of the area has also presumed as associated to the pressure on labour resources, especially the one from less developed areas. The Maästricht Treaty and moment (1992) took a new and advanced step onto deepening cohesion in a context linked to convergence and growth-sustained development [14, pp. 12-13].

Despite these facts [14, pp. 22-23] concludes some contradictory situation regarding the issues here above debated. The per capita GDP proves rather divergent (i.e. rising σ coefficient) within EU15 during the 1995-2005 interval. On the contrary, a slight convergence trend was proven by EU25 between 2004 and 2005 around EU10. However, the EU25 and EU15 groups display significantly different variation coefficients from each-other. Finally, all three mentioned groups of the EU member countries play on distinct numbers the way that the highest trend to convergence belongs to the less developed countries[1].

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[1] Here including Romania. Despite the author has a not too optimistic conclusion, i.e. for a presumed 4% a year growth for this country, as against 1.8% a year growth for EU25, a common per capita GDP level will get as high as EUR 63,200 in about 57 years from the moment of this study [14, pp. 18-21].

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AN INQUIRY REGARDING THE INFLUENCE OF THE EXPANSION OF INTERNET NETWORKS UPON THE DEVELOPMENT OF THE SOCIO-ECONOMIC ENVIRONMENT

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Abstract

The implementation and expansion of internet networks around the world had a huge impact on the development of the social-welfare of citizens, where the attendance of internet networks are present, and especially on the development of the economic environment at a local, regional and national level. The paper presents an insight of how internet networks expand in different rates around the world but especially in the European Union (EU) by analyzing data available to the general public and interpreting different researches we conducted so far. The complex and dynamic approaches that involves studding the expansion of internet networks plays an important part on further developing new strategies on how to expand new networks at a global level and most importantly how to "standardize" all internet connections worldwide.

Keywords: intelligent systems, social development, internet networks, economic environment

JEL Classification: D00, E00, F20, L86, M16, M21, O11, O12, O31

1. Introduction and literature review

As a consequence of differential economic development around the world, the implementation and expansion of new technologies are much higher in developed economic regions such as Eastern Asia, North America and Western Europe. Thus, the economic development in the field of implementation of new technologies leads to inequalities between rich regions and poor regions.

Due to the recent "birth" of this mean of communication and uncertainty on how the spread of the Internet affects individual or community life, sociological research in this area is less advanced, relative to other areas of social life [7]. Therefore, studies and analyses on the influence of Internet upon individual lives and the way in which the Internet alters both the social structure as well as the capacity of the local communities to understand the social participation of individuals in using the Internet networks are recent ant not relevant enough [1].

Around internet networks are built theories and perspectives that either emphasizes the positive aspects of the Internet and new technologies involving social life or they present the negative issues that involve using the Internet and new technologies.

In this sphere of social effects caused by the Internet networks, namely, the unequal diffusion of information technologies there shall be established the concept of technological and social division [3]. Far from being a unified conceptual and technological notion the inequalities that result from different geographical areas depend on the viewpoint of analyzing the phenomenon.

Today, the Internet represents a technological reality subsumed impetuous to the process of globalization, a force capable of intensifying the knowledge and communication environment on a planetary scale and most importantly it facilitates the interaction between people [5]. In addition, the Internet is becoming a more than a legal reality that its various users can no longer ignore. Whether we are talking about online the relationship between the virtual world that was created and the real problems that we are facing tends to become second nature [6].

Due to the fact that the Internet is a global, interactive, flexible, rich in resources, dynamic, generous information, relatively inexpensive compared with other means of mass communication; and that has opened up new channels of communication, collaboration, social networking, interaction and coordination between users, more and more Internet applications and services have been developed to support the operations and users needs, but also to make it accessible to a more diverse audience [2].

We can identify two distinct perspectives on how to approach the evolvement of the Internet networks, already established through studies and scientific theorizing: the Internet as a communication and information medium and the Internet as a medium of social expression [4]. The two dimensions achieved virtually complete characterization of this area, without being individually sufficient. Thus, what is important to note is that the informatization of everyday life is not reducible only to communication processes, but also the involvement of ICT in more and more activities in all areas of society (professional and domestic, public and private) is having a huge impact on the socio-economic environment.

2. The influence of Internet networks on the socio-economic environment

It is generally accepted by all the researcher in this field of study that the Internet, information and communication technologies were the key elements that have marked the evolution of the last two decades especially the last century, being as important for this millennium, which began as a fundamentally influenced global process of computerization of society by increasing complexity in the use of information technology (IT) and the exponential profile of IT.

The fact that the Internet network is global, interactive, flexible, rich in resources, dynamic and relatively inexpensive compared to other means of mass communication, collaboration, socialization, interaction and coordination between the users, more applications and internet services have been developed to support both users needs and actions, and to make it accessible to an diverse audience.

If the classification of the Internet media was done naturally, following the initial direction for which it was designed, the transformation of the Internet and social media wouldn't been as expansive as we know it today.

Beyond the approaches that we have enumerated previously, the social component of the Internet represents a reality that we are living now and obviously the communication processes is irreducible.

If the magnitude of the Internet networks expansion is currently widely accepted, does the same thing can be said about its importance? Both as a mean of communication (interpersonal and mass) but especially as a "world of people who communicate".

To understand the impact of the Internet on sociology, economics, geopolitics etc. we need to understand first the implications of the widely spared concept of "information society" as well as its implementations, definitions and theories.

The Web and especially Web-sites have become in a short time from their appearance a thriving business and, at the same time, an environment conducive to business development. But as in any environment, competition is becoming increasingly fierce, therefore, mere presence on the Internet is no longer enough to be known and appreciated. Web-sites can be simultaneously considered as products and in the same time commercial sites.

If we consider Web-sites as products and the end-users as costumers, the supply and demand operates the same as in the real world. Moreover the functions of the Internet networks adapts to the needs of everyone, going so far as to anticipating them. What is different from the real environment is that web-sites focus on the product itself, on its functioning and the appearance equally.

In conclusion it is important that, before delivering the final product to the end-users, to follow all stages of marketing and sales strategies where both the form and function of the product ensures the success of the transaction.

3. The access to Internet networks in the European Union (EU) and neighbors countries

In the last decades we have witnessed, in all areas that involve the economic environment, the need to improve the existing technologies and the emergence of new ones, as a result of the natural evolution of things. What

characterizes the internet networks now is represented by the fact that we perceive things in a different manner and obviously this shows the advantages and disadvantages on how people around the world interact with new technologies.

In the 1990s, with the magnitude of which internet networks began to evolve, it has started a new mode on how companies and clients interact, and the results obtained after the implementation of new technologies quantified the potential of information technology (IT) from three different angles:

1. ensuring socially fair distribution of advantages offered by technological progress;

2. improving the efficiency of the administration department from companies and, in general, in all departments;

3. ensuring the possibility of exercising the rights of participation and decision-making for all persons engaged in certain activities.

Figure 1: Internet users (per 100 people) in the EU and neighbors countries
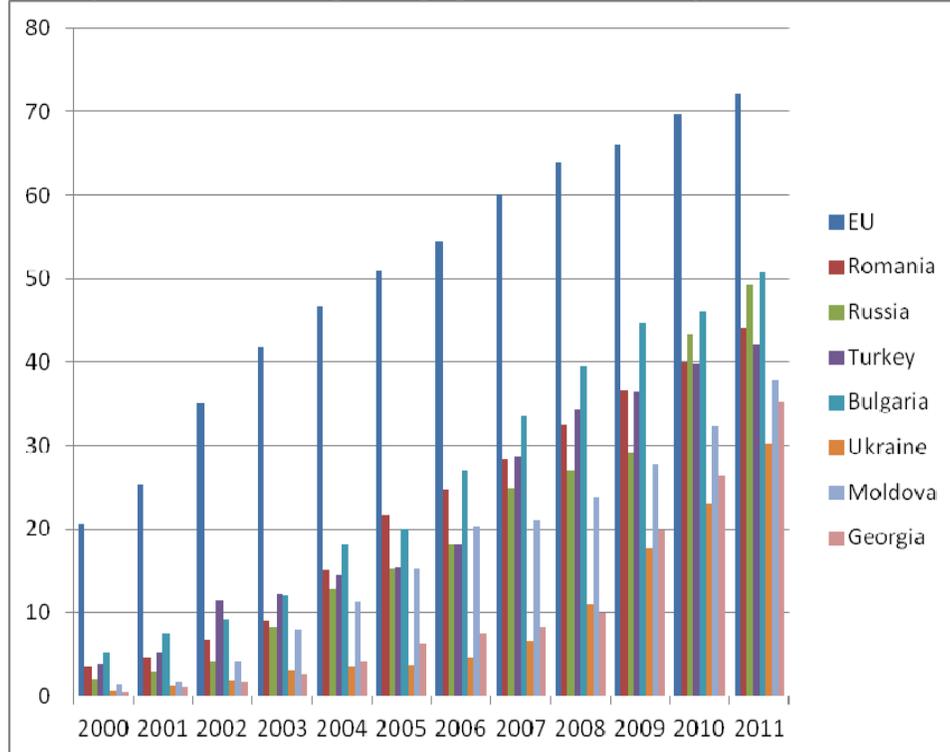
Source: Original representation based on data provided by World Bank Indicators,
http://data.worldbank.org/indicator/IT.NET.USER.P2

As we can see in figure no. 1 the number of internet users has been growing constantly in the last decade. According to the data offered by the World Bank Indicators the development of internet user is increasing year by year from a decade to another decade. Differences between countries are obviously (see fig. 1)

but the increase rate of internet user is developing in the same manner all over the EU and neighbor countries.

The difference between EU countries and other non EU countries are obvious and a preliminary conclusion is that the economic development is not equal all over the EU or other neighbor countries with a very good economic background (example Turkey).

As we correlate the preliminary results of this paper presented previously in our research with the historical background of the countries that we can find in figure no. 1 we can say that the importance of the communist architecture had an immense impact on the evolution of Internet networks. We affirm this because, after our studies, we believe that the expansion of a new internet network is done more easily in a ex-communist country rather in a western country due to the architecture of the houses that people live in. If we have 60 people living in an apartment building and if we had 60 people living in a complex of houses it is more easily to connect apartment building to the internet all in the same time rather than connecting all the houses separately at an internet network.

We consider that the internet networks will expand "their territory" in the next decades in an "explosive" manner due to the fast evolution of technology and especially to the expansion of wireless technologies.

4. Conclusion and recommendations

Although it was always assumed that those using and benefiting from the latest breakthroughs in technology are capable people, there are other groups that may be as important and perhaps most important communication namely those with special needs with physical or sensory limitations.

The expansion of internet networks will be indubitable the promoter of new breakouts in technology and most importantly will boost the economic environment to a new level and we will be witnesses to a permanent changing of the socio-economic medium.

This paper does not claim to exhaust a topic that, in its basic dimensions - Sociology and the Internet networks, is extremely extended and placed in a permanent dynamic environment. It cannot - and does not have the possibility - to keep pace with innovations occurring at the present time. Perhaps some concepts and some very useful guidelines will be discovered and implemented by theorists and practitioners in the EU or in any other place in the world, in order to boost innovation.

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YOUTH LABOUR MARKET EVOLUTIONS AT REGIONAL LEVEL IN ROMANIA

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Abstract

The current economic crisis generated several challenges that the youth have to face on the labour market.

The 5.8 million youths, aged between 15 and 34 years of age from Romania, represent a huge resource for the society. Romania, like most of the Member-States faces increasing challenges in the absorption and integration of youths within the education systems and on the labour force market.

Unemployment among youths is very high, increasing to 24.3% in QIV 2013 much above the total unemployment rate recorded at national level of 7.2%. The analyses performed by various bodies in the field highlight that the number of young unemployed is not decreasing until 2016.

The present paper presents a brief characterisation of the labour force market among youths in the development regions in Romania. An analysis is made about the evolution of the unemployment rate, of the employment rate for youths aged between 15 and 24 years of age, the structure, educational level and on genders of the NEET groups under the impact of the economic-financial crisis, but also factors hindering and delaying the entry of the youths on the labour market.

Keywords: youths labour market, youths' unemployment rate, youth employment rate, population, NEET

JEL Classification: E24, J6, J21, J23

Introduction

With a labour force employment rate of 59.5% in the year 2012, and severe issues on the labour market during the last years, Romania is still far from reaching the "EU2020" objective established by the National Reform Programme which mentions a labour force employment rate of 70% up to 2020. In the context of increasing discrepancies against the EU average and given the current trends regarding labour force employment, it is less probable that the national objective for 2020 shall be reached if the economic performance and the national policies do not improve considerably.

In Romania live more than 6 million youths with ages between 15 and 34 years of age. The data provided by the National Institute of Statistics highlight a continuous decrease as weight in population from 32.1% in the year 2003 to 28.6% in the year 2013 for the youths aged between 15 and 34 years of age[1], as outcome of the mix of several factors; increased life expectancy, decrease of the births' rate, and emigration, the last phenomenon involving youths to a much higher share than other age groups[2].

Even though the weight of young population in Romania is over the EU-27 average, from 25.1% at the level of the year 2012, the decrease of the last 10 years is more marked in our country. The Eurostat forecasts indicate that an abrupt decrease is expected up to the year 2060 of the young population weight in total population, and Romania is among the countries affected to a large extent by this trend, as of 2015 Romania falling behind the EU-27 average. The fertility rate in Romania was placed in 2011 at the level of 1.3 considerably under the 1.6 level registered in average within the EU-27.

1. Features of the Youths' Labour Market at the Level of Romania's Development Regions

The employment rate of the population aged 15 to 64 years of age in Romania (59.3% in QIV 2013) is smaller than the European Union average (64.3% for the same year) the national target being of 70% up to the year 2020[3].

For the age group 30-34 years of age in QIV 2013 is registered a level of the employment rate slightly over the European one (83.2% against 83.1%), for all other age groups (15-19, 20-24, 25-29 years of age), the youth being considerably under the EU-28 values: 7.5% the employment rate for youths between 15 and 19 years of age (against 14.9% in EU-28); 30.8% from the Romanian youths between 20-24 years of age are employed against 47.7% from the youths in the EU; 66.1% from the Romanian young individuals aged between 25-29 years of age are employed against 70.5% of the European young individuals.

At regional level important discrepancies emerge, so that the lowest rates of employment for youths aged between 15-25 years of age were recorded in QIV 2013 in the Regions Centre (15.5%) and West (17.2%), while there are also regions with a significantly better situation, North-East (27.6%), South-Muntenia (25.9%) and South-West Oltenia (25.3%). Also, major differences are registered between men and women: the employment rate for young men between 15 and 24 years of age (Figure 1).

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[1] Statistical Yearbook of Romania 1990-2013, National Institute of Statistics

[2] Approximately 80% from the youths registered as emigrated in 2011 in official statistics are betwen 18 and 40 years of age. Source NIS, TEMPO Data Bank.

[3] According to the European Commission, Recommendation for a COUNCIL RECOMMENDATION on Romania's 2013 national reform programme and delivering a Council opinion on Romania's convergence programme for 2012-2016 {SWD(2013) 373 final}, p. 4, available at http://ec.europa.eu/

Figure 1. Employment rates of youths (15-24 years of age) at regional level and depending on gender for quarter IV 2013
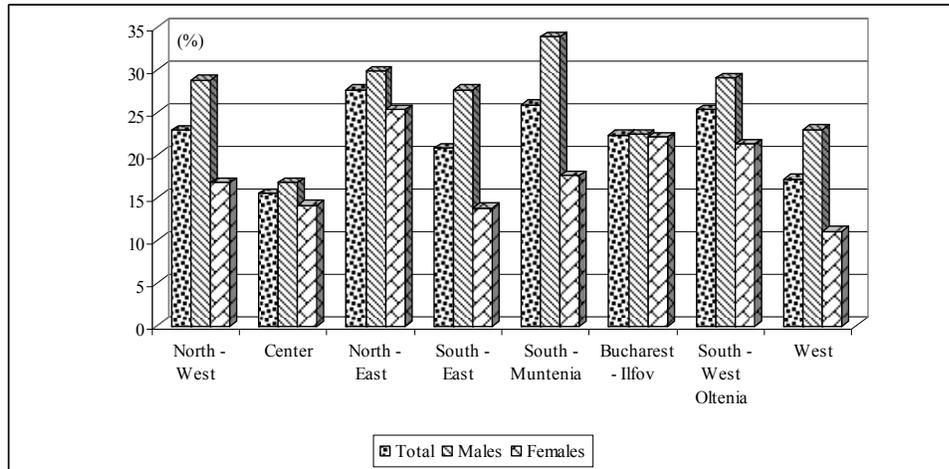
Source: TEMPO Online time series, National Institute of Statistics

        Significant disparities can be observed also between the urban and the rural area. According to NIS data, in QIV 2013 the employment rate of young individuals (15-24 years of age) from the urban area was of 16.2%, while in the rural area was registered a significantly higher rate (29.6%). This age group, together with the age group of individuals between 55-64 years of age registers the lowest employment rates per total population (22.8% and, respectively, 41.7% in QIV 2013).

        Young Romanian individuals face a rigid labour market without any available flexible employment forms that would allow the continuation of their studies in parallel to employment. Only approximately 94.5 thousand youths employed in Romania with ages between 15 and 24 years of age worked part-time in QIV 2013 against 5805.5 thousand individuals within the EU-28. Almost three quarters were employed in this manner involuntary against the situation at European level where approximately the same share of youths prefers this type of employment. While 7177 thousand youths aged 15 to 24 years of age employed in the EU-28 had a temporary job in QIV 2013, only 20 thousand young Romanian individuals were temporary employed on the job[1]. Temporary and part-time employment are constituted more as a hindrance at youths' entry on the labour marked instead of representing a characteristic of a flexible labour market with alternative employment forms.

        The young individuals employed in the informal sector, respectively mainly in the subsistence agriculture constitutes one of the most vulnerable social

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[1] Data source about temporary and part-time employment: Eurostat: lfsg_etgaed

categories[1]. Over 40% from the individuals employed in the informal sector are young individuals between 15 to 34 years of age.

The ILO unemployment rate for the whole population is of 7.2% a rather low level in the context of EU-28 (quarter IV 2013) while among the youths under the age of 25 years of age is registered an alarming value of 24.3%[2]. The access to the European resources mobilised by the Initiative for Youth Employment depends on the situation of unemployment among youths at the level of the year 2013. In three of Romania's development regions (NUTS 2), respectively Centre South-Muntenia and South-East the unemployment rate among youths aged between 15 and 25 years of age exceeded in Q IV 2013 the value of 25% (Figure 2) which makes them eligible for European financial support within the aforementioned Initiative.

Figure 2 Unemployment rate on age groups among young individuals at regional level and depending on gender in quarter IV 2013
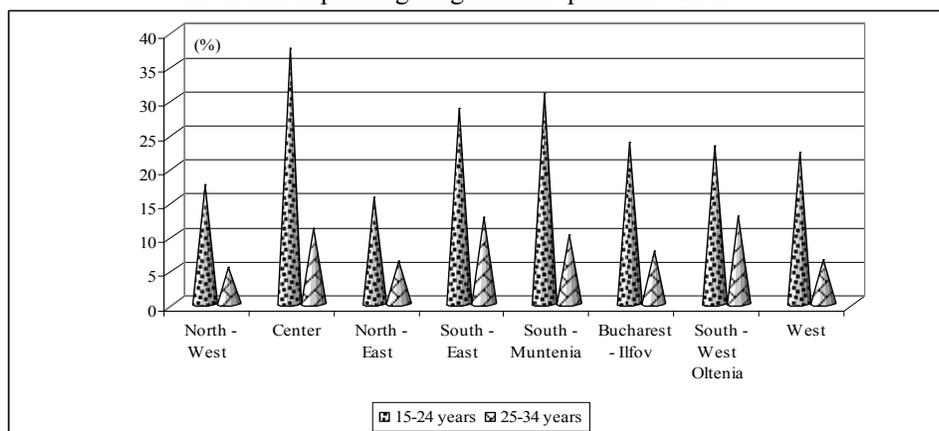
Source: TEMPO Online time series, National Institute of Statistics

The data regarding unemployment among youths at regional level indicates that there are significant regional differences, the level varying between 37.5% in the Centre region and 15.5% in the North-East region for the age group 15 to 24 years of age in quarter IV 2013 (Figure 2).

A large part of the unemployment among youths is chronic extending for more than one year: 43.3% from total unemployed aged between 15 and 24 years of age were long-term unemployed in 2012. The long-term unemployment rate among youths aged between 15 and 24 years of age was of 13.3% against 3.2% for the whole active population.

A special risk is represented by the fact that graduating higher-education does not improve the success changes on the labour market, contrary to the trend at global level. Thus, if the ILO unemployment among young individuals between 25

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[1] Report of the Presidential Commission regarding Demographic Risks in 2010.

[2] TEMPO-online Data Bank – Romania's National Institute of Statistics.

and 29 years of age who graduated upper-secondary education or post-upper secondary education was of 10.3% in 2012, the level was of 10.9% in the case of higher-education graduates. The entry of higher-education graduates on the labour market is hindered because employers prefer experienced personnel[1].

In the year 2013, 17.2% from Romania's youths were classified as NEETs (young individuals between 15 and 24 years of age who are not employed, nor in education or training), against 13.0% from the youths within the EU-27[2]. After several years of decline at European level, the weight was stabilised in 2008, but increased thereafter as result of the economic crisis. In Romania the NEET weight also increased from 11.6% in 2008 to 17.2% in 2013.

While in the year 2008, 11.6% (men: 8.8%; women: 14.5%) of the individuals aged between 15 and 24 years of age were included in NEET, the share of these individuals increased to 17.4% in 2011 (men: 15.9%; women: 18.8%) and to 17.2% in the year 2013 (men: 15.5%; women: 18.9%), after a slightly decreasing trend in the year 2012 (16.8%).

The exclusion from labour, education or training is in Romania a bigger issue than for the average of the European Union. The consequences on long-term of young individuals' circumstances that are neither employed, nor in any form of education or training are drastic: poverty and exclusion from social life. In other words, poverty, marginalisation and social exclusion represent the logic consequences of a possible failure of investments in the human capital and for the education aimed at the youths.

Also for this indicator of the youths' labour market are recorded significant disparities at regional level, with a very high rate of NEET individuals in total population for the region Centre (33.5% in 2011), and a relatively low rate in the West region (15.7%)[3].

For youths', the increase in the unemployment period or the NEET condition can have severe personal consequences, but also for the community to which they belong, both on short- and long-term. These can be of a financial nature, but also of social nature: isolation, involvement in risks related to unstable behaviour from the physical and psychological viewpoint. Many of them give up seeking a job (Figure 3).

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[1] Absolventii recenti de invatamant superior si integrarea lor pe piata muncii (Recent Higher-Education Graduates and Their Integration on the Labour Market), Bucharest, DOCIS; 2010
[2] Databasis Eurostat [edat_lfse_20];
[3] Sector "Labour Force Employment", www.fonduri-ue.ro

Figure 3 The number of persons discouraged in seeking a job, on age groups
in QIV 2013
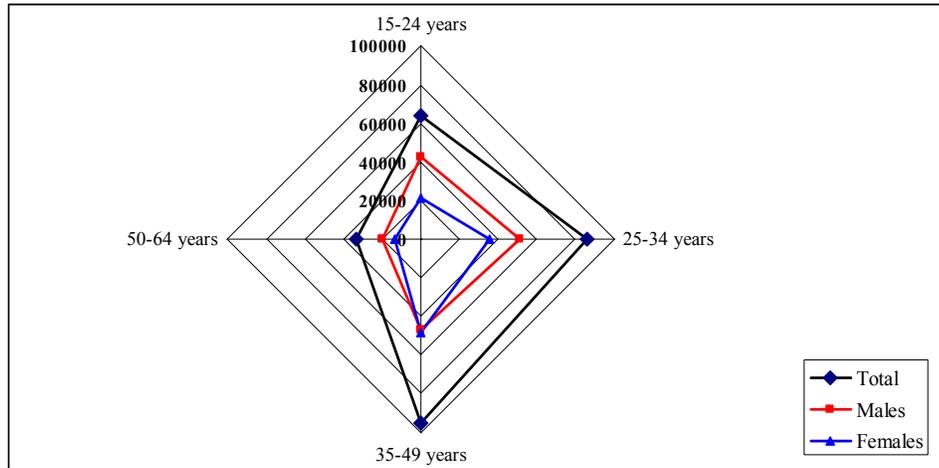
Source: TEMPO Online time series, National Institute of Statistics

The analysis of data regarding the evolution of the youths' employment rate on one hand and of the NEET share on the other, is rather difficult. Very few analyses have been realised during the last years to this end. In any case, the low employment rate of the youths does not necessarily mean that these individuals are enrolled in education. Just to the contrary, the opposite is true, with variations between the various regions of the country (as shown above). The most plausible explanation seems to be, for the time being, that the low employment rate of the youths and the high share of NEETs indicate that a large number of young individuals are involved on the black market delivering undeclared or informal labour. Another explanation can be found in the potentially high number of youths who emigrated to other EU member-states without declaring this to the authorities.

The youths from Romania have access later and to a smaller extent to the labour market, and the incomes obtained are lower. Thus, Romania has the highest level of poverty of the youths' between 18 and 24 years of age who work: 30.7% from them were poor in 2011 (for the whole employed population the level was of 19%) even though they had a job, while in the EU-28 the value is of 11.2%. The wage poverty of the youths acquires an even more worrying aspect if the fact is taken into account that this group is on increase: in the year 2008, at the beginning of the economic crisis, 23.1% from the employed young individuals were poor.

Irrespective of the method of estimating poverty, children and youths were constantly the most exposed categories for the last decades.

More than a quarter of the youths between 18 and 24 years of age find themselves in relative poverty (28.1% in 2011), a fact which places Romania among the three countries with the most severe situation in the EU-27. At the same time, the level is on increase during the last years.

More than one third from the youths faces the risk of poverty or social exclusion, respectively 40.3% against 24.3% within the EU-28. For the whole population from Romania, the risk of poverty or of social exclusion is considerably lower, of 24.3%.

In Romania, 60% from the youths aged between 18 and 34 years of age live with their parents, against 48.5% within the EU-28. The highest weight of population residing in over-populated houses from within the EU-27, save for Hungary, is thus recorded in Romania. With 2.9 persons per household in average, Romania has the highest number of members per household within the EU-28, at equality with Bulgaria, Croatia and Malta.

The constraints of the labour market, increasingly tougher for youths, and lacking access to independent living solutions are among the factors that lead to postponing important decisions in the sphere of family life. The age for the first marriage increased between 1990 and 2010, from 22 to 26 years of age for women, and from 25 to 29.1 years of age for men. The average age at the first birth also increased considerably, from 22.4 years to 26 years in the same time period. As result of the economic crisis, approximately one out of ten young individuals declares that he/she had to give up education, postpone the marriage decision or the one of having a child.

Partially as result of the high weight of population residing in the rural area, 43.3% from the young individuals aged between 12 and 17 years of age are severely deprived regarding housing conditions: they live in an over-populated house and are affected by at least another issue of inadequate housing (poorly insulated roofs, bathroom, restroom, toilet, shower lacking, or the house has inadequate lightning). The severe housing deprivation from Romania is over 4 times higher than the European average.

Conclusions

The world crisis, the social reality which all societies are confronted with brought again at the front the idea of youths' frailty on the labour market. The high level of unemployment among youths is representative and has two major influences: the decrease of employment chances of the youths in general, and diminished opportunities of economic development, both at national and world level.

Unemployment among youths generates long-term effects both on the income and on the stability of the job, because youths affected by unemployment have a lower level of credibility and are not as trusting and flexible about employment opportunities and thus, developing with more difficulties from the professional viewpoint.

The youths' labour market from Romania is in a continuing decline for the last years, the unemployment rate on this population segment increasing in the period 2008-2013 from 18.6% to 23.6 % from the viewpoint of the quarterly employment rate of the youths, in the quarters I-IV 2013, it underwent an improvement against the previous quarters and had an ascending evolution. Also,

the employment rate is higher for men, by approximately 7.9%, but also for those residing in the rural area, by 17 percentage points.

Because the traditional indicators regarding youths' participation on the labour force market has a limited relevance for analyses and prognoses, the NEET concept was implemented. This concept describes and analyses the youths' vulnerability on the labour market.

The national and European statistics indicate that, in average, the NEET rate among women is higher than among men, as well as among youths with a low education level.

For youths, the increase of the NEET period can have severe consequences at individual level, but also within the community in which they find themselves both on short- and long-term. These consequences can be of financial nature, but also of social nature: isolation, involvement in risks related to unstable physical and psychological behaviour.

This is an issue that must be approached with maximum responsibility/ seriousness both at European Union level, and in Romania. A coherent strategy is necessary on medium- and long-term, that would comprise measures for creating jobs for youths, as well as providing fiscal facilities to employers, encouraging and financing free-initiative among young individuals, concentrating on developing the sectors for which there already are thousands of graduates but who are unemployed, but also coordinating educational programmes with the labour market dynamics.

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SOCIO-ECONOMIC EFFECTS OF SOME IT-SOLUTIONS FOR THE ROMANIAN RAILWAYS

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Abstract

Transportations are one of the success-keys for achieving the Single European Market because they contribute to rendering concrete two of the fundamental objectives of the latter: free movement of persons and of goods.

The new technologies developed for vehicles and traffic management shall be essential in diminishing the emissions caused by transportation both within the European Union and in the rest of the world. The race for sustainable mobility has worldwide amplitude. The delayed action and modest implementation of the new technologies could condemn the transportation industry within the European Union to an irreversible decline. The transportation sector within the EU is faced with increasing acerbic competition on the transportation world markets which are in a process of swift development.

The present paper intends to make a brief presentation of the new information and telecommunication technologies implemented in the Romanian railways transportation, as well as an analysis of the economic and social impact of their implementation.

Keywords: railway transportation, information and telecommunication technologies, economic impact, social impact

JEL Classification: L92, L96, R42

Introduction

From all types of transportation existing today, railway transportation remains of high interest due to some certain advantages resulting from the fact that it is the less polluting and most environmental friendly one. These are but a few of the reasons for which, during the last years, by means of European Union strategies attempts are made for developing and implementing some programs for railway transportation to pick back up within the Community, and for generating increased traffic for this type of transportation.

At European Union level arguments are brought in for more efficient exploitation of existing infrastructures and for more ecological transportation. Ensuring energy and environmental sustainability of European transportations is an

objective that cannot be reached but by combining several policies that mutually support and complement each other and by involving an increasingly higher number of actors, representatives of the transports' sector, of public administration and of the citizens.

Advanced information and communication technologies can contribute considerably to achieving competitive and reliable transports by improving infrastructure, traffic and the fleet, by facilitating better monitoring and traceability of goods along transportation networks and improved relationships between enterprises and administrations.

During the last years, the information and telecommunication technology (ITT) pervaded European societies and economies to an extent no one could have foreseen just some couples of years ago. Many observers believe that the quick expansion of computer networks, mobile phones and of other TTI elements is on a very wide scale and with implications that lead even to the change of the European society.

ITT changes the manner in which people work and the typology of available jobs (vacancies). Obviously, the impact of these changes generated by the implementation of new information and telecommunication technologies could be significant for economies and societies. The changes generated by ITT can be done by a series of instruments, including by informing and consulting with workers, social dialogue, identifying in advance the deficit of competencies, of professional training and making sure that any restructuring will take place according to social accountability.

The paper intends to briefly analyze the economic and social impact of implementing information and telecommunication technologies for the railway transportations in Romania.

1. Railway transportation in Romania. General characteristics

Romania disposes currently of a national transportation system (infrastructure, transportation means, transport operators, etc.) which is placed, to a large extent, both from the viewpoint of the functional structure and from the one of delivered services at the level of average standards of the conventional transportation systems from Europe, fit to meet the current necessities of domestic and international users.

As a whole, the public transportation infrastructures' network (roads, railways, waterways, inland waterways, sea and river ports, airports) ensure the linking of all localities of the country to the national transportation network and to the international transportation systems.

After a "disordered" development, when each type of transportation was developed autonomously and independently, during the last years a certain "settling" occurred in developing the various means of transportation in Romania. Forced traffic capacities' surpasses was generated for some sectors of the road infrastructure network (mainly for large city entries and exits) and drastic decreases of the utilization degree of the railways infrastructure network (in many cases for the same transportation connection.

Despite all major changes achieved up to date, the transportation system from Romania still pays tribute to the "inadequacies" of the system in which it was conceived and realized.

The localization of Romania at the crossroads of several ways linking Western and Eastern Europe, as well as Northern and Southern Europe, and the location of the country on the transit axes between Europe and Asia constitutes a reference element for determining the transportation policy.

The Romanian Railways have the role to integrate the national railway infrastructure according to the technical and operational parameters at European level for being a compatible and inter-operable part of the future trans-european railways network.

The railways infrastructure is currently in a difficult technical state because of some important delays in realizing the maintenance and reparation cycles for the rails, installations and buildings, but also with respect to realizing modernization works, as these postponements were generated by the chronic absence of necessary funds. Because of the impossibility of ensuring the financial funds required for the current maintenance works of the railways infrastructure during the last years, the traffic capacity was diminished.

The inter-operability of the conventional railways network (TEN-T also outside the TEN-T network) with the European railways transportation network shall be done by implementing in the rail and on board of the motor rolling material of the required elements of the ETCS monitoring system, by modernizing the centralization installations of the railway stations by implementing electronic centralization systems, and by developing the information system for all railway stations placed on the inter-operable railway network from Romania; developing the telecommunications' network for ensuring the support for data transmission, and implementing the national integrated traffic management center on Romania's territory, revamping the installations for the power supply of the contact rail.

These actions shall lead to a better coverage of the transports' market and improved accessibility of the travelers to the main transport routes by interconnecting the latter to the regional services and increasing the load degree of wagons with passengers on the main and regional transportation routes.

2. Economic and social implications of ITT implementation in railways transportation

Technological innovation shall constitute an important source of contributions for solving transportation issues. The systems of railways traffic management can optimize the use of the network and improve safety.

"Intelligent transportation systems" presuppose the use if ITT in the field of transportations. Such applications are developed for various transportation means but also in order to favor their interaction (including intermodal platforms).

If in the field of air transportation, SESAR[1] shall constitute the framework for implementing a new generation system for air traffic management, and for inland waterways the river information services (RIS)[2] are available, in view of managing the use of waterways and the wares' and passengers' transportation, for the railways network is gradually implemented the European Rail Traffic Management System (ERTMS) and the telematics applications for freight (TAF).

The European Rail Traffic Management System-ERTMS is a major industrial project developed by six members of the UNIFE association (Association of the European Rail Industry): Alstom Transport, Ansaldo STS, Bombardier Transportation, Invensys Rail Group, Siemens Mobility, and Thalse in close cooperation with the European Union, and bodies interested in the railways and GSM-R industry.

2.1. Implementation of the ERTMS/ETCS system in Romania and its generated economic effects

Developing the national plan for implementing in Romania the ERTMS/ECTS system began from the strategy in the field of signaling installations based on the current endowments and future modernizations within the limits of the funds allocated for the field.

Thus, for large stations was regarded as necessary the implementation of the electronic integrated management systems (the types SIMIS W-SIEMENS and ETSTW L90 RO – ALCATEL, - ALCATEL compatible for the linking to the ERTMS/ETCS system), (CED), and for the small stations were realized two digitalization variants of the operation posts for the electro-dynamic centralization installations (CED).

The implementation of the ERTMS/ETCS system has as basis a range of specific requirements for each rail administration, and for Romania the requirements can be classified as follows:

► *superior requirements,* that cover the essential necessities for the ERTMS/ETCS system from which: hardware requirements; capacity (for instance, number of trains/hour and direction); maximum speed (200 km/h);

► *operational requirements,* that describe the necessity of the ERTMS/ETCS system from the viewpoint of the operations performed on the railway;

► *functional requirements* of the ERTMS/ETCS system.

With respect to implementing the speed control system for ETCS-type trains, Romania opted for ETCS Level 1 for the rail Bucharest North-Ploiesti West, ETCS Level 2 for the rail Bucharest North-Constanta while concomitantly maintaining the installation for the in-point control of trains' speed (INDUSI).

Implementing ETCS level 1 provides for a series of important advantages: interoperatibility; increasing the safety degree; increasing the comfort degree for

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[1] SESAR: *Single European Sky Air Traffic Management Research* (The research programme about the air traffic management within the Single European Sky).
[2] River Information Services (RIS)

passengers by optimizing the brake-time, diminishing specific consumptions of traction power; diminishing the usage of the brakes.

The important advantages related to the implementation of a electronic centralization installation are: realizing all possible traffic and maneuver routes for a given configuration of the station, which provides increased flexibility to traffic management; ensuring the possibility of changes and tunings during operation without requiring significant periods of time in which the system is stopped; increasing the safety of rail traffic; ensuring a maximum level of reliability of the installation that would allow, thus, for diminishing the activity and costs of maintenance, and rendering efficient the activity of preventative and corrective maintenance by computerized assistance, including by diagnosis and defect localization functions; decreasing the costs for systems' exploitation by diminishing the elements requiring periodical tuning such as the relies; ensuring the technical support for developing rail traffic management by embedding the centralization installation as sub-system in ERTMS/ECTS.

2.2. Other ITT implementation in Romanian Rail Transport and its generated economic implications

In the modernization program of rail telecommunications was included also the integrated exploitation management digitalization project for the Romanian Railways – IRIS [14].

The *IRIS* Program (*Integrated Railway Information System)* is a component of the Railway Rehabilitation Program financed by BIRD, the aim being to increase the competitiveness degree of Romanian railways in the context of free access to the European railways 'system.

The main objectives of the project were to optimize and automate a number of key-activities within the railways and building-up an information infrastructure able to support subsequent developments. The first stage of the IRIS, designed to cover with applications and information systems vital activities for the entire railway system, was finalized in the year 2003, comprising four major components: railways' infrastructure management application; rail vehicles management application; freight transportation management application; and the application for monitoring trains' traffic. Thus, IRIS delivers an integrated digitalization solution, including complex hardware equipment for data banks and software applications connected to a national network with two levels – WAN and LAN.

In January 2005, the modernization of IRIS was initiated. One of the components of this new project aimed to modernize the network, in particular improving the users' access to the IRIS resources and benefitted of a new hardware and software infrastructure with direct results in diversifying and increasing the quality of provided services, preparing the national railways network for the interoperability with the European network.

With respect to the *infrastructure management application* (IRIS-IMA), its objectives for the exploitation and management levels are: railway infrastructure's components management; management of the maintenance activities; management

of repair projects for the railway infrastructure; maintenance costs' control; railways' cadaster.

Among the *advantages* of implementing this system can be counted: the doubling in the numbers of passengers; superior quality of the services delivered to passenger; correct tariffs; secure reservation; issuing standardized tickets at European level with clear information; safe and swift financial management; major diminishment of manual effort; obtaining various statistics as efficient decision-making support; modeling the specific technological processes for the Romanian Railways; comfortable use; 100% availability, ensuring safety and confidentiality of the system's data.

Taking into account the importance of providing Internet services on the railway the Romanian Railways Company for Passengers has implemented wireless internet in the year 2006 for business-class passengers. The technical endowments for ensuring the wireless connection based on mobile phones were not separately purchased but together with the entire package of facilities specific to modernized passengers' wagons, among which: access for persons with diminished mobility; circuits for video casts and interior arrangement elements that provide a particular comfort degree.

Installing optic fiber cables and digital transport equipment on the rails Bucharest-Craiova, Bucharest-Constanta and Bucharest-Brasov leads to obtain some particularly important advantages such as: developing the railway activity by using modern phone and data communication under conditions of maximum safety; implementing in very good quality conditions the applications of the IRIS program in other 74 railway stations; rehabilitating railway communications at the Western border, respectively on the rail Timisoara-Jimbolia; rehabilitating railway communications on the rail Eforie-Nord – Mangalia for which an increased demand of digital services is shown; rehabilitating railway communications on the rail Salva-Sighetul Marmatiei for which the air infrastructure was in an advanced state of tear due to frequent storms.

2.3 Social Impact of Implementing the TTI Products and Services in Romanian Railway Transportation

The technological changes from the railway transportation sector had consequences on the skills of the personnel. Due to the evolution of technological processes and to the market development, several occupational classifications from Romania within the sector are no longer up to date. During the last years, within the Romanian railway systems were implemented a series of new ITT products and services, from among which:

► **IRIS** – a very complex system – is part of the restructuring program of the railway transportation system from Romania. This project, having as purpose the realization of an information system, aims a harmonization of a procedural nature. It should be regarded as an "instrument" made available to the users – specifically the railway companies CFR S.A., CFR Marfa (Freight) and CFR Calatori (Passengers) – for providing assistance in their effort to provide services of superior quality.

The IRIS system, regarded in its entirety, can be considered as an integrated collection of various applications, as each of them could be defined as complex information systems.

For the good functioning of these applications were trained in several centers hundreds of future users of the system and in many railway entities were installed hundreds of data processing equipment's to which are added the complex communication links that allow for quick and safe access to information.

The implementation of the IRIS system had implications on:

- **jobs:**
  - partial diminishment in the numbers of jobs: several jobs remained without human activity, others changed into positions without human activity. As result, in some instances the numbers of personnel were diminished by endowing the respective location with PCs. This generated the demand for skilled staff that would ensure the periodical assistance of the PCs for eliminating malfunctions and maintaining the networks;
  - some jobs required permanent personnel assistance which meant that jobs were maintained;
  - implementation of new information and telecommunications technologies implies that the operating personnel has medium and higher education, depending on the complexity of implemented technologies. At the same time, higher educated experts are required for supervising the entire activity, but also experts with interdisciplinary training;
  - implementing the new technologies in the Romanian railway transportation demanded that the personnel from the contracting departments for ensuring the exploitation safety, and also those from the commercial-purchases department underwent improvement training courses. It is also necessary to train experts for the financial-accounting department, for specific registries (for instance, specific software for processing and centralizing data/tickets (ticketing activities), for managing traffic contracts and calculation of tariffs for freight and passengers operators;
  - the enrichment of the job's contents has required the improved training of the corresponding personnel;
  - the personnel corresponding to the eliminated jobs had the opportunity to undergo reconversion trainings by complementariness and, after a period of training, to take jobs in the sphere of specific services;
  - the improvement training courses pursues by bettering professional expertise:
    a) knowledge gain, and newly employed personnel integration according to the specifics of the railway transportation activity;
    b) shaping skills with the purpose of ensuring the demands regarding trains' safe traffic, transportations' security and quality of services in railways transportation;

c) updating knowledge and improving professional training for the main occupation, as well as in secondary occupations in accordance with the occupational standards;

d) ensuring the possibility of employment in another position/trade of the personnel used in specific or related activities of the railway transportation (social mobility of labour force);

e) acquiring advanced knowledge and/or detail skills in view of applying modern methods and techniques required for fullfiling job tasks.

- **incomes**
  - the personnel remaining on the traditional jobs and participating to improvement training courses either maintained their wage incomes, or in most instances, benefitted of increased incomes, or was employed within wage systems based on competences;
  - for newly created jobs, in average, the wages are higher than for comparable positions and jobs but of another technological generation.

► The implementation of the national system of e-ticketing in over 245 railway stations, where each sales point is endowed with a computer and a printer connected to the various systems. Yet, the implementation of this new system presupposes the complete replacement of the personnel due to the introduction of electronic devices, positions that do not require human assistance. This leads, on one hand, to the disappearance of some current operations' jobs and, on the other hand, require the creation of a new category of jobs such as, for instance, supervisor and use advisor (who must provide increased quality services for the customers of the railway stations, in particular information services about the transportation possibilities, tariffs, other services provided by the Company).

► The implementation of the **ETMS signalization system** has as consequence the diminishment by half in the numbers of train enginemen but also training the remaining ones in acquiring knowledge about the functioning and use of the system with its command-control-signaling components. This will allow enginemen to benefit from the European certification.

The emergence within the railway system of some phenomena such as labour force ageing, new work technologies for infrastructure, the globalized competition between transport operators, modernization and emergence of various types of rolling material, implementation of the directives regarding interoperability, etc. underpin the necessity of establishing continuing training centers that has increased advantages both for employees and for the employers.

The average age of the personnel within railway units is rather high. Many employees holding positions of responsibility regarding traffic safety have exceeded the pensioning age. These personnel are necessary because they cannot be replaced entirely, as on the labour market the numbers of the individuals with corresponding skills are insufficient. The most conclusive example is the one of private railway transport operators who employed the retired personnel of the state-owned railway companies. If this situation is taken into account, it results the necessity of increasing the numbers of skilled personnel. In the contrary

circumstances, railway transportation might face a personnel crisis similar to the one in the constructions' sector.

The improved skills and specialization of the personnel is required both for maintaining a corresponding degree of railway transportation safety but, mostly, for increasing competitiveness and productivity of the railway units. This last aspect is crucial: the investment in the human capital is the most profitable investment on long-term both for employers and employees.

Continued professional training in the field of railways is beneficial both for employers and employees:

► *Advantages for employers*
- expanding the tendering area for works in the European Union due to the skilled and acknowledged labour force at European level;
- ensuring the quality of performed works;
- employees' compliance with the traffic safety and job and environment security norms (SSM);
- skilled labour force with improved competences in a short time and at low costs;
- a ensuring the required labour force in deficit qualifications or in new ones;
- fiscal advantages for funds invested in the continued vocational training;
- diminishing up to complete elimination of inactivity periods for all employees within the company;
- lower material losses;
- a higher profitability rate of the trading company.

► *Advantages for employees*
- national recognition of gained skills;
- recognition of gained skills within the formal or informal system as part of the qualification;
- the opportunity of obtaining skills based on competences gained in time;
- higher wage earnings;
- eligibility on the national and European labour market;
- mobility in the swift acquisition of competences demanded on the labour market;
- shorter and cheaper courses;
- avoiding or shortening the periods of inactivity or unemployment;
- specialization and over-specialization in certain activities.

Conclusions

Developing the transportation infrastructure shall play an important role in integrating on the Single Market and shall support the valuation of the geographic position of Romania as a transit area at the crossroads of the Pan-European Transportation Corridor IV and of the Pan-European Transportation Corridor IX.

The location of Romania at the crossroads linking Western and Eastern Europe, but also Northern Europe to Southern Europe, as well as the position of the country on the transit axes between Europe and Asia constitute reference elements for determining the strategic options regarding the development and modernization of the transport infrastructure. The opportunity created by the Danube-Black Sea Channel and the Danube river can play a key-role in attracting international flows of freights, in the relations between Europe and the other continents.

The Romanian Railways have the role of integrating the national railway infrastructure into the technical and operational parameters at European level in order to be a compatible and fit for interoperability of the future Trans-European railway network.

The strategy in the sector of railways' transportation of promoting the ITT products and services leads to:

- changing the marketing policy by promoting the social effects/benefits for the beneficiaries (positive externalities);
- improving processes' transparence and information management which facilitate the planning processes and decision-making ones;
- creating new opportunities for externalizing specific economic processes. Externalization promises to increase the productivity of the company. Specialized "e-Intermediaries" support the data exchange between companies;
- flexible personnel policies;
- continuing training programs at the railway operators' level.;

Implementing ETCS - level 1 in Romania leads to costs' decrease in exploiting the system by diminishing the elements requiring periodical tunings, provides for better flexibility of traffic management and results in increased railway traffic security, ensuring a maximum level of reliability of the installation that would allow thus for reducing maintenance activities but also for rendering more efficient the preventative and correction maintenance by computerized assistance, including based on functions for defects' diagnosis and localization.

Yet, the current size of the services provided by the digital railway telecommunication networks does not ensure integrally the domestic market required for the railway infrastructure, for the railway transport operators and for the economic agents working in the railway field.

By means of synchronic and a-synchronic railway transmission networks the logistics can be ensured for expanding the IT&C projects of the national and local operators in areas with a low density of services' supply: voice, data, video and added value ones (Internet, teletext, video text, fax and voice mail).

The specific forte of the railway telecommunications networks results from the conditions imposed by the beneficiaries from the railway sphere, where the communications have a decisional character (contribute to trains' traffic security), are secured and operate based on the principle "reserve for reserve".

The technological changes within the Romanian railway transportation sector had consequences on the labour force. Due to the evolution of technological processes, to the market development, many of the occupational classifications

from Romania within the sector are no longer of actuality. Among the consequences are:

- the partial diminishment in the number of jobs;
- the requirement for skilled personnel to ensure the periodical assistance of PCs for eliminating damages or maintaining the networks;
- some jobs required permanent personnel assistance which meant that jobs were maintained;
- the implementation of the new information and telecommunications technologies requires medium- or higher-educated personnel depending on the complexity of the implemented technologies;
- the personnel of the contracting departments for ensuring exploitation, as well as those from the commercial-acquisition departments have to undergo improvement training courses;
- the personnel corresponding to the eliminated jobs had the opportunity to take jobs in the sphere of specific services after pursuing reconversion training, based on complementariness;
- even in areas where the new technologies were not implemented, the personnel reductions were due to inadequate policies, which generated negative effects on the railway infrastructure or on the maintenance and exploitation of the rolling material park;
- wage incomes of the personnel remaining on traditional jobs and participating in training courses either remained the same or, in most of the cases, increased.
- for newly created jobs, in average, the wages are higher than for the similar positions and jobs but of another technological generation.

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DEVELOPING THE CONCEPT OF SUSTAINABLE AGRICULTURE
IN THE ECONOMY OF ROMANIA

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Abstract
Romania's economy present the risk of underdevelopment due to the proliferation of economic measures adjusted interest immediately, without considering the long-term interests compatible of principles of sustainability.
In this context, the agriculture faces the most acute problems related to underfunding, lack of major investments to compete in creating a viable agricultural market in the immediate interest of the consumer and the farmer, with repercussions for the environment and agriculture in general.

Keywords: Sustainability, agriculture policy, economy

Objectives: The paper will analyze the causes that led to the backwardness of Romanian agriculture relative to other regions of the European Union, will be identified measures to harmonize the Romanian agricultural policy of the European Union and highlighting the features of Romanian agriculture, the necessary measures for the application of methods that lead to the development of the principles of sustainable agriculture.

Methods: In order to achieve the paper will be analyzed documents of departments of the Ministry of Agriculture, documents of Senate Committee on Agriculture. Also, will be analyzed the fulfillment of the Europe 2020 targets on sustainable agriculture.
The work will be designed using the following research methods: critical analysis, logical analysis, conceptualization, development of hypotheses.

Results: The paper will make a synoptic analyze of Romanian agriculture, sustainable development opportunities with the goal of protecting its agricultural

resources, their rational exploitation, timely and effective exploitation of agricultural resources in the agricultural market.

As an important branch of any modern economy, agriculture contributes to the economic growth and it is and important factor of social stability. This is also noticeable at the EU level, where over 86% of the rural population is employed in agriculture and where the agricultural surface is 40% of the entire surface on average. However, the EU agricultural policy considers agriculture in the general sense of rural development.

The rural problem with its main component – agriculture – is the focus of European debates whose emphasis is on sustainable development, improvement of the quality of rural life, food safety and protecting the environment.

Once the Accession Treaty was signed by Romania and the EU, the Romanian agriculture and its rural environment must cope with the standards and requirements of the Common Agricultural Policy.

Romanian agriculture is the main economic branch if the country, if we are to mention only the available natural and human resources and the making of the Gross Added Value and the Gross Domestic Product.

Agriculture, as an important branch of the economy, is required to bring in an important contribution to the natural resources rational use and to the rural economic development. It is also required to help the social structure redistribution and to improve the population life standard.

The economic, social and environmental importance, its contribution to the Romanian village development impose making and applying agricultural policy strategies that are oriented towards agricultural productivity growth and sustainable rural development. Romanian agricultural development is closely related to the transition results within the Romanian rural environment and to the level of adaptability to the EU requirements.

Romania's integration to the European Union causes a lot of problems related to the agriculture competitiveness. The sector's long-lasting stagnation and regress, the strong distortions of the agricultural market generated by property and production structures against concentration and qualification, the low capitalization and the great lack of manufacturing and service sectors in the rural environment, the destruction of energy and low investment have resulted in a very low agricultural productivity. The applied policies have had perverted effects on the evolution of Romanian agriculture, because the agricultural policy is still taken for agricultural works policy, thus not being able to reflect the right thought we should have about turning the comparative advantage into a competitive advantage created by us. Even if Romanian agriculture may be the main competitor of the great European farmers according to the market economy laws, having good equipment and diverse relief, good climate conditions and cheap qualified labor force, it may not be competitive as the modern sector is tearing apart and all the 4 mil peasant homes are sustained on insignificant amounts. Moreover, the predictable turn from the agricultural to the environmental sustainability – a fundamental orientation within the EU – is not adequate to Romania in the present stage.

Following the EU membership, Romania has focused on infrastructure that was needed to access the funds, as if it forgot about most of the agricultural working that are completely cut out from the market mechanisms. The European funds are instruments of the market mechanism used for the development and demand of a modern agricultural market, which is able to satisfy the needs of a European circuit of agricultural products, within a modern rural development. Even if the community fund flow could partially solve the financial problem, the main focus of the Romanian agriculture is to define the concept of organizing and making agriculture work.

Thus, it would be a mistake to consider the possibility of accessing community funds as a main element to profit from the EU accession, because this will contribute to the solving some due issues of the rural environment development.

The present stage, which is called post-accession, imposes a change of thought and method in the process of conceiving the agricultural policy. We need to jump from the careful and shy survival policy to the brave and bold policy of conquering foreign markets.

By reporting to quantity variables, namely geographical, geodetic, morphological, agriculture enjoys a high potential but does not generate added value due to lack of strategic vision on medium and long-term leading to development based on efficiency, sustainability, compatibility with sustainable development objectives of Europe Strategy 2020. In order to fulfill the real convergence criteria, Romanian agriculture development strategy must consider the following:

- preservating the productive potential. For this, there will be allocated investments managed by public-private partnerships for the restoration or construction of irrigation networks, endowment with technical capital which lead to increase in agricultural productivity

-conserving and attracting labor. Agricultural population of Romania is either aging or it has no access to financial resources to start economic activities. The main shortcomings of the agricultural population are low opportunities for schooling, low qualifications, lack of adaptation of the specific skills and professional skills to current agricultural products market. In this regard, local authorities should support rural education process but also motivations or facilities to attract labor in agriculture.

-developing agricultural products processing networks, as family associations with little or artisanal production, which are complementary with medium and large farms.

-finalizing the legal relations of the agricultural population to the possibility of accumulation of production factors in order to build medium and large-sized farms.

-starting agricultural land market to form a real price of the land production factor, favoring the accumulation and production.

-supporting farmers through a system of subsidies linked to actual costs of productive act, designed to encourage the production and sale.

-the possibility of accesing credit at preferential rates for farmers.

-encouraging intensive agriculture, large-scale, mechanized practice means to increase productivity and to achieve scale economies.

- discouraging rudimental practices which cause auto-consumption, lack of economic motivation, impaired physical and mental health of the workforce.
- raising agriculture to the rank of profitable, efficient activity field, at the expense of the current attitude of marginalization, discrimination, degradation.

Romanian economy must be encouraged to exploit economic resources without becoming self-sufficient; neither could achieve this in terms of consumption liberalization and especially of being in an integrated economy, such as the European Union.

Romanian agriculture has to recover numerous gaps in relation to the EU caused, as we showed, by inefficient allocation of production factors due to inelastic demand for agricultural products or to meteodependent pronounced character of the Romanian agriculture, and also to economic policy mistakes that were exacerbated in the first years after 1989. "Before december" agricultural policy had a strong extensively character, distribution and consumption process is ensured by a big market where centralized orientation was predominant. Post-revolutionary period was marked by institutional chaos, legislative especially, that caused restriction of production for several reasons:

1. Fragmentation of agricultural land with negative consequences on production capacity on the one hand, and on quality of realized products, on the other hand;
2. Lack of agriculture financing caused a technological gap and disparty development of agricultural research with consequences on the productive potential on medium and long term;
3. Widening disparty between urban and rural areas due to lack of manpower income in rural areas due to lack of a revenue stream that would cover living needs and prerequisites for a sustainable economic development;
4. Fewer opportunities to acces agricultural products markets for small producers. Agricultural market in Romania is an oligopolistic market which imposes many barriers to small producers both in price and in quality standards in agricultural products. This is exacerbated by limited access of small producers to forms of financing for growth and development of efficient farms.
5. Accession to the European Union has yet to develop the interest of small producers to attract financial and material resources, since it has done just a little part of it. In this case there is a need of information programs for the rural population on the importance of attracting European funds to develop agriculture on bases consistent with the European Union, but also changing people's attitude regarding work in agriculture: substitution in greater labor production factor capital, use of marketing techniques to streamline the process of distributing agricultural products, increase the labor force in agriculture and attracting a large number of young people in agricultural processes;
6. Integration into the European Union makes the Romanian agriculture to replace the common agricultural policy, which entails both advantages and disadvantages. So that Romania should improve production capacity on a

competitive, consistent and convergent basis consensus CAP(Common Agriculture Policy), relying on the exploitation of comparative advantages in relation to other countries in the European Union: big agricultural products market, high production potential, access to European funding to the extent they are attracted.

Viewed from inside, the Romanian agriculture shows low growth rates due to low productivity, insufficient development of human capital due to lack of adequate rural educational infrastructure and adapted to the requests of a competitive, and converging to the common agricultural policy, agricultural market.

The lack of rural infrastructure represents a real obstacle in the way of developing this space. By developing phisical infrastructure, existing differences between rural life conditions and urban life conditions would be cut back. This kind of work would determine employment in agriculture external activities and would stimulate foreign investment process in this environment.

Rural community economic development depends mostly on the same factors as urban development: well-payed jobs, acces to critical services such as education, health, technology, transport and telecommunications and on a long-term natural environment. Rural offers some more advantages such as: abundant and cheaper labor, much cheaper built surfaces, a lower cost of living, less crowded and more peaceful lifestyle. So, three aspects are essential for the diversification of the rural economy: capital investment for business development in rural areas, targeting the rural population to other fields as well and development of basic infrastructure needed to develop other economic activities.

So, in a first phase, creating and mantaining an adequate infrastructure level represent essential conditions for ecolomic and social rural development. Modern infrastructure conditions the ability to effectively compete in rural areas to promote domestic investment. This also contributes to increasing the attractiveness of rural areas in terms of residential areas and workplaces. Infrastructure for transport, telecommunications, electricity and water services is essential for business development and for attracting new investment in rural areas.

Capital, the third factor of production in agriculture has an important role as development capacity and efficiency of agriculture depend on the volume and structure of it. Increasing the role of capital in labor substitution is the result of a modernized technical and technological agriculture.

Romanian agriculture has suffered a strong disinvestment in conjunction with a low interest investment. This aspect has led to a deterioration of the technical equipment that cannot provide mechanical work execution for most farms.

Analysis of the current situation of the agricultural sector in Romania indicate the need to accelerate the processes of restructuring and modernization in rural areas, given their economic and social importance for ensuring integrated and sustainable economic development of rural areas.

Romania considers important to implement Europe Strategy 2020's credentials in agriculture due to the effect it has on businesses in the agro-food and the administrative system. We consider necessary to ensure the continuity and

predictability of European agriculture and its funding system as well to allow Romanian manufacturers to align to EU norms and to handle their competitors.

In accordance with the CAP and rural development of the European space, for Romania it is necessary to ensure enough income to farmers, the specificity of rural areas, employment in rural areas, avoiding rural depopulation, maintaining the specificity of local traditions, strengthening the objectives of the CAP food safety.

Conclusions: Implementing the principles of sustainable agriculture in Romania will lead to eco-efficient use of agricultural environmental resources, paving the way to minimize the negative effects of environmental degradation, species degradation, with an important impact on human health. At the same time, will be identifying opportunities to increase producers' incomes and consumer benefits in the medium and long term, effect of the practice of agriculture participatory field.

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CONSIDERATIONS ON THE CONDITIONS OF TIME LIMITS FOR APPROACHING
THE ADMINISTRATIVE LITIGATION COURT,
IN THE ROMANIAN AND FRENCH LAW

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Abstract
We reviewed in this article the legal regime of the time limit in which the prefect - Government's representative in the Romanian law, namely state's representative in the French law - may appeal to the administrative litigation court against local public administration authorities documents if such documents are deemed unlawful, in relation to the requirements of European standards enshrining the <reasonable time> notion.

We pointed out that the time for referral to the administrative litigation court by the prefect on these documents illegality is 6 months in the Romanian law, compared to 2 months in the French law and prior complaint for actions brought by prefect is not required in the Romanian law, unlike its compulsoriness under French law.

The European doctrine showed that "reasonable time" notion, enshrined in the contents of art.6 par.1 of the European Convention on Human Rights is autonomous and cannot be defined by strict criteria. In civil matters, the term reasonable is to be assessed from the date of referral to the competent court, but it also includes the length of prior administrative procedure when the referral to the court is preceded by a prior appeal required.

Through in the Romanian law, both constituent and organic legislator undertook procedural guarantees provided by European standards regarding "reasonable time", we considered that a lex ferenda proposal on reducing the 6 months period referred to in art.11 par.(1) of Administrative Litigation Act no.554/2004 may be discussed for the appeal to the administrative litigation court.

Keywords: prefect, Romanian law, French law, prior complaint, reasonable time.

JEL Classification: K.

1. Preliminaries - constitutional and legal foundations on the conditions of time limits in which the Prefect may challenge in court documents of local public administration authorities, in Romanian law and French law

1.1. **In Romanian law**, control over the legality of administrative documents of local public administration authorities is governed by the Constitution of Romania, republished[1], in art.123 - "*Prefect*" according to which the prefect is **the local representative of the Government**, [(art.123 par.(2)] and *may appeal before the administrative litigation court against a document of the county or local council, of the mayor, where such document is deemed as unlawful*. [art.123 par.(5)].

Constitutional provisions mentioned found realization in the contents of *Administrative Litigation Act no. 554/2004*[2] as amended and supplemented, which states in art.3 - *Administrative Tutelage*, par.(1) the following: *Prefect may challenge directly to the administrative litigation courts documents issued by local public administration authorities if such documents are deemed as unlawful; action shall be brought in the period referred to in art.11 par.(1), which commences from the time the document is forwarded to the prefect.*

Art.11 - *Time limit for filing the action* - provides in par.(1), (2) and (3) that for actions brought by the prefect, the general time limit is **6 months** or, where appropriate, a year, for good reasons, *as of the time the illegal document was acknowledged.*

To eliminate the possibility of conflicting interpretations, art.11 par.(5) of the same law provides that the short time limit of 6 months, provided in par.(1), is *limitation period* and long time limit of 1 year, provided in par.(2) is *lapse period*. The period of 6 months is the *rule*, while the period of 1 year is the *exception* it remains at the discretion of the court, being an *exception to the rule*, which involves *justification thereof in each case*.[3]

The constitutional text does not restrict or condition the prefect's action, opinion expressed in the case law on the settlement of the pleas of unconstitutionality of the law (*Constitutional Court Decision no.1353/2008*)[4], unlike the administrative litigation action of the injured citizen, natural entity, or legal entity, which under the organic law may be subject to conditionality and limitations, as stated in art.52 par. (2) of the Constitution.

Under the provisions of art.7 - *Prior procedure*, par.(5) of Law no.554/2004, **for action brought by the prefect, prior complaint is not required**. However, the voluntary nature of such procedure specific to *grace appeal* allows the prefect to require, with necessary motivation, that the issuing

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[1] Published in Official Gazette of Romania, Part I, no.233 of November 21, 1991, as amended and supplemented by Constitution Reviewing Act no.429/2003, published in the Official Gazette of Romania, Part I, no.758 of October 29, 2003, as republished in the Official Gazette of Romania, Part I, no.767 of October 31, 2003.

[2] Published in the Official Gazette of Romania, Part I, no.1154 of December 7, 2004.

[3] Antonie Iorgovan, *Tratat de drept administrativ* (*Treatise on Administrative Law*), Vol.II, All Beck Publishing House, Bucharest, 2005, pp.596-598.

[4] By *Decision no.1353/2008* published in the Official Gazette of Romania, Part I, no.884 of December 29, 2008 the Constitutional Court rejected the plea of unconstitutionality of the provisions of art.19 par.(1) letter e) of *Law no.340/2004 on the prefect and the prefect's institution.*

public authorities reconsider the administrative acts deemed unlawful for *amendment* thereof or, as appropriate, for *revocation* thereof, within 30 days, as provided in par.(1) of art.7 of the same law, for *individual administrative documents*. For solid reasons, for *unilateral administrative documents*, prior complaint may be filed after the time limit provided in par.(1), *but not later than 6 months from the date the document was issued,* according to par.(7) of art.7, *the period of 6 months being limitation period,* according to the law.

The premise of the constituent, and of the legislator, in terms of action applicable to an administrative document deemed unlawful by the prefect and challenged in court, whether prior procedure is used or not, consists precisely in those documents being presumed to be valid, entered into force, generating rights and obligations prior to referral of the court.[1]

1.2. **In French law**, *within the Republic territorial collectivities,* **state representative**, *a representative of each member of the Government, is in charge of national interests, administrative control and compliance with the law*, according to art.2, the final sentence of the French Constitution[2], in force.

An action ("*le recours*") is exercised by state representative within the department, **the prefect**, against the documents of communes and departments and by state representative in the region, the prefect of the regions, for the documents of the regions.[3]

The deadline is **two months** (as opposed to the period of 6 months, according to the Romanian law) and begins to run (as in Romanian law) from the date the unlawful document was acknowledged.[4]

According to French law, the state representative/ prefect **must notify** the local authority concerned, stating the reasons why they consider the document as unlawful, claimed in the contents of the action (enabling the authority, if desired, to revoke the act).[5]

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[1] See: Corneliu Manda, Cezar C. Manda, *Dreptul colectivitatilor locale (Local collectivities law)*, 3rd Edition revised and enlarged, Lumina Lex Publishing House, Bucharest, 2007, p.362 and the following.

[2] Adopted by referendum on 28.09.1958, revised on 23.07.2008, Romanian version, pp.27-28, available at the website of the Constitutional Council *[Conseil_constitutionnel_(France)]:* http://www.conseil-constitutionnel.fr/conseil-constitutionnel/root/bank_mm/constitution/constitution_roumain.pdf, accessed on 05.05.2014.

[3] Jean-Marie Auby, Robert Ducos-Ader, Jean-Bernard Auby, *Institutions administratives - Organisation générale. Fonction publique. Contentieux administratif. Intervention de l'administration dans l'économie. Prix. Planification. Aménagement du territoire*, 5th edition, Dalloz, Paris, 1989, p.238, (our translation).

[4] Ibidem, p.239.

[5] Jean-Marie Auby, Robert Ducos-Ader, Jean-Bernard Auby, works cited, pp.239-240, (our translation).

2. Romanian administrative case law - the time limit in which the prefect may challenge a document of local authorities if deemed as unlawful

Ploiesti Court of Appeal, *the 2ⁿᵈ Civil Department of Administrative and Tax Litigation,* ***Judgment no.1791 of September 8, 2011***[1]

Art.11 par.(1) and (3) of Law no.554/2004 shows that *the time limit for filing the action seeking annulment of an individual administrative document, an administrative contract, the acknowledgement of the claimed right and repair of damage caused may be filed within 6 months from the date when the unlawful act was acknowledged.*

By the action filed with Prahova High Court, the claimant Prefect of Prahova County, against defendant Prahova County Council, requested that the court determine the partial invalidity by right of the Resolution no.55/29.04.2009.

The claimant has showed that the contested administrative document violates the provisions of art.46 par.(1) and (2) of the *Local Public Administration Law no.215/2001, republished*[2], as subsequently amended and supplemented, according to which the local councillor may not take part in the deliberation and the adoption of resolutions, either personally or through spouse, in-laws or relatives up to the fourth degree, who has a proprietary interest in the issue subject to debates in the local council (...).

By sentence no.357/10.05.2011, Prahova Court **upheld the plea of action tardiness** claimed by the respondent Prahova County Council and **dismissed the action** brought by the Prefect of Prahova County, as tardily filed.

The claimant / prefect appealed.

We present below the considerations expressed by the Court of Appeal.

Since County Council Resolution no.55/29.04.2009 was notified on 30.04.2009 to the prefect by letter no.5581 the action requesting the annulment of the administrative document in question, filed in court on 28.03.2011, exceeds the *time limit of 6 months* provided by art.11 par.(1) of the Administrative Litigation Act, for which reason **the trial court properly determined that the action was belatedly brought and rejected the same for this reason**.

Analysing the allegations of the appellant as to the nature of the document in question, the court of appeal showed that: on the one hand, the trial court correctly determined that, regardless of the nature of the document, according to art.3 par.(1) second sentence, in conjunction with art.11 par.(1) of Law no.554/2004, *prefect's action in administrative litigation is filed within 6 months from the date of document submission*[3]*,* and on the other hand, the contested document cannot be

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[1] Decision no.1791 of September 8, 2011, Ploiesti Court of Appeal, 2ⁿᵈ Civil Department of Administrative and Tax Litigation. For details, see the websites: http://jurisprudenta.avocats.ro/44-contencios.php; http://legeaz.net/spete-contencios/tutela-administrativa-1791-8-2011, accessed on 05.05.2014.
[2] Published in the Official Gazette of Romania, Part I, no.204 of April 23, 2001, republished in the Official Gazette of Romania, Part I, no.123 of February 20, 2007.
[3] In our opinion, the period of 6 months acts as recommendation for *regulatory* administrative documents contested in court by the *prefect*, given that art.11 par.(4) of Law no.554/2004, as subsequently amended and supplemented, 2ⁿᵈ sentence, establishes that:

characterized as a regulatory document, but as an individual document in relation to the definition given to the *regulatory administrative document* by art.3 letter a) of *Law no.52/2003 on decisional transparency in public administration*[1], as "*document issued or adopted by a public authority with general applicability.*"

Also, the court of appeal considered the appellant's contention that it could not examine the legality of the resolution in the absence of the minutes of the meeting, as ungrounded, as such minutes could be found on the website of the issuing local administration where they are required to be displayed, under the law, or otherwise they could be requested in time, in order to verify the legality of the administrative document issued.[2]

For the reasons given, **Ploiesti Court of Appeal dismissed the appeal filed by the prefect, as unfounded.**

In **conclusion**, prefect's claim was rejected as inadmissible for lateness, as it was filed later than within 6 months *limitation period*, and 1 year *lapse period* provided for in Law no.554/2004, art.11 par.(1) and (2) for individual administrative documents.

3. French administrative case law - time limit in which the prefect may challenge in court a document of the local authorities if deemed unlawful

Administrative Court of Appeal of Paris, 4ᵗʰ Chamber, **Judgment no.99PA02625, of February 10, 2004**[3]

Prefect of Seine-Saint-Denis department, by claim recorded on August 4, 1999, requested the Court:

1). Cancellation of Judgment no.9806988/5, dated May 4, 1999, whereby the Paris Administrative Court dismissed the application for annulment of the Decision of the Mayor of Le Raincy in December 19, 1997.

2). Cancellation of that decision for misuse of power.

Given the contested judgment, other documents in the file, (...), the Code of Administrative Justice[1], the Administrative Court of Appeal held as we show below.

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regulatory administrative documents that are considered to be unlawful may be challenged at any time, without distinction between subjects of law which approach the court on such document, given that the prefect's action falls within the *objective administrative litigation*, and not within the *subjective* one, and is intended to safeguard or restore legal status.

[1] Published in the Official Gazette of Romania, Part I, no.70 of February 3, 2003.

[2] We think that the legislation should provide that the documents of the local public administration authorities which are compulsorily communicated to the prefect, be accompanied by documentation that led to the issue / adoption thereof, in order that the judicial review be effectively exercised.

[3] *Judgment no.99PA02625 of February 10, 2004, the Administrative Court of Appeal of Paris,* 4ᵗʰ Chamber*, French version (our translation) available at the website Legifrance.gouv.fr – Le service public de diffusion du droit:* http://www.legifrance.gouv.fr/initRechJuriAdmin.do, http://www.legifrance.gouv.fr/affichJuriAdmin.do?oldAction=rechJuriAdmin&idTexte=CETATEXT000007444422, accessed on 05.05.2014.

Under art.3 of Law of March 2, 1982, as amended by Law of July 22, 1982: "*state representative in the department appeals to the administrative court against the documents (...) which he/she considers contrary to law within two months of their submission.*"

The decision of mayor of Raincy dated December 19, 1997, was sent to the Prefecture of Seine-Saint-Denis on December 23rd.

If prefect addressed a letter to Raincy mayor in February 23, 1998 whereby he required him to reconsider the decision, it is not clear from the file that this letter was received before February 25, the date on which the mayor responded to this letter, but after the expiry of two months period available to the prefect according to art.3 of Law of March 2, 1982 to refer the administrative litigation court the document challenged.

In these circumstances, the submission of the letter to the prefect could not have the effect of preserving the prefect's benefit of the aforementioned two months period.

Referral of the prefect of Seine- Saint- Denis department, recorded on April 28, 1998 **was inadmissible for lateness**.

From the above it follows that the prefect of Seine-Saint-Denis department has no right to complain that, by the judgment under appeal, the Paris Administrative Court dismissed the application for annulment of the Decision of Raincy mayor of December 19, 1997.

Towards the considerations expressed, **Paris Administrative Court of Appeal decided to reject the application of Seine-Saint-Denis prefect**.

In **conclusion**, the time limit during which the prefect may challenge an administrative document is not preserved for his benefit if the letter to the prefect was received by the mayor after **the expiry of two months period available to the prefect** according to art.3 of Law of March 2, 1982 to bring to court the contested administrative document.

In these circumstances, the prefect's letter is a *grace appeal* in nature, but *this prior procedure may have no effect of interruption and extension of the two months period,* referred to above, for the benefit of the prefect.[2]

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[1] *Code de justice administrative* (*Code of administrative justice*), available on website *Legifrance.gouv.fr – Le service public de diffusion du droit*: http://www.legifrance.gouv.fr/initRechCodeArticle.do, http://www.legifrance.gouv.fr/affichCode.do?cidTexte=LEGITEXT00000607093, accessed on 03.05.2014.

[2] In the same vein: *Judgment no.114854 of March 27, 1991*, the State Council, French version available at the website *Legifrance.gouv.fr – Le service public de diffusion du droit*: http://www.legifrance.gouv.fr/initRechJuriAdmin.do, http://www.legifrance.gouv.fr/affichJuriAdmin.do?oldAction=rechJuriAdmin&idTexte=CE TATEXT000007800330, accessed on 03.05.2014.

4. Time limit for bringing an action before the Court of Justice of the European Union to review the legality of juridical documents of the EU institutions

  Court of Justice of the European Union reviews the legality of documents of the Council, the Commission and the European Central Bank and of documents of the European Parliament and of the European Council and the legality of documents of EU bodies, offices or agencies intended to produce legal effects to third parties, according to art.263, Section 5 - *Court of Justice of the European Union*, Chapter I - *Institutions*, Title I, Part VI of the Treaty on the Functioning of the European Union (TFEU).[1]

  Therefore, the EU Court of Justice ensures *the exercise of judicial review of legality over juridical documents adopted by the institutions of the Union* (except recommendations and approvals, which, as we know, are preparatory / preliminary documents, procedural deeds or preliminary operations as qualified in the Romanian doctrine also[2]).

  According to the same art.263 of TFEU, the Court has jurisdiction to rule on actions brought by a Member State, the European Parliament, the Council or the Commission for: grounds of *lack of competence*, *infringement of an essential procedural requirement*, *infringement of the treaties* or of any rule of law relating to its application, or for *misuse of powers*.

   The final sentence of art.263 TFEU states that "*the actions provided for in this article must be brought within two months, as applicable, as of the publication of the document, or its notification to the claimant or, in its absence, as of the date on which the claimant became aware of such document*"[3], the time limit thus being much shorter than in the Romanian law, where the deadline is 6 months, a period considered questionable in relation to the concept of *reasonable time* established by the *Convention for the Protection of Human Rights and Fundamental Freedoms*[4] in art.6 - *Right to a fair trial* par.1, and by the *Charter of Fundamental Rights of the European Union*[1] in art.41 - *Right to good administration*, par.(1).

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[1] Beatrice Andresan-Grigoriu; Tudorel Stefan, *Tratatele Uniunii Europene (EU Treaties)*, Official consolidated version following the entry into force of the Lisbon Treaty, Bucharest, Hamangiu Publishing House, 2010, p.161.

[2] Verginia Vedinas, *Drept Administrativ, Curs universitar (Administrative Law, University Course),* 7th edition, revised and updated, Universul Juridic Publishing House, Bucharest, 2012, pp.104-107.

[3] Beatrice Andresan-Grigoriu; Tudorel Stefan, *Tratatele Uniunii Europene (EU Treaties)*, Official consolidated version following the entry into force of the Lisbon Treaty, works cited, p.162.

[4] *European Convention on Human Rights and Fundamental Freedoms* (*Convention européenne de sauvegarde des Droits de l'Homme et des Libertés fondamentales*), Rome, 04.11.1950: Romanian version, available at the website *JurisprudentaCEDO.com*: http://jurisprudentacedo.com/Conventia-CEDO.html; French version available at the Council of Europe website: http://conventions.coe.int/Treaty/FR/Treaties/Html/005.htm, accessed on 03.05.2014.

Regarding the right of a person to address the European Court of Justice, under the Lisbon Treaty, art.263 of TFEU par.4, any natural or legal entity may appeal against documents whose addressee they are, or which concern it directly and individually, and against regulatory document which directly concern it and which do not entail enforcement measures[2].

In **conclusion**, the time limit for bringing *actions the Court of Justice of the European Union is referred to,* is **2 months** in European law from the date of acknowledgment of the contested document, unlike the **6 months** period in the Romanian law (we can say that the 2 months period is French inspired, being identical to the French administrative litigation law).

5. Doctrinal and regulatory references on the concept of "*reasonable time*" in European and Romanian law

5.1. The <*reasonable time*> notion is not defined in the text of art.6 par.1 of the **European Convention on Human Rights**. In the review it exercises over compliance with art.6 par.1 by national authorities of the contracting states, the European court "*considers the **content of the law** as disputed by reference to the provisions of the Convention, as well as to those of national rules of law, by taking into account the **autonomous nature of the notion**"*[3].

The European doctrine showed that the concept of "*reasonable time*" cannot be defined by strict criteria, being a relative term, and the Strasbourg Court stated that "*assessment is done on the whole procedure*", i.e. "*on the whole process*" in all its phases, the reasonableness of the length of proceedings being assessed "*depending on the circumstances of the case and the criteria established by the case law, in particular, depending on the complexity of the case, the conduct of the claimant and of the competent authorities.*"[4]

Art.6 par.1 of the European Convention on Human Rights: „*Everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law* (...)".

[1] *Charter of Fundamental Rights of the European Union,* available at Eur-lex website Access to European Union Law: http://eur-lex.europa.eu/JOIndex. (Official Journal C 364 of December 18, 2000), accessed on 03.05.2014.
Art.41 par.(1) of the Charter of Fundamental Rights of the European Union: "*Every person has the right to have his or her affairs handled impartially, fairly and within a reasonable time by the institutions and bodies of the Union.*"

[2] Beatrice Andresan-Grigoriu; Tudorel Stefan, *Tratatele Uniunii Europene (EU Treatises)*, Official consolidated version following the entry into force of the Lisbon Treaty, works cited, p.161.

[3] Corneliu Barsan, *Convenţia europeană a drepturilor omului, Comentariu pe articole (European Convention on Human Rights, Comment on articles)*, Vol.I, All Beck Publishing House, Bucharest, 2005, p.400 and related footnotes.

[4] Dorina Zeca, *Daunele morale in litigii de munca, comerciale si de contencios administrativ*, *Practica judiciara* (*Moral damages in labour, commercial and administrative disputes, Judicial practice*), Hamangiu Publishing House, Bucharest, 2011, p.256: „*In this respect, it was shown that, in civil matters, dies a quo begins to run from the date of referral to the competent court, but it also includes the length of prior*

Regarding the phrase "*reasonable time*", enshrined in the contents of art.6 par.1 of the European Convention on Human Rights, there are a number of conceptual determinations stated by the European Court in Strasbourg in the content of its case law, as "*the admissibility of a complaint to the Court for exceeding a reasonable time, is not subject to the exhaustion of domestic remedies (...)*", "*in civil matters, reasonable time will be assessed from the date of referral to the competent court, but in certain circumstances, the start of the time limit may fall before the date of the document initiating proceedings (for example, the date of exercise of administrative appeal)*", so it is the responsibility of each state "*to create an appropriate and sufficient legal arsenal to ensure that positive obligations incumbent to it be observed (...)*".[1]

5.2. The **Romanian law**, enshrines at constitutional level the rule according to which: *constitutional provision on citizens' rights and liberties shall be interpreted and enforced in accordance with the Universal Declaration of Human Rights, with the covenants and other treaties to which Romania is a party*, and *if there is conflict between the covenants and treaties on fundamental human rights to which Romania is a party, and domestic laws, the international regulations shall take precedence unless the Constitution or domestic laws comprise more favourable provisions* (art.20 of the Constitution)*, and *the parties have the right to a fair trial and to the settlement of cases in a reasonable time* [art.21 par.(3) of the Constitution].

As we know, administrative law relations are subject to Law no.554/2004, which **is supplemented by the common law**, namely by the *provisions of the Civil Code and the provisions of the Civil Procedure Code, to the extent they are not inconsistent with the peculiarities of power relations between public authorities on the one hand, and persons injured in their legitimate rights and interests, on the other hand*, according to art.28 par.(1) of the same Law.[2]

Civil Procedure Code[3] provides in art.6 - *Right to a fair trial within optimal and predictable time*, par.(1): *Everyone is entitled to a fair hearing within an optimal and predictable time by an independent, impartial and established by law court*, for which purpose, *the court is obliged to order all measures allowed by law to conduct a trial with expedience.*

In the same spirit, the Romanian organic legislator provided within Law no.554/2004, *urgent trial and with priority of claims referred to the administrative*

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administrative procedure when referral to the competent court is preceded by a prior, compulsory appeal."

[1] Ion Deleanu, *Prolegomene juridice - studii şi articole* (*Legal Prolegomena - Studies and Articles*), Universul Juridic Publishing House, Bucharest, 2010, p.267 and related footnotes.

[2] Par.(1) of art.28 was amended by section 9 of art.54 of *Law no.76/2012 for the enforcement of Law no. 134/2010 on Civil Procedure Code*, published in the Official Gazette of Romania, Part I, no.365 of May 30, 2012.

[3] *Law no.134/2010 on Civil Procedure Code,* published in the Official Gazette of Romania, Part I, no.485 of July 15, 2010, republished in the Official Gazette of Romania, Part I, no.545 of August 3, 2012.

litigation court and the *urgent trial of the appeal* [art.17, par. (1) and art.20 par.(2)].[1]

6. Conclusions

In the doctrinal, jurisprudential and regulatory rules presented, it appears, on the one hand, that the time limit for referral to the administrative litigation court by the prefect on unlawfulness of local public administration authorities' documents, is **6 months in the Romanian law**, as opposed to **2 months in French law**, time limit which shall be found enshrined in the Treaty of Lisbon, on referral to the Court of Justice of the European Union in Luxembourg to exercise judicial review of juridical documents of the institutions / bodies of the Union, and on the other hand, that **in the Romanian law prior complaint is not compulsory** for action brought by the prefect, unlike **its compulsoriness under French law**.

European doctrine, in agreement with the European Court in Strasbourg has shown that <*reasonable time*> notion enshrined in art.6 par.1 of the European Convention on Human Rights, in civil matters, it begins to run from *the date of referral to competent court*, but it also includes *the length of prior administrative procedure* when notification of the court is preceded by *a prior appeal required* - which is not found in the Romanian law, for the prefect 's action against documents of local public administration authorities they consider unlawful, in contrast to the compulsoriness of prior complaint for the natural or legal entity injured.

With reference to these considerations, even if it can be assessed that in the Romanian law, both constituent legislator and the organic legislator undertook the procedural guarantees laid down by European rules regarding the "*reasonable time*", we think that a *lex ferenda proposal* may be discussed to reduce the *6 months* period to appeal before the administrative litigation court referred to in art.11 par.(1) of Law no.554/2004.

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[1] See: Andreea Tabacu, PhD Univ. Lecturer, Faculty of Legal and Administrative Sciences, University of Pitesti, Pitesti, Romania, *Principiul dreptului la un proces echitabil, în termen optim şi previzibil, potrivit noului Cod de procedură civilă şi contenciosului administrativ* (*The Person's Right to a Fair Hearing within a Reasonable and Predictable Timeframe According to the New Civil Procedure Code and Administrative Law),* Revista Transilvana de Stiinte Administrative, 2(31)/2012, pp.140-151, article available at the website: http://rtsa.ro/files/RTSA%20-%2031%20-%209TABACU.pdf, accessed on 05.05.2014.

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RISK IN PERFORMANCE AGRICULTURAL PRACTICE

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Abstract
The environment, with all physical and chemical components, was permanently exploited by the biodiversity. The ecology experts consider that its value is invaluable. But, under anthropic activity, the biological communities suffer modifications, which, under current conditions are differently understood. In this respect, at global level the issue environment – economy occurs, due to complex and multidimensional features (technological, economical, political and ecological) by nature and involvements. The agricultural science and practice, by meteorological variations, intensity and field exploitation type, have demonstrated the exposure of yield to the risk. The research refers to some technological risks. It is important to understand the role and the implications of using chemicals as part of agricultural practice. All vegetal species are differently affected by the diseases and pests and as well as by weeds. The damages could affect the yields, even fully. The modern and efficacy measures to prevent and control all kinds of pests are chemical treatments. Used rationally, they create the healthy of crops with no pollution to the environment. The key question for an efficient technology are what, how and when are used the pesticides. This aspect is under research into field crop exploitations.

Keywords: technology, risk, agricultural product, environment

JEL Classification: O3, Q12

Introduction

The agricultural practice is achieved based on specific technologies, financially sustained. A technological system is an entity consists of many elements (material, human and/or informational ones) joined as certain structure, into an specific environment (ambient); it is charaterized by some on-going technological processes (germination, emergence, growth, development) with agricultural product as final destination (grains/seeds, vegetative mass, fruits).

The high-level yields, economical or ecological ones are consequence of the fact that the producer could have access to general, technical, economical and management knowledges. Under these circumstances, one can act to raise the perception degree of phenomena and to better utilize the tools (economical-financial and environment ones) contained by the policies promoted versus agriculture. So, the „enclosed" agriculture is replaced by elements of knowledges regarding the agricultural science; by the obtained products, the exploitations are also connected to national and international fluxes.

Materials and methods

Field vegetal yield (cereals, industrial crops, forage crops, legumes, fruit trees and vineyards) is achieves annually, on about 60,82% of total Romania'a area, with 0.68 agricultural area/capita or 0.44 arable land/capita.

The national statistical data from figure 1 represents the yield/capita during 2006 – 2012; add to these, 260.47 l milk and 307 eggs.

	2006	2007	2008	2009	2010	2011	2012
■ Cereals for grains	730.1	362.8	782.5	692.7	779.8	973.3	638.1
□ Sunflower	70.7	25.4	54.4	51.1	58.9	83.6	69.6
▨ Sugar beet	53.4	34.8	32.9	38	39.1	30.8	35.8
▣ Potatoes	186.1	172.4	169.7	186.5	153.2	190.4	122.7
▨ Vegetables	191.8	144.7	177.6	181.7	180.3	195	175.9
▨ Fruit	68.9	50.4	54.8	61.6	66.2	69.1	56.2
▨ Meat, live weight	64.9	69.8	66.3	66.3	60.9	63.4	66.3
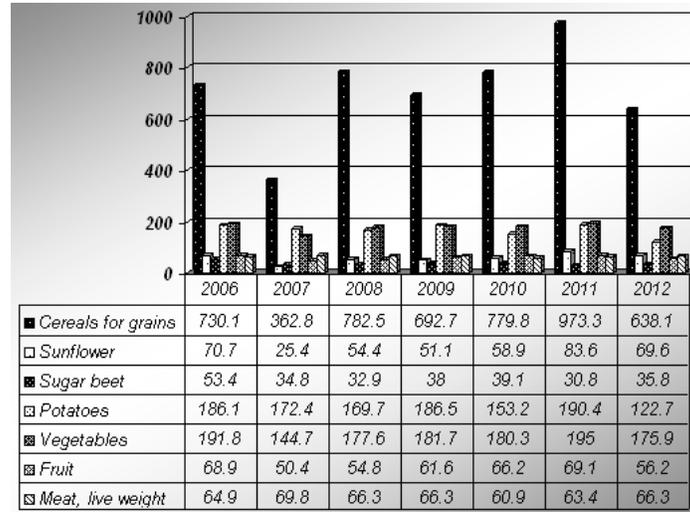
Source: Statistical Yearbook of Romania, 2013 - 2014

Figure 1. The main agricultural products made in Romanian agriculture, kg / capita

Based on these achievements, the Romanian consumer has fully covered the needs of food, so, Romania has no pressing food issue.

The economical analysts have predicted that during next time (starting with 2015 till 2050) the Romanian agricultural yield could be doubled, which means that we could sustain the consumption abroad too. The calculation was based on the agricultural area of the country and performance technology approaches (Enache Calcedonia, 2011). These are consumers of inputs, such as: fertilizers (chemical and manure), seeds and valuable biological planting material, pesticides, irrigation water.

Yield factors. Comparing the chemical consumption per Romanian agricultural area (fig. 2) with world one (fig. 3), one can ascertain that the average/ha in Romania in 2010 was of about 33 active ingredient; this represents a diminution of 100 kg active ingredient/ha versus world average.

■ CHEMICAL FERTILIZERS (active substance), thou tonnes	2006	2007	2008	2009	2010	2011	2012
	363	387	398	426	481	487	438
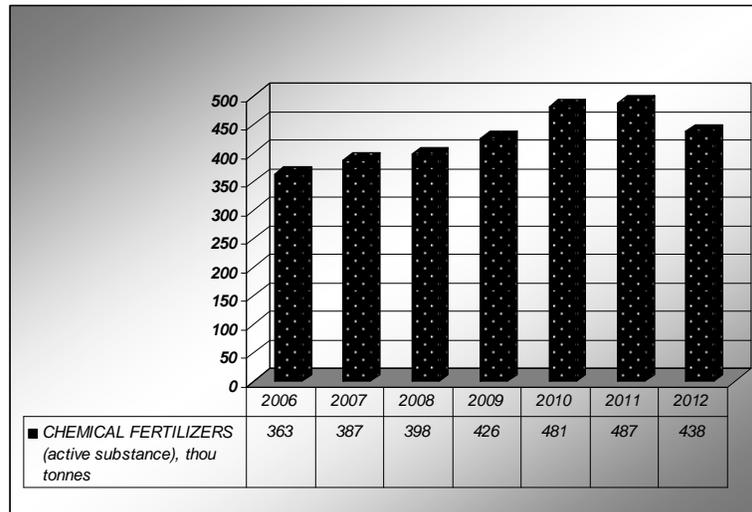
Source: NIS, 2012

Figure 2. The amount of fertilizer used in making production plant in Romania
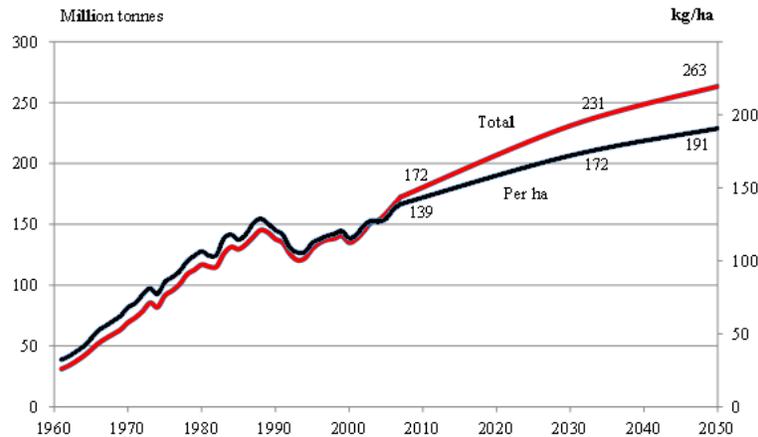
Source: Alexandratos N. and Bruinsma J., 2012

Figure 3. World fertilizer consumption (NPK): past and projected

To understand the importance of fertilizers, it is obvious to know the need of consumption to achieve the agricultural product. For example, to achieve 1000 kg wheat grains, the crop has a consumption of active ingredients (NPK) of about 57 – 83 kg. But, 1 ha could yield over 8 tons, which means a higher NPK consumption. The calculation is not made strictly mathematical, but takes into consideration the local conditions, sown cultivar, generally speaking the factors which influence the technology (including of risk).

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Other chemicals are the pesticides, for which, we underline a diminution in solid pesticide commercialization in 2012 and an increasing of liquid ones commercialization (fig. 4). Per total, in 2012, more such products were sold.

The pesticides are frequently known by benefic effect regarding the weed control (herbicides), diseases control (fungicides) and pests (insecticides). They are also known as harmful for human and environment health, by their toxicity. Their using or not is optional. But, knowing the damages provoked by weeds, diseases and pests on crops (in maize for grains, yield losses are of 12.4% due to pests attack, 9.4% due to diseases and 13% due to weeds; the same plants could be affected by an attack or by the three ones, so, we cannot estimate the total losses), one can highlights the consequence of pesticide utilization under risk conditions too.
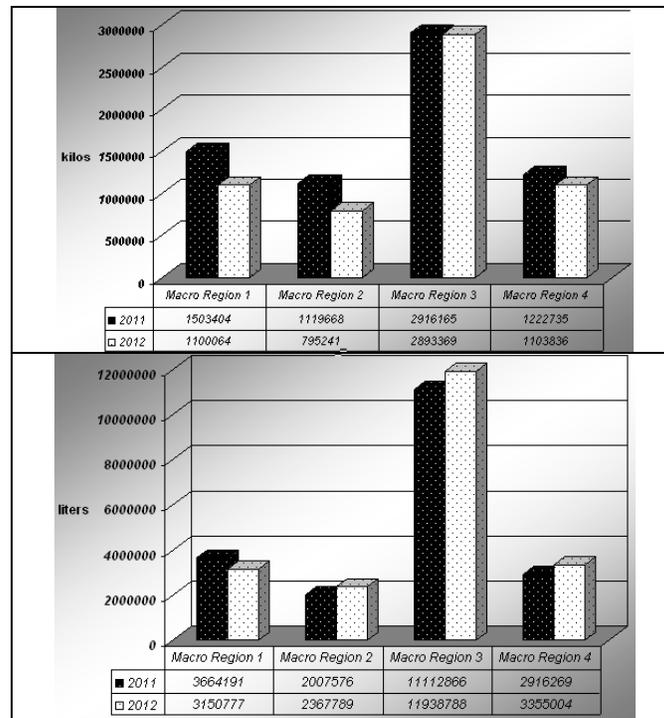
Source: NIS, 2012

Figure 4. The sale of pesticides (solid and liquid) in Romania

Risk factors are joined with the yield factors, but they could be classified independently – climatic, biological and anthropic risks. Due to the fact that affect the yield, partially or totally, there are necessary to exist prevention and control measures, even improvement of the current technologies or new ones realization.

The risk biological factors are the weeds, diseases and pests. The concept born at the end of the XXth centrury – Integrated Plant Protection Management (IPPM) – has in view the maintenance of risk below EDT.

For example, in order to achieve an IPPM against risk biological fators, certain activities could be taken into consideration:

- *establishment of EDT (economic damage threshold)* for problem – weeds in different crops. The EDTs are based on: evolution of weed populations under influence of various agro-technical measures on soil seed reserve and weed emergence prognosis; critical period of weed ocurrence; influence of weed on yields;

- *establishment of EDT for diseases specific to cultivated species* under influence of agro-technical measures on attack degree and yields. The EDT is established based on research results (e.g.: genetic resistance of varieties and hybrids under certain pedoclimatic conditions; variety behavior under specific stress factors;

- *establishment of EDT for pests.* The realization of IPPM against pests are based on bio-ecological peculiarities of the pests; correlations between climatic conditions and pest rearing; crop rotation influence on pest rearing; influence of technology choose to fight with pest attack, yield quality and quantity; using natural predators and testing of chemicals un-pollutant for the environment.

Anthropic factors of risk. By spreading crops, the humans affected the environment, leading to: soil erosion, soil compaction and degradation of soil structure, acidification, clay content and macro- and micro-elements diminution, soil, water and air industrial pollution, reduction of biodiversity. As follows, it is urgent to prevent and control these aspects, but, the recovering of "failures" is long-term process.

Many and diversified documentation sources, as well as surveys method utilized to farmers have allowed the identification of the current level of technological development and impact of the reality on performances registered by the vegetal exploitations.

Results and discussions

Nothing is more clear than the uncertainty prevailing over the consequences of any decision and economical activity (Cioc, P., 2001).

The uncertainty occurres when one action of the stakeholder, at least, leads to many possible consequences. Thus, the consequence is that the stakeholder does not control perfectly its environment. For example, the output of a stakeholder could not be possible – starting from a given input collection – than under favorable meteorological conditions.

During an exploitation organization, he must know the yield factors useful to obtain given yields. The scheme no1 presents the factors that influence the agricultural yield.

Among *natural factors,* one can highlight: soil fertility class used into production process; rainfall regime of the given region and how they could intervene if the regime is deficitary; annual average temperatures and the varieties/cultivars/hybrids adequate for this regime.

Natural factors are no cost carriers that transfer on the achieved products.

Into action, the natural factors encourage or not the yielding processes and efficiency of economical factor utilization.

Economical factors are various and cost carriers: materials necessary to yielding process on categories and quantities; seeds, herbicides, insecticides, fungicides, fertilizers suppliers; irrigation water, if necessary (Voicu R., Iuliana Dobre, 2003).

The economical factors have dynamic character (Vasile Emilia and al., 2009), it manifests through suffered transformations, partially or totally, during yielding processes.
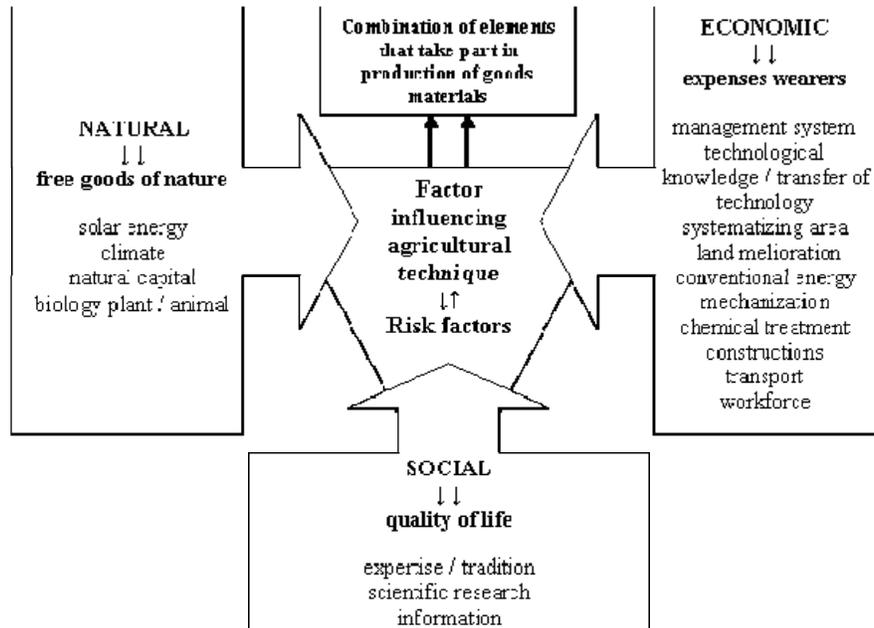
Source: processed by the author

Scheme no 1 – Factors of influence and risk in agricultural technique

Human factor represents the conscious factor of whole activity into farm and also, the element to put into action yielding means, with ability to apply the high-level technologies.

The human factor releases values which exceeds its own cost.

The sustainable vegetal yield involves the implementation of crop systems on an given area, choosing species and crop rotation, soil fertilization, integrated pest management (IPM) (diseases, pests, weeds), sowing, crop management (irrigation, supplementary pollination), harvesting, transport, storage and yield commercialization.

Unlike other yielding processes, the final agricultural product depends by many risk factors (pedoclimatic, variety), which could act during any vegetation stage.

The benefit and losses of farmers are affected by uncontrollable factors, including climatic ones, market fluctuations, diseases and pest infestation and legislation. On these considerations, the prompt and efficient application of cultural

practices is required, having as aim the losses mitigation. The cultural practices, respectively the utilized technologies, improve efficiency, diminish cost and increase efficiency.

Regarding the species and variety, if they are chosen according to area requirements, the yield will be satisfactory and market satisfied.

The tested farmers, managers of exploitation between 13 and 2122 ha, have positively argued utilization of both chemicals and pesticides. Their percentage into yielding expenditure ranged between 9 and 19%, higher expenses are registered to fertilizers. Among pesticides, all farmers affirmed that they made higher investments in herbicides, the risk of diseases and pests being cancelled by using seeds treated with insecto-fungicides.

Conclusions

Natural factors and probability of their occurrence as favorable manifestation allow better utilization of economical factors.

The vulnerability is fundamental component part into risk assessment.

The risks of chemical residues existence into agricultural product is the object of the risk management.

The future agriculture, intensive, performance one, imposes to producer to be high-level agronomist, expert in environment preservation and financial analyst, but expert in marketing and informatics too.

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THE CHEQUE,
PAYMENT INSTRUMENT IN DOMESTIC AND
INTERNATIONAL TRADE RELATIONS
**Brief considerations in light of the changes to the Law no. 59/1934 by
GEO 38/2008**

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Abstract
　　*As a corollary of the unprecedented development known by information
technology in the last decade of the twentieth century and the first decade of the
twenty first century, at the global banking system level telematics was implemented.
This is a long-distance transmission technology of digital information that
combines computer science with satellite communications and public and private
web networks.*
　　*Consequently, the celerity that characterizes economic changes has
imposed the transmission – through this system – of debt instruments in order to
settle them quickly. As such, the banking practice required the presentation for
payment in order to settle traditional payment instruments, paper-based, by means
of computerized process.*
　　*For these reasons we can state that electronic payment instruments
represent the digital image of paper-based payment titles, of which the
presentation for payment is made by using computer techniques.*

Keywords: payment, payment instruments, debt securities, cheque

Section I
Notion. Form requirements. Particularities

1. *Notion. Form requirements. Particularities.* Unlike the bill of exchange and
promissory note, the cheque is not a credit title, although the holder may endorse it
and thus delay its presentation for payment, reason for which it was classified as
payment instrument.
Similar to the two previously analyzed credit titles, the cheque has also generated
much controversy in practice, due to legislative differences between states, which
is why was the object of a Convention of uniform regulation in the continental law.
However, its legal regime being different from the credit titles, the cheque
experienced a separate regulation in the European continental law system, therefore
being the object of the Geneva Convention of 1931.

As in the case of credit titles analyzed, regarding the cheque were also adopted *three conventions*, namely *one on the cheques*, by which signatory states were obliged to introduce into national legislation, without amendment, the text of the Convention accompanied by two annexes, one containing the uniform law text, and the second the points where national laws could depart from uniform regulation; the *second consisted of conflicts of laws in time in terms of cheques*, and the last one had as object the *stamp right in terms of cheques* by which the signatory states were obliged to amend their tax law, in the sense that obligations under cheques or the exertion of rights arising therefrom are not subject to the legal provisions relating to stamp.

Although Romania has also participated in the work of this Convention, it has not ratified it and proceeded as in the case of credit titles when took on the Italian legislation, which transposed into the Italian law the Geneva Convention of 1931 on cheques, under the name of Law no. 59/1934 on cheques.

Since the Geneva Convention of 1931 on cheques does not define the cheque, neither the national legislation include such a *definition*, limited only to indicate its defining elements according to which we can state that the *cheque* is a payment instrument, by virtue of which a person named drawer orders to a credit institution named drawee and where has a corresponding cash available, to pay an amount at the submission of the title to a person named payee[1].

Unlike the uniform regulation of Geneva, in the legal system of common law, the cheque is governed by the bills of exchange law, being considered a species of it. Therefore, the English law[2] states that the cheque is a bill of exchange drawn on a banker and payable on demand, while U.S. law[3] specifies that the cheque is a different bill of exchange than the documentary, drawn on a bank and payable on demand.

Regardless of the legal system that governs it, the parts that contribute to the creation of a cheque are in number of three, similar to the bill legal report, namely the drawer which is the creator of the instrument, the drawee which is a credit institution and the payee which is the recipient of the amount mentioned in the cheque.

Nevertheless, the cheque is different from credit titles on demand in that on its issuance is necessary to have the *provision*, meaning available money in the current account opened at the credit institution from which payment is to be made. It is not relevant if the money comes from the drawer's bank deposit for the drawee or from a loan granted by the drawee to the drawer or cashing operations.

It is worth noting that in light of the Geneva Convention of 1931 on cheques, the mandatory requirement for issuing any cheque is the existence of the provision[4].

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[1] O. Capatana, B. Stefanescu, op. cit., pg. 93;

[2] In the English law the cheque regulation is called the Bills of Exchange Act;

[3] In the American law the regulation is called the Uniform Commercial Code;

[4] Art. 3 of the Geneva Convention of 1931 on cheques states that the cheque is drawn on a bank holding funds available to the drawer, based on the express or tacit agreement of the parties, according to which the drawer has the right to dispose of these funds by check;

National law requires additionally the existence of available funds prior to issuing the cheque and it must have at least the amount stated in the cheque[1].

The mention provided additionally by the national legislation did not impose an excessive requirement to the issuance of the cheque but complied with the provisions of art. 4 of annex no. 2 of the Geneva Convention on cheques, under which, states were allowed to introduce in their national legislation art. 3 of the uniform regulation, adapted to the best conditions necessary for purpose of uniform law on the matter.

Therefore, unlike credit titles, to the issuance of the cheque must be performed a number of requirements, namely the prior existence of the amount in the account opened at the drawee, the amount thereof to be at least the amount stated on the cheque and to exist no legal or material obstacle on its availability.

However, regarding the cheque, the legal relationships between the drawer and drawee do not arise from a fundamental relation as in the case of credit titles, but from a front-office banking service[2] with dual function, by which the credit institution shall authorize the drawer to draw cheques on him and the drawer shall mandate the drawee to make payments from his current account on his behalf, as instructed.

In the same vein we show that unlike the bill procedure, in terms of the cheque the drawee must not accept the instrument prior to payment, as it acts as the representative of the drawer and not as holder of a payment obligation arising from the cheque.

Nevertheless, the drawer – on its own initiative or on payee's demand – may present the cheque to the drawee for confirmation. In such a situation, any mention of certification, of view or other equivalent written in the title and signed by the drawee, has only the effect of confirming the availability in the drawer's account, while preventing him to dispose of the amount before the due date for the payment of the cheque[3].

In the same vein, we note that the Anglo-American law does not establish any mandatory provision, such payment instrument can be drawn also when there is lack of availability in behalf of the issuer, under the condition of a contractual commitment (consideration) between the drawer and drawee[4]. Consequently, the drawer of a cheque governed by the Anglo-American regulation may order the payment from two categories of accounts, an account related to a bank deposit called *deposit account*, in relation to which the issuer of the cheque is called the *depositary* and a current account called simple account, situation in which the drawer is called the *account holder*. In both cases, the drawer receives from the credit institution two books, of which one of account in which the issuer must

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[1] Art. 3 par. 2 thesis I of Law no. 59/1934 on cheques;

[2] Art. 3 of the Geneva Convention of 1931 on cheques; Art. 3 par. 2 thesis III of Law no. 59/1934 on cheques;

[3] Art. 4 of Law no. 59/1934 on cheques;

[4] In the Anglo-American law the contractual arrangement between the drawer of a cheque or a bill of exchange, under which the credit institution takes a payment commitment is called *consideration*;

disclose all amounts paid or withdrawn and a second book that contains a number of cheques numbered.

Subsection II
Basic requirements of validity of a cheque

2.1. *Basic requirements of validity of a cheque.* In accordance with the Geneva Convention of 1931 on cheques and also with other relevant national legislation, the conditions of the form of cheques are basically similar to those of credit titles but with the particularities of this payment instrument.

The Anglo-American bill of exchange law states that for the validity of cheques are applicable the same form conditions of bills of exchange, under penalty of nullity.

Therefore, in accordance with provisions of art. 1 of the uniform law of Geneva on cheques and similarly the same article of the national legislation, under penalty of nullity, the cheque should include mandatory the name of cheque, the unconditional order to pay a sum of money, the name or denomination of the credit institution that must pay, place of payment, date and place of issuance and signature of the drawer.

As can be seen, the mandatory mentions of the cheque are fewer compared to those of the bill of exchange. Therefore, in a cheque should not be mentioned any beneficiary or maturity. Hence the indication of the payee arranged by cheque is optional for the drawer, who can issue it either *"on order"* or *"bearer"* which makes irrelevant mentioning the payee in the title, or with *"not on order"* clause, case in which the endorsement is prohibited, but in the same time the transmission path of the cheque is open to voluntary assignment of common law.

If the cheque was drawn on the order of a certain person mentioning on the title also the phrase *„or bearer"* the payment title shall be deemed to have been drawn on bearer.

Regarding the lack of *maturity* of the cheque's mentions, this is justified by the fact that as means of payment in sight, it is no longer necessary to mention its maturity as titles with such maturities are payable on presentation and any such statement inserted on the title is not opposable to the holder who may present it for payment at any time, but in the period of presentation under penalty of forfeiture of the right of recourse.

We believe that also in the case of payment titles represented by cheques, the national law should be amended similar to the amendment proposition of the law on bills of exchange and promissory notes, in the sense of being governed the possibility of payment in instalments of the amount stated in the title, along with immediate chargeability, ope legis without any other formality, of the whole amount to be paid in case of missing a payment at the stipulated deadline.

In relation to these provisions of the regulations relating to cheques, it follows that the drawer's rights in nominating the drawee are limited to the scope of credit institutions[1] and, regardless, the issuer cannot draw it on him unless there are two

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[1] Reason for which the doctrine named it bank title; J. P. Le Gall, *Droit commercial [Commercial law]*, 6th edition, Paris, Dalloz, 1983, pg. 24;

separate legal entities and with the conditions not to be *on bearer*, and the failure to indicate the maturity turns it into an instrument payable on demand only.

2.2. Regarding the conditions of validity of a cheque, we note that its *name* should be mentioned in the text of the title, under penalty of nullity and be expressed in the language used for writing the title.

In the Anglo-American law, the cheque is considered a species of the bill of exchange, the lack of name does not affect the validity of the title.

2.3. *Unconditional payment order*. Under penalty of nullity, the cheque should include the order addressed to the drawee, to pay at the presentation title, the amount of money mentioned therein, to the payee or bearer or at their order. The payment order shall not contain any condition affecting payment on title presentation to the credit institution designated for payment.

The amount that is subject to payment should be mentioned both in figures and in letters in the content of the cheque and in the event of inconsistency prevails the entry made in letters, and if there are differences in value between the amount written in words and figures, is given credit to the lower value[1].

Both the regulation of Geneva and the national regulation prohibit the stipulation of interests because the title has the maturity on sight, case in which the lack of diligence by the holder of the title expressed by the failure to be presented for payment may not be covered by stipulating an interest clause[2].

2.4. *Name or denomination of the payer*. Under penalty of nullity, the title must include the name or denomination of the credit institution, of the drawee where cheque must be presented for payment.

Given the title, the drawee is not required to accept it because, *on the one hand*, its maturity is in sight, *and on the other hand*, the drawer of a cheque is kept as a bill of exchange acceptor or issuer of a promissory note, as long as payment obligation incumbes them, although the funds transfer operation is performed by a credit institution authorized for that purpose by the drawee.

The uniform regulation of Geneva and the national regulation expressly provide that any mention of accepting the cheque is counted unwritten[3]. However, the cheque can be presented to the drawer for confirmation[4]. In such a situation, any mention made by the drawee is to certify the existence of the amount stated in the title, and since that time the drawer is prohibited any act that would target the availability in the account up to the amount stated on the title before reaching the deadline for payment.

In the same vein we support the idea that for similar reasons the aval given by the drawee is also excluded because it be equated with acceptance[5]. Consequently it follows that in the absence of acceptance, the drawee nominated in a cheque does

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[1] Art. 9 of the Geneva Convention of 1931 on cheques and art. 9 of Law no. 59/1934 on cheques;

[2] Art. 7 of the Geneva Convention of 1931 on cheques and art. 7 of Law no. 59/1934 on cheques;

[3] Idem art. 4 par. 1;

[4] Art. 6 of the Geneva Convention of 1931 on cheques and art. 4 alin. 2 of Law no. 59/1934 on cheques;

[5] O. Capatana, B. Stefanescu, op. cit., pg. 94;

not assume any obligation to guarantee payment derived from the fundamental relation the creation of the title was based on.

Thus the drawee has the only obligation to pay the amount mentioned in the title, within the limit of funds available and without its responsibility for refusing the cheque or paying partially the cheque, because in this case the drawee has only the role of solvens for the drawer[1].

At the same time, the responsibility for refusing the payment of the cheque remains of the drawer as guarantor of the sum payment and any clause that it tends to remove all or part of its liability is counted unwritten[2].

2.5. *Place of payment*. Regarding the place of payment of the cheque, it shall be explicitly stated in the title, given the drawee's quality of representative for payment. However, the omission to mention the place of payment on the title is not sanctioned by its nullity because both uniform regulation of Geneva and national regulation have established a legal presumption of the place of payment, meaning that it will be considered as such the place mentioned beside the name of the drawee[3].

If any place near the drawee's name is not indicated, combined with the lack of mention of the place of payment, attracts the incidence of special provisions[4] under which the title is to be paid at the principal headquarters of the drawee.

However, if several places of payment are mentioned, the cheque is to be paid at the first place indicated. Also, the national legislation on cheques held that such a title can be also paid at the residence of a third party, either in the same place as the drawee or from another place, but the third party must be always a credit institution[5].

Nevertheless, any title created on national territory but payable abroad is valid even if the drawee is not a credit institution[6].

In the same vein we note that the regulation of Geneva on cheques has admitted the possibility – for participating states at the adoption of the Convention or acceded to it subsequently – of stipulating within national laws the possibility to pay the cheque at the residence of a third party other than a credit institution[7].

2.6. *Date and place of issuance.* The date must appear on the title as according to this it is calculated the deadline for payment of the instrument, regardless of the maturity mentioned by the drawer on the cheque.

According to the regulation of Geneva the cheque may be post-dated, making it payable anytime from the day of its issue. This option was removed from the national legislation by art. I, pt. 6 of GEO 58/2008 on the grounds that the date of

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[1] O. Capatana, B. Stefanescu, op. cit., pg. 94;

[2] Art. 12 of the Geneva Convention of 1931 on cheques and art. 13 of Law no. 59/1934 on cheques;

[3] Art. 2 par. 2 of Geneva Convention of 1931 on cheques and art. 2 par. 2 of Law no. 59/1934 on cheques;

[4] Art. 2 par. 3 of Geneva Convention of 1931 on cheques and art. 2 par. 3 of Law no. 59/1934 on cheques;

[5] Art. 8 of Law no.59/1934 on cheques;

[6] Art. 3, par. 1, the IInd thesis of Law no.58/1934 on cheques;

[7] Art. 10 of the IInd annex to the Geneva Convention on cheques;

issue would be treated as of a so-called due date, provided that the cheque is a payment instrument in sight[1].

Regarding the place of issue of the cheque, it has relevance in relation to the payment submission of this title[2]. Under the national legislation, the current text of paragraph 1 of art. 30 of Law no. 59/1934 on cheques provide the presentation for payment of any cheque issued and payable on the national territory within 15 days from date of issue.

Regarding cheques issued outside the national territory but inside the European continent and payable in the country, they should be presented for payment within 30 days from the date of issue and in the situation where issuance is outside Europe and payable in Romania, to be submitted for payment within 70 days from the date of issue[3].

Where there is a difference between the calendar of the place of issue and of the place of payment, the period is calculated by reference to the date of issue at the calendar of the place of payment.

However, if the place of issue is not indicated on the title, is activated the legal presumption under which the place of issuance of the cheque is considered the one shown next to the name of the drawer.

2.7. *Signature of the drawer.* In accordance with the regulations of both bill of exchange law systems, in order to worth as payment title the cheque must be signed by the drawer.

Regarding the signature on the cheque, the uniform regulation of Geneva does not provide its definition but, as in credit titles, mentions that the signature must include the name and surname or the name of the legal entity committed to pay. Hence the signature of any payment title must necessarily include the elements of identification of the drawer that must be associated with the handwritten signature of the individual or the legal entity representative, in order to be achieved the

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[1] The modifying normative act respectively GEO no. 38/2008 established a single payment term within 15 days, justifying in the sense that for the payment, cheques are subject to a centralized electronic processing by credit institutions and terms differentiation for presenting to payment according to place of issue and of payment would not be applicable. We do not share this view as the justification of the national legislator is irrelevant as long as it confused the deadline for payment of a cheque, as it was regulated by art. 30 par. 1 of Law no. 59/1934, with the actual payment of this title. We support this opinion because the change affected all professionals in good faith as by this was done only the safeguarding of the interests of the non-diligent holder of the cheque, by doubling the term of drawer's, given that both the drawer and place of payment were located in same locality, with the consequence of affecting the drawer's exclusive interests;

[2] Until the amendment of 2008, art. 30 par. 1 stated that if the place of payment was situated in the same locality as the issue, then the title, under the penalty of loosing the right of recourse, it had to be presented for payment within eight days since its creation, and if the place of payment was located in another place, the cheque had to be presented for payment within 15 days from issuance.

[3] Art. 29 of Geneva Convention of 1930 on cheques and art. 30 par. 2 of Law no. 59/1934 on cheques;

individualization of the drawer, as guarantor of payment of the sum mentioned in the title.

Consequently, the uniform regulation – although it does not expressly specify – allows the drawer to sign the title also by processes other than handwritten, at the standards and procedure laid down by the regulations on information technology, thus meeting the current requirements of economic exchanges characterized by celerity.

Nationally, pending the amendment of Law no. 59/1934 on cheques – conducted by GEO 58/2008 – regarding the signature of the drawer on the cheque, the provisions of the law were similar to those of the uniform law of Geneva. Subsequently, by the changes brought to it, was held that changes the signature[1] must include the name and surname of the individual or the name of the company or entity that commits, as well as the handwritten signature of the individual or company representative or entity representative committed to pay.

In these conditions, according to the mandatory provisions of the law, a payment title, the cheque, cannot be signed under the conditions and procedure laid down by the regulations on information technology because it must necessarily contain the handwritten signature of the person who undertakes to pay the amount in the title. From this perspective, we argue that although amendments to the law on the signature in payment titles was intended to be a modern one, actually represents a decline of quality of regulation in the field.

In such a situation we consider that art. 11 of Law no. 59/1934 on cheques must be adapted to the realities of international banking practice admitting the signature of such titles also by other electronic or mechanical methods that allow the certain identification of the signer.

Regarding the signature on the credit titles of people who were not representative of the drawer, the regulations in the field provide that they are committing personally, and if the cheque has been honoured to payment, they acquire the same rights they would have had if they worked as a representative[2]. The same rule applies also if the representative goes beyond the limits of the mandate that was given by the drawer.

If a power of attorney was granted to a person by the drawer and the mandate was stated in general terms, the issuance of payment titles by it commits the trustee patrimonial because, as general as the terms of the mandate may be, they also include the right to sign cheques. To avoid such situations the mandate should expressly contain the phrase *"cannot issue cheques"*.

However, if the payment instrument shall bear the signatures of people who could not oblige by cheque or forged signatures or belonging to imaginary people or could not force people who signed the title because they were altered for any reason, the obligations of other signatories of the payment title remain valid[3].

Also in case of loss of possession on the cheque for reasons beyond the control of the person who lost it, the owner in whose hand reached the title is not bound to

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[1] Art. 11 of Law 59/1934 on cheques, amended by art. I, pct. 1 of the GEO 38/2008;
[2] Art. 12 of Law no. 59/1934 on cheques;
[3] Idem art. 10;

hand to whom claim its loss, regardless whether the title is to bearer or transferable by endorsement, if proofs its good faith[1]. Per a contrario it results that if the new owner is dishonest or has committed a serious mistake in acquiring the title has the obligation to hand it back to the person who lost the title.

Subsection III
Movement of a cheque. Guarantee of a cheque. Payment of a cheque

3.1. *Movement of a cheque*. The transmission of the cheque is in fact its legal movement. Given its nature of payment instrument, the purpose of which is to obtain cash, the movement of this title is narrower than of the credit titles[2].
However, regarding the legal movement of such a title, in the doctrine were outlined two opinions. In the first opinion[3], it was considered that the cheque is at order, to bearer and transferable by assignment, and in the second[4] was told that the cheque is nominative, at order and to bearer.
As can be seen, the divergence of opinion includes only the *cheque transferable by endorsement*, according to the first opinion, respectively the *nominative cheque*, according to the second.
In support of the first opinion was appreciated that the regulations on cheques, *likely to be transmitted by endorsement*, does not establish mandatory formalities required to nominative titles – procedure that is carried out with the mandatory involvement of the issuer of the title or its representative − respectively the enrolment in the issuer's special register of the mention on the transfer of property, followed by confirmation by autographed signature of the alienator and acquirer, as well as mentioning the name of the new owner of the title.
The argument pleading in favour of the second opinion was mentioning the name of the payee on the title, in conjunction with the insertion of the clause *"not at order"*.
As far as we are concerned we agree with the first opinion and additionally we mention that, first, the law regulating the legal status of cheques has the character of special law[5] in relation to the common law, with provisions of which was made the analogy in issuing the second point of view. In such a situation is incident the principle of law expressed by the Latin adage *specialia generalibus derogant*.
In these circumstances we support that it cannot be derogated – by reference to common law – from provisions of the special law – *which in art. 5 par. 3 held that the cheque stipulated payable to a particular person* (nominated n.n.) *containing the clause "or bearer" is considered bearer cheque*. If the legislator had intended to name the cheque where the payee was nominated as nominative, the text of par. 3 of art. 5 would have been the most convincing example as in the regulation referred to; the first alternative would have been preferable. Consequently, in light

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[1] Art. 21 of Geneva Convention on cheques and art. 22 of Law no. 59/1934 on cheques;
[2] O. Capatana, B. Stefanescu, op. cit. pg. 95;
[3] Ibidem;
[4] St. D. Carpenaru, op. cit. pg. 519; I. Macovei, op. cit., pg. 356;
[5] Law no. 59/1934 on cheques, with subsequent amendments;

of this regulation and keeping the principle of legal texts symmetry it follows that neither the cheque payable to a person nominated stated *"not at order"* is nominative but *represents a special category of such titles*.

Moreover, in the European continental law is widely acknowledged that, although experienced a separate regulation, the cheque has borrowed many features from the bill of exchange, but with a number of peculiarities that differentiates it, and in the legal system of common-law it is considered a species of it.

We also support that a beneficiary nomination in a payment title stipulated "not at order" was imposed by the legislator not to turn such a title into one nominative but to not facilitate its legal movement and confer the holder the ability to transmit it by way of assignment of debt, knowing the strictness of this procedure due to the solemnity that characterizes it.

Therefore, similar to the bills of exchange stipulated "not at order", cheques with payee nominated transmissible by assignment of debt, represent a distinct category of titles rarely encountered in practice and that comparative law did not likened with nominated titles[1].

The endorsement must be written on the cheque[2] and signed by the guarantor, as its person should be individualized, as it is bound to pay, if there is no contrary clause. The guarantor may prohibit the transmission of the title by a new endorsement, in which case it does not respond to people who have been endorsed the title subsequently[3].

The endorsement has the effect of transferring all rights deriving from the title from the guarantor to endorsees. However, if the endorsement contains one of the words "value coverage", "for power of attorney" or any other expression that suggests a simple mandate, the holder of this title may exercise all the rights that arise from it, but it cannot endorse it only as a proxy. In this case, the mandate contained in the endorsement "for power of attorney" does not end by the death of the principal, or civil incapacity or only its restriction.

3.2. *Payment of a cheque*. Payment of any cheque, drawn and payable within the national territory is always made by a credit institution. Per a contrario, it follows that cheques drawn on national territory but payable abroad may be presented for payment also to an entity or person other than a credit institution.

Regardless of the quality of the person honouring the payment of a cheque, it meets this obligation on behalf of the drawer, because it is not bill of exchange bound but acts as a drawer's representative for payment.

Being an immediate payment instrument, the cheque cannot be accepted and any such written statement counts as unwritten. As an exception, the cheque can be presented to the drawee confirmation, but the statement made by it on the title represents a certification of the existence of available funds in the drawer's account

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[1] Hamel, Lagarde, Jauffret, op. cit, pg. 762;

[2] Until the amendment of par. 1 of art. 17 of Law no. 59/1934 on cheques by art. 1, pct. 2 of the GEO no. 38/2008, the law provided the possibility for writing the endorsement on both the cheque and the addition (allonge) thereof;

[3] Art. 19 of Law no. 59/1934 on cheques;

and also a promise to maintain the amount indicated on the title in the drawer's account until the expiry of the presentation term for payment of the cheque.

Thus, if the cheque was drawn on national territory and is payable within the borders of the country, in order to collect the amount stated on the title, cheque must be presented for payment within 15 days from date of issue[1]. If issued in a European country and is payable in the country it should have been presented for payment within 30 days from the date of issue and if issued outside the European continent and is payable in the country must be presented for payment within 70 days after issuance. Payment terms are calculated from the day stated in the title as the date of their issue.

Regarding cheques issued on national territory and payable abroad, terms for presenting to payment are calculated according to the applicable law at the place of payment.

Not presenting the cheque for payment within the deadlines set out above, does not penalizing the owner to forfeiture of the right to demand payment of the drawee but it only decades the right of recourse against the other committed by cheque, if the drawee has not honoured the payment of the cheque. The holder's claim right arising from the quality of legitimate holder of the cheque remains intact throughout the statute of limitations period provided by law, in which it may require payment of the amount stated in the title.

In order to pay, the credit institution is *essentially* required to verify the form conditions of the cheque[2] and to confront the signature specimen filled by the drawer when opening the account with that in the title, and *in subsidiary*, the quality of the legitimate owner of the title by the claimant of payment, by checking the unbroken string of endorsements.

The presentation of a cheque to payment can be made both by presenting the original and by truncation.

Initially, until the amendment of Law no. 59/1934 by the GEO no. 38/2008, presenting cheques for payment was made at the national level, by presenting the original cheque on paper. After the amendment brought by GEO no. 38/2008, with the possibility of presenting cheques for payment by truncation, to the initial conditions were joined a number of new provisions.

Thus, by the new art. 32[1] of Law no. 59/1934 on the cheque, it was held that a cheque can be presented for payment both in original and truncated.

Truncation is a processing technique consisting of transposing electronically the relevant information from the original paper-based cheque, followed by the reproduction of its image electronically and sending them through the information technology of the paying credit institution (where the solvens opened its account) by the accipiens credit institution (payment creditor).

In such a situation, the presentation for payment is considered made on the date on which the solvents credit institution has received the electronic transmission and the responsibility for checking the regularity of sequence endorsements and

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[1] Art. 30 of Law no. 59/1934 on cheques;
[2] Art. 35 of the Geneva Convention of 1931 on cheques;

compliance of data collected electronically with those in the original title is of the credit institution that has submitted the title to payment by truncation[1].

After receiving payment, the credit institution who presented the cheque for payment by truncation and in which possession is the original title, is obliged to take all necessary measures to eliminate the risk that title is to be reinstated in service.

However, if the cheque presented for payment by truncation was refused by the solvents credit institution, although initially accepted, the credit institution where is the original title is forced to mention in the title the payment refusal upon electronic notification received from the paying credit institution, which must include date of payment of the title and statement of refusal dated and signed by its legal representatives or assigns[2].

Regardless of the method of presentation of payment title, in original or by truncation, basically the cheque payment is made for the entire amount mentioned in it, but if the available funds were insufficient, payment may be partial and the accipiens owner-creditor cannot refuse it.

In the situation where the full amount was paid, the drawee is entitled to require the holder the original title with the word paid written on it. If payment was made partially, the drawee cannot claim the original title, but can mention it on the cheque, also releasing a proof of this.

However, in accordance with the provisions of cheque regulation, as in the case of bill of exchange, cheques drawn in one country but payable in another may be issued in several identical copies, except bearer securities. In such a situation, when creating the payment title, the drawer should number them because otherwise, each copy is regarded as a separate cheque.

Payment of any copy shall discharge the drawer and drawee even in the absence of express mention in the text of the title, according to which, the payment of any copy invalidates the other.

Also, if each copy of title was sent to different people by endorsement, both initial and subsequent endorsers remain bound under all copies they have signed and were not returned to them.

In the event of the text alteration of such payment title, signers subsequent to its alteration are held responsible for payment under altered text, the previous under the original text and if the title does not show the filling date of signature by subsequent committers, it is presumed that they were committed before alteration.

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[1] Art. 32² of Law no. 59/1934, as subsequently amended;
[2] Art. 32³ of Law no. 59/1934, as subsequently amended.

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National regulations, continental and international uniform
1. Geneva Convention of 1931 on checks;
2. Law no. 59/1934 on checks;
3. Ordinance no. 38/2008 amending Law no. 59/1934 on checks;
4. Bills of Exchange Act, adopted by the United Kingdom, adopted in 1882;
5. Uniform Commercial Code adopted in 1951 by the United States and revised in 1990, which replaced the Negociable Instrument Law, adopted in 1896.

ASPECTS OF THE EVOLUTION OF THE MAIN MACROECONOMIC INDICATORS IN ROMANIA

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Abstract
By joining the European Union, Romania entered a new stage of development, which requires compliance with the new criteria and rules necessary for the development of the Romanian economy in line with the European development. In this sense, our paper captures some aspects of the evolution of some macroeconomic indicators, indicators representative for the correlation of the Romanian economic growth with the European one while emphasizing the impact of these developments on the economy.

Keywords: macroeconomic indicators, inflation rate, budget deficit, public debt, exchange

JEL Classification: E01, E31, E42

1. Introduction

According to economic history, in the first two centuries of evident manifestation of the capitalist market economy in a part of Earth, the state and dynamics of the economies of the national states were observed and analysed in the light of the economic activities and results of private individual economic agents. In other words, the approach of dynamics and economic power of the states that already were on the way to capitalist development was a microeconomic one.

In the twentieth century, based on the involvement and intervention of the state in the overall economy of the countries and the formation of consolidated macroeconomic structures, the macroeconomic approach of the economic problems that exist within the limits of different countries became possible and necessary.

Thus, the analysis of some macroeconomic indicators is important to know the level of development of any economy and the living standards of welfare.

2. The inflationary process in Romania

Along with the transition to market economy Romania has undergone many stages of inflation. At the beginning of the transition to market economy, Romania faced two major shocks: a significant increase in aggregate demand and a strong decrease in aggregate supply, which led to a strong start of the inflationary process. In addition, excessive gradualism of price liberalization and inflation volatility did not allow functioning price system to correspond to the rules of market economy, which made inflation to achieve extremely high rate during the first years of transition (100-200%) followed by low rates in 1995-1996.

The liberalization of prices for agricultural products and energy in 1997 resulted in a new burst of inflation, being situated in the middle of the year a little under 180% and maintaining very high in 1998. Inflation slowed down in 1999, reaching a minimum of 33% in February 1999 due to a restrictive monetary policy and slowing domestic currency depreciation. The cost was that of the deterioration of external competitiveness through strong appreciation of the real exchange rate which drew together with other factors a corrective depreciation of the national currency in 1999 that accelerated inflation again to a maximum of 57% in January 2000. (Cristescu A., 2011)

In 1999-2000, Romania passed through another inflation crisis this being the period of time of at least 2 years, during which the inflation rate exceeded 40% [Brunno M., Easterly W., 1998]. The year 2000 constitutes the beginning of a period characterized by high economic growth, improvement of internal and external balance - budget deficit reduction, sustainable current account deficit and thus lower inflation.

In 2001-2004 in Romania there was a downward trend in inflation reaching in 2005 after a very long period of 14 years, the value of a single digit i.e. 9%, according to INS.

The evolution the disinflation process over the last decade must be analysed in the context of a robust growth in real GDP until mid-2008 which exceeded the level of 5% almost every year starting with 2001. A major role in inflation dynamics played unit labour costs, adjustments in administered prices and excise duty, several supply-side shocks and exchange rate developments. Wage growth far exceeded productivity growth, leading to an increase in unit labour costs up to very high levels, pressures of overheating and finally to the erosion of competitiveness. [Gheorghiu, A., Gheorghiu, A., Spânulescu, I., 2009]

Between 2005 and mid-2007 the disinflation process was favoured by the evolution of import prices due to the appreciation of RON against the euro. Still

inflation fell until 2007 when it reached a historic low for the period after the revolution i.e. 4.9%. The end of 2007 was when the downward trend was reversed.

In March of 2012 inflation fell to 2.5%, a significant decrease compared to the large fluctuations during 2011, illustrated by the impact of a 5% increase in VAT in July 2010 as well as by the slowdown in pressures from food and energy prices. This moderation is given by the global price developments, a good harvest and disinflation pressures generated by the output gap. [Dinu, M., Socol, C., Marinas, M, 2005]

The evolution of inflation is shown in the chart below which highlights its downward trend during 2000-2012 (fig. no 1). This process is supported by factors such as: ease of food prices pressures; the prudent monetary policy adopted by NBR; exchange rate developments, domestic currency appreciating in real terms; keeping the budget deficit low, etc.

Fig. no 1. The national inflationary process
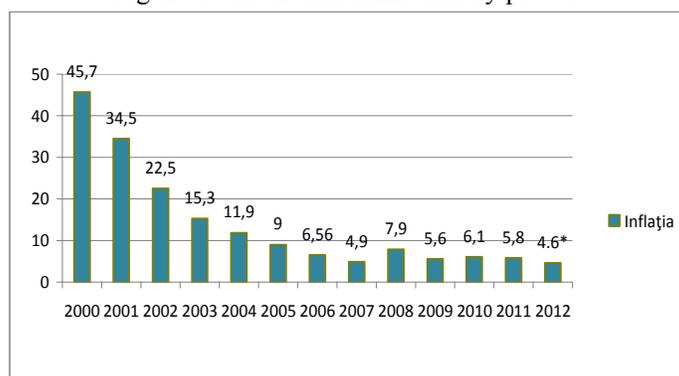
Source: www.insse.ro

3. The analysis of fluctuations of the national economy

The budget deficit fluctuated greatly during 2000-2012 registering a particularly downward trend. Starting with 2000 the deficit developments embarked on a downward path by 2006 when it entered an upward trajectory reaching the maximum value of 8.3% in 2009. In recent years, this upward trend of the budget deficit was influenced by increased capital expenditures necessary for projects initiated by the government, by the increase in spending on goods and services at the expense of investment [Pecican, E., 2008] due to a lower capacity of funding by revenues from foreign direct investment, especially amid the current financial and economic crisis (fig. no 2).

Fig. no 2. The analysis of budget deficit
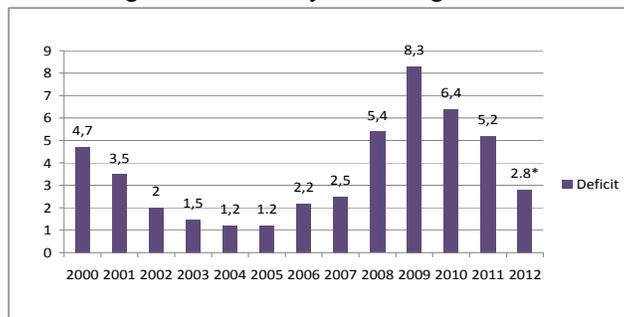
Source: www.bce.ro

From 2002 to 2007, Romania was under the limit of 3% imposed by the Maastricht Treaty concerning the budget deficit.

Romania's budget deficit increased significantly in 2008-2010 from 5.4% in 2008, 8.3% of GDP in 2009 and 6.4% in 2010. Among the causes that led to this, we list: decreases in economic output, overspending in the development of social programs, increases in the share of shadow economy, diminished budget revenues during the economic crisis, institutional factors (procedures and budgetary laws, bureaucracy) and political instability. [Balan, M., Balan, G., 2013]

Since 2008 until now, Romania has been the subject of a decision of the EU Council [Dinu, M., Socol C., Marinas, M., 2007] on the existence of excessive deficit. Since 2009 the budget deficit has had a downward trend, but it registers values superior to the reference value of 3% of GDP.

For Romania to maintain a share of the deficit below the reference value and meet the medium-term objective specified in the Stability and Growth Pact it must continue the fiscal consolidation process.

In 2000 – 2007 the share of government debt to gross domestic product experienced a steady decline, from a relative size of 31.2% in 2000 to 13% in 2007. Starting with 2008 up to now the public debt has faced an upward trend, reaching 33.3% of GDP in 2011. In 2009 the share of government debt to gross domestic product increased considerably, reaching 23.7% at the end of the year from 13.3% as it was in 2008. The increase in government debt to gross domestic product was determined not only by the increase in the absolute value of the government debt, but also by a decrease in GDP by 7.1% in 2009 compared to 2008 (fig. no 3).

Fig. No 3. Public Debt
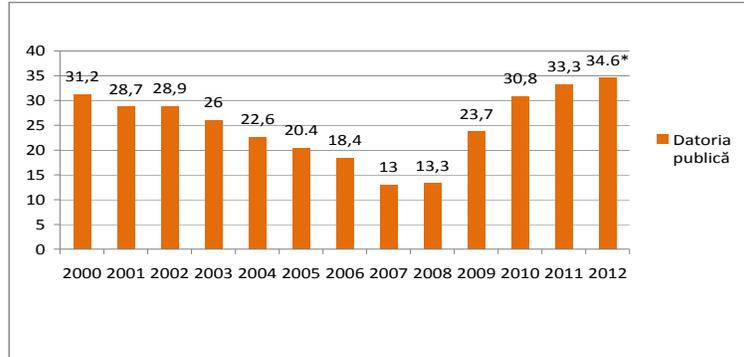
Source: www.bce.ro

Although the Debt-to-GDP ratio is well below 60% set out in the Maastricht Treaty, while maintaining a growth rate of government public debt that surpasses the growth of economy, phenomenon recorded in the period 2007 - 2009, solvency risk will increase.

Throughout the period 2000-2012 in the case of public debt, Romania recorded net values below the reference value of 60%.

In the 2000s, the Romanian Leu exchange rate fluctuated extensively. Between 2004 and 2007, the national currency strongly appreciated under the impact of capital inflows triggered by the economic catching-up process and prospects of EU accession (facilitated by the capital account liberalization in the autumn of 2006). After recording the highest value in the last five years in 2007, the exchange rate fell sharply as a result of the outbreak of the global crisis. An important role in increasing investor uncertainty about the worsening of the economy imbalances lies in each country-specific factors (fig. no 4).

Fig. No 4. Exchange rate
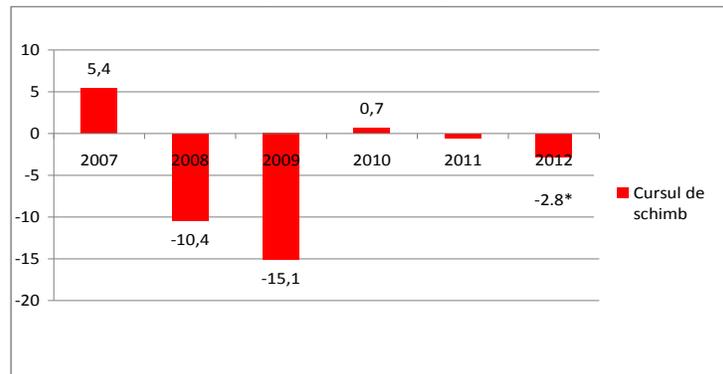
Source: www.bce.ro

The financial assistance programs run by the EU and International Monetary Fund contributed in March 2009 to reducing the pressures borne by currency. In the past two years, exchange rate volatility decreased gradually, short-term interest rate differentials against the three-month EURIBOR maintaining a high level. Exchange rate fluctuations reflected the effectiveness of banking sector liquidity management, foreign exchange operations of the government and the change of the investors` perspective. [Iancu A., 2012]

Ever since Romania's accession to the EU, the long term average interest rates exceeded the number of reference. The differences with the euro area widened in the second half of 2007 and 2008, as a result of the global financial crisis and the difficulties of the national economy. Considering the period March 2009-2010, the value recorded was of 9.4% over the reference of 6% of the EU. Given that the long-term interest is correlated with the level of inflation, it is clear that the success of Romania in adopting the euro depends mainly on reducing inflation (fig. no 5).

Fig. No 5. Long-term interest rate
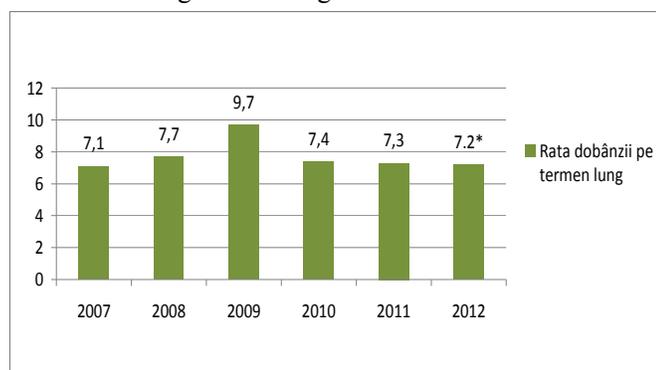
Source: www.bce.ro

In order to reduce this gap and to achieve financial stability after the hearing on 31 March 2011, the Board of Directors of the National Bank of Romania decided: maintain the monetary policy rate at 6.25% per annum; adequate management of liquidity in the banking system; the reduction of the reserve requirement ratio applicable to foreign exchange liabilities with residual maturity of less than two years of credit institutions at the level of 20% from 25% starting with the application period 24 April - 23 May 2011 and maintaining the reserve requirement ratio applicable to liabilities in lei of credit institutions at the level of 15%. At present, monetary policy rate reaches a value of 3.5%. In order to support a sustainable process of lending and for the harmonization of the reserve requirements with the standards of the European Central Bank, NBR Board of Directors decided to reduce the reserve requirement ratio to 12% (15%) for lei and to decrease the reserve requirement ratio applicable to foreign exchange liabilities to the level of 18% from 20% since the application period 24 January - 23 February 2014. [BNR, 2014]

The interest rates charged by the commercial banks were close to the monetary policy rate, and the national currency showed a slight trend of nominal appreciation, amid improvements in Romania's balance of payments and improving investor risk perception towards the Romanian economy.

4. Conclusions

The assessment of the welfare of individuals is a complex process due to the multidimensional nature of the concept. The current welfare of individuals depends on the economic resources available to them and the non-economic aspects of their life, and the sustainability of this welfare depends on how the capital stock gets passed. The wellbeing of individuals is given by a combination of factors including: standard of living, access to health, access to education, personal activities, equal chances, social relationships, quality of the environment etc.

The introduction of the single currency, based on a stable macroeconomic framework will bring benefits; however there are costs to be taken into account. These costs include: giving up the independent monetary policy and transition costs associated with the replacement of the national currency with the euro. [Muresan, M., 2009]

Euro adoption could lead to an increase in GDP, greater employment, lower inflation and lower budget deficit. A positive effect would be reducing the country risk premium, as well as productivity growth driven by increased international trade and foreign direct investment. On the other hand, if an economy is unprepared, the changeover would create imbalances that could be felt in the welfare of the population.

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MODELING CREDIT RISK THROUGH CREDIT SCORING

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Abstract
Credit risk governs all financial transactions and it is defined as the risk of suffering a loss due to certain shifts in the credit quality of a counterpart. Credit risk literature gravitates around two main modeling approaches: the structural approach and the reduced form approach. In addition to these perspectives, credit risk assessment has been conducted through a series of techniques such as credit scoring models, which form the traditional approach. This paper examines the evolution of these initiatives.

Keywords: credit risk, credit scoring models, Z – score, O – score, failure models

JEL Classification: G30, G32, G33

Introduction:

Credit risk is a ubiquitous component of the risk faced by financial institutions involved in lending operations and it is defined as the risk of suffering a loss that derives from incapacity of a borrower to make the foreseen payments. Credit risk literature is vast and can be divided into two main classes: the structural class and the reduced form class.

The structural class originates from the work of Black-Scholes (1973) and Merton (1974) and focuses on the evolution of the value of the firm. The logic behind this approach is that a firm will default at the moment when its total value is lower than the value of its liabilities. Structural credit risk modeling has quickly become very popular. Key studies in this area are Vasicek (1984), Longstaff and Schwartz (1995), Hull and White (1995), Collin-Dufresne and Goldstein (2001) or Becker, Koivusalo and Schäfer (2012).

Calin and Popovici (2012 a) review the main developments brought to the structural modeling approach, focusing also on the literature concerned with the testing of the performance of this models.

The reduced form model class treats default as a random event described by a certain probability. Defaults can thus occur unexpectedly without a structural degradation of the value of the firm. The general assumption of reduced form models is the fact that default is related to an exogenous variable that forces the default probability to be different than zero at any moment. The reduced form approach was developed by Jarrow and Turnbull (1995), Jarrow, Lando and Turnbull (1997), Duffie and Singleton (1999), or Dionne et al. (2011). For a detailed presentation of the evolution of reduced form models see Calin and Popovici (2012 b).

Besides these perspectives, academic literature and business practice have considered a series of alternative techniques. Among these, credit scoring proved to be a tractable instrument in credit risk assessment during the last decades and continues to be used and refined. The purpose of the paper is to analyze the evolution of credit scoring systems and to evaluate their efficiency in the modern economic environment.

Methodology

In order to clearly characterize the evolution of scoring models we consulted academic research ranging from 1968 to present.

The research papers were gathered from databases like JStor, EBSCO Publishing, ScienceDirect, Scopus, ProQuest and SpringerLink, REPEC, after searching key words like: credit risk; default risk; credit scoring, Z-score, O-score, failure models.

Credit Scoring Models

The basic principle of credit scoring models is to determine the factors that can influence the default probability and to combine them into a relevant score. These factors are in general accounting variables that are weighted and fused into a multivariate model. The output of the multivariate model can be a credit score or a measure of the default probability as explained in Altman and Saunders (1998). The obtained score is compared to a benchmark value in order to determine the creditworthiness of a counterpart. Often, the scoring models were used and translated into failure prediction models.

From a methodological point of view these models have been built on techniques like: Multivariate Discriminant Analysis, the linear probability model, the logit model or the probit model (Altman and Saunders (1998)). Other similar initiatives incorporate: *recursive partitioning* (Bruwer and Hamman, (2006)), *artificial neural networks* (Odom and Sharda, (1990), *case-based forecasting* (Jo, Han and Lee, 1997) or *rough sets* ((Dimitras, Slowinski, Susmaga and Zopounidis, 1999).

One of the first and most studied credit scoring models is the Z-score introduced by Altman (1968). In this seminal paper, Altman used a sample of 33 bankrupt and 33 non bankrupt firms in the 1946-1965 period, to devise a tool for

classifying corporate firms and for predictions on the default probability. Having as core a multivariate discriminant analysis, the Z-score model has the following form:

$$Z = 0.012X_1 + 0.014X_2 + 0.033X_3 + 0.006X_4 + 0.999X_5 \quad (1)$$

Where *Z* represents the cumulative score and the X_i variables are:

$$X_1 = Working \frac{Capital}{Total} Assets \left(\frac{WC}{TA}\right)$$

This ratio is a measure of the liquidity of the firm's assets. The first term consist in the difference between the current assets and the current liabilities. Altman considers that a firm with heavy operational losses will have diminishing current assets compared to the total assets.

$$X_2 = Retained\ Earnings/Total\ Assets\ (RE/TA)$$

Retained earnings represents the position that reports the total amount of reinvested earnings. Altman (2000) notes that the retained earnings account can be influenced by certain corporate strategies like reorganization or dividend declarations. The author considers this indicator as a measure of the cumulative profitability in time, and the age of a firm is considered in this ratio in the sense that a recent founded firm without a history of cumulative profits will have a low RE/TA. This makes young firms more vulnerable to be classified as bankrupt in comparison to more established firms. To counteract this idea, Altman (2000) shows that this situation is synonymous to reality and quotes a study by Dun and Bradstreet (1993) which reported that 50% of the firms that defaulted in 1993 had a history lower than five years.

$$X_3 = (Earnings\ Before\ Interest\ and\ Taxes/Total\ Assets\ (EBIT/TA))$$

X_3 represents a real measure of the productivity of the firm's assets. Given the fact that a firm's success depends on the capacity of its assets to generate income, this rate is very useful in this type of analysis.

$$X_4 = (Market\ Value\ of\ Equity/Book\ Value\ of\ Total\ Liabilities\ (MVE/TL))$$

This rate shows the amount by which the value of the assets of the firm can fall before the liabilities surmount the assets, and thus the firm is insolvent.

$$X_5 = (Sales/Total\ Assets\ (S/TA))$$

This ratio shows the ability of the firm's assets to generate sales. Besides this fact, this ratio is a measure of the management's capacity to operate in

competitive conditions. Altman (2000) states that given the relationship with the other variables considered in the analysis this ratio has a significant impact on the model.

The calculated Z score is then compared to two benchmark values, 1.81 and 2.99. If Z<1.81, there is a high chance of a default, while a Z score above 2.99 suggests that the company will avoid financial distress.

The original Altman model has undergone an important number of alterations during the years. For example, Altamn and LaFleur (1981) consider a more tractable form of equation 1.

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5 \quad (2)$$

Other well-known variants of the original Z score model are the Z' and Z''. As their predecessor, these models use a discriminant analysis on data sets that describe defaulting firms, and firms which survived this state.

In order to build the Z' model, Altman modifies the X_4 component by substituting the book value of equity for the market value. This alteration changes all the coefficients, and the classification criteria Altman (2000).

The Z' and Z'' models have the following forms:

$$Z' = 0.717X_1 + 0.847X_2 + 3.107X_3 + 0.420X_4 + 0.998X_5 \quad (3)$$

$$Z'' = 3.25 + 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4 \quad (4)$$

In a subsequent application Altman, Hatzell and Peck (1995) explain that the constant +3.25 has been added to the Z'' specification in order to obtain standardization between the zero score and a bond classified in the D (default) class.

Altman, Haldeman and Narayanan (1977) introduced a new model which intended to be an enhancement of the original Z score. The new ZETA model relied on seven variables, and according to its authors clearly outperformed the prior modeling initiatives. From this point, the literature considering the use of Z scoring models for credit risk assessment flourished at an impressive scale. For example, Altman, Baidya and Riberio-Dias (1979) adapted the original Z score for the Brazilian economy, obtaining a model that was 88% accurate in predicting defaults. Ko (1982) introduced an alternative to Z score that incorporated three of the five parameters used by Altman. The benchmark value was zero, which meant that any firm with a score above this value was in a state of less than 50% probability of default.

A strong alternative to Altman's research was introduced by Springate (1978). The author also used a multiple discriminate analysis that relied on four financial rations in order to derive a score that could distinguish between efficient and distressed firms. The study was conducted on 40 firms and had a 92.5% accuracy rate.

The Springate Model has the following form:

$$S = 1.03X_1 + 3.07X_2 + 0.66X_3 + 0.4X_4 \quad (5)$$

Where:

$$X_1 = \frac{Working\ Capital}{Total\ Assets}$$

$$X_2 = \frac{Net\ Profit\ before\ Interest\ and\ Taxes}{Total\ Assets}$$

$$X_3 = \frac{Net\ profit\ before\ Taes}{Current\ Liabilities}$$

$$X_4 = \frac{Sales}{Total\ Assets}$$

In terms of interpretation of the score, any value under 0.862 indicated the firm was predicted to default.

Fulmer et al (1984) brought forward an extensive model composed of nine variables which came to be known in the scientific literature as the H score. Fulmer's model had 98% accuracy in classifying firms one year prior to default, and an 81% accuracy rate for a longer time horizon. The general form of the Fulmer model is the following

$$H = 5.528X_1 + 0.212X_2 + 0.073X_3 + 1.270X_4 -$$

$$-0.120X_5 + 2.335X_6 + 0.575X_7 + 1.083X_8 + 0.894X_9 - 6.075 \quad (6)$$

Where

$$X_1 = \frac{Retained\ Earnings}{Total\ Assets}$$

$$X_2 = \frac{Sales}{Total\ Assets}$$

$$X_3 = \frac{EBT}{Equity}$$

$$X_4 = \frac{Cash\ Flow}{Total\ Debt}$$

$$X_5 = \frac{Debt}{Total\ Assets}$$

$$X_6 = \frac{Current\ Liabilities}{Total\ Assets}$$

$$X_7 = Long\ Tangible\ Assets$$

$$X_8 = \frac{Working\ Capital}{Total\ Debt}$$

$$X_9 = \frac{Log\ EBIT}{Interest}$$

The emulation brought by the works of Altman, Springate and Fullmer made the multiple discriminant analysis the dominant statistical tool for failure models. Reference papers in this area were conducted by: Deakin (1972, 1977), Edmister (1972), Taffler and Tisshaw (1977), Bilderbeek (1979), Ooghe and Verbaere (1982), Micha (1984), Gloubos and Grammatikos (1988), Declerc et al. (1991), or Lussier and Corman (1994). Similar modern initiatives have been carried out by: Leksrisakul and Evans (2005), Lugovskaja (2009), Chijoriga (2011), or Pervan et al (2011).

Despite this extensive and growing literature, some authors criticized the Altman approach or argued against the shortcomings of the multiple discriminant analysis (MDA).

Fulmer et al (1984) observed that the Zeta model introduced by Altman (1977) focused only on large firms with an average value of total assets around 100\$ dollars. Other authors argue that the sales/total assets ratio may not be relevant for such an analysis as it can vary significantly from industry to another.

Besides these aspects, the scientific literature has pointed out a series of deficiencies of the multiple discriminant analysis.

Balcaen and Ooghe (2006) explain the fact that the classification rule is linear which contradicts with the fact that certain variables don't have a liner relationship with financial stability. Ohlson (1980) criticizes the existence of certain statistical requirements of the properties of the predictors. The author also states that the output of Z-scores is limited since it follows an ordinal ranking.

One of the assumptions of MDA model is the fact that the variables that compose it are multivariate normally distributed. Balcaen and Ooghe (2006) signal that in practice this assumption is often neglected which results in a bias in the estimated error rates. Furthermore, in general, variables built on financial ratios have non-normal distributions.

Ohlson (1980) criticizes the restrictive assumptions of the MDA model and corrects these shortcomings by using a logistic regression to forecast firm default. Thus, Ohlson uses a logit model and a series of data basis of American firms in order to estimate the default probability. The author isolates nine independent variables considered to be adequate in default estimation. Ohlson finds 105 defaulting firms and 2000 with a sound financial state and tests three forecasting models for time horizons that vary from 0 to 2 years.

The logit function suggested by Ohlson (1980) has the following form

$$O = -1.3 - 0.4X_1 + 6.0X_2 - 1.4X_3 + 0.8X_4 -$$

$$-2.4X_5 - 1.8X_6 + 0.3X_7 - 1.7X_8 - 0.5X_9 \quad (7)$$

Where

$$X_1 = \log\left(\text{total } \frac{\text{assets}}{\text{GNP}} \text{ price} - \text{level index}\right)$$

$$X_2 = \text{total } \frac{\text{liabilities}}{\text{total}} \text{ assets}$$

$$X_3 = \text{working } \frac{\text{capital}}{\text{total}} \text{ assets}$$

$$X_4 = \text{current} \frac{\text{liabilities}}{\text{current}} \text{ assets}$$

$$X_5 = 1 \text{ if total liabilities exceeds total assets, 0 otherwise}$$

$$X_6 = \text{net} \frac{\text{income}}{\text{total}} \text{ assets}$$

$$X_7 = \text{funds provided by} \frac{\text{operations}}{\text{total}} \text{ liabilities}$$

$$X_8 = 1 \text{ if net income was negative for last two years, 0 otherwise}$$

$$X_9 = \frac{(NI_t - NI_{t-1})}{(|NI_t| + |NI_{t-1}|)}, \text{ where } NI_t \text{ represents the net income}$$

This model, is known in the literature as the O-score, and has become the most important alternative to Altman's Z-scores. This fact resulted in an important number of studies aimed at observing which of the two models is more suitable for default prediction.

Pongsatat, Ramage and Lawrence (2004) test both the Altman (1968) and the Ohlson (1980) models on a set of 120 companies from the Thailand Stock Exchange. The authors conclude that Altman's model is more efficient in detecting bankrupt firms. In a similar study, Bandyopadhyay (2006) tests logistic models and z-scores in order to forecast defaults for Indian companies, while Ugurlu and Aksoy (2006) use the O-scores and Z-scores for the Turkish market.

Moghadam, Zadeh, and Fard (2009) use the two models for a list of companies from the Tehran stock exchange. The authors conclude that the Ohlson (1980) model is more powerful in predicting bankruptcy for Iranian listed companies. Also, the authors reject the hypothesis that the MDA has more predictive power than the Logistic regression for the analyzed companies. In another study conducted on the Iranian Market, Karamzadeh (2013) obtains contrasting results that point to a superiority of the Altman model.

Hillegeist et al (2003) study Z-score and O-score models and compare them to the Black-Scholes-Merton model, reporting the clear superiority of the latter.

Conclusions:

Scoring models have become very popular during the last 40 years in credit risk applications, forming a vast and fast growing literature. In spite of this fact, their capacity of clear and sound default detection has been frequently questioned.

Z-score models have a series of shortcomings that cripples their prediction efficiency. They have a linear construction, while detecting default may require a nonlinear initiative. In addition to this, it is not clear if the variables used in Z-scores have a linear relation.

Scoring models are built on a series of accounting rates that are generally formed on the basis of historical values. Thus, it has been argued that this generation of models can't accurately capture the essential default data for a firm which has a rapidly deteriorating condition.

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THE INFLUENCE OF ABC COST CALCULATION METHOD ON ECONOMIC ENTITIES PERFORMANCE

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Abstract

There is a direct relationship between ABC method and financial performance of entities, but only in the context of certain drivers, as well as the establishments' size, the offered products diversity, indirect cost structure or organizational culture. A competitive position is also generated by products mix, making it unlikely that a single product can sustain a long-term high profitability due to its life cycle. The costs value calculated using ABC method which exceeds the amount of the traditionally costs calculation is explained by hidden costs previously unidentified. For the products whose costs calculated by ABC are lower than those traditionally calculated, the difference is justifying by a hidden profit. The explanation of both favorable and unfavorable differences is assigned to different indirect cost configuration used by these two methods.

Keywords: ABC method, traditional management cost systems, performance, productivity, managerial accounting

JEL Classification: M40, M41, M11

Introduction

Initially, ABC method was applying in order to improve products profitability and manufactured products optimal mix selection. The expert interest for the results of method application subsequently dropped because of its disadvantages.

However, further theoretical method developments proved the ABC ability to incorporate long-term planning elements and forecasts as well as to provide a planning tool for long term that grown the specialists and entities interest for method application. According to the present holistic approach, ABC method is treating as both a cost allocation methodology and a drafting decisions tool used on short or long term.

Contributing factors associated with the ABC method that increase financial performance

Cost management development based on activities has reduced economic entities dependence on traditional costs management systems. As we all know, according to traditional costs management systems, indirect costs allocation was made in relation to different database distribution designed to provide a breakdown of their rationality. The experience has shown the lack of this method accuracy due to a relationship lack not able to identify the connection between assigned and preferred costs sources in real time.

At the time of her appearance the ABC method was seen as a more effective method of products or services cost calculation. Over the time it turned into a management actions balance scorecard method that could be quantified in profitability terms (Figure 1).
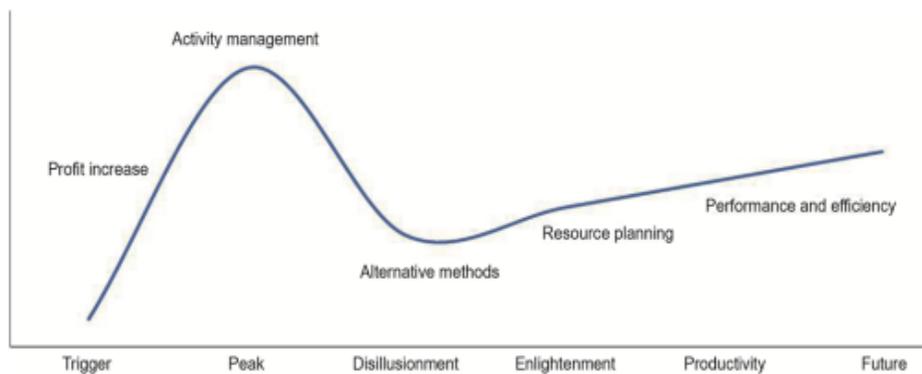
Figure 1 – ABC method development [8]

Entities competitiveness and long-term profitability cannot exist in the absence of productivity, which could be increasing only by practicing systematic and holistic activities management. In addition, productivity cannot growth in the absence of its quantification.

The lack of objectives regarding productivity, economic activities has no direction. The lack of productivity quantification generates economic activities without any control [3].

An integrated approach of productivity quantification has many benefits, such as [6]:
- Providing an overview of organizational performance;
- Emphases the existing relationships between various economic and financial rates and drives;
- Facilitating entity factors analysis that contribute to performance in terms of productivity;

- Providing support for problems diagnosis and suggesting corrective suitable measures;
- Monitoring entity performance in time term and reporting on some other entities performance.

The connection between ABC method implementation and financial performance or factors contributing to financial performance growth associated with ABC method is a widely debated topic.

A comprehensive study has identified that only 23 percent from the examined entities have adopted ABC method, while the remaining 78 use some other cost allocation methods. The study conclusions also demonstrated there is a direct relationship between ABC method and financial performance of entities, but only in the context of certain drivers, as well as the establishments' size, the offered products diversity, indirect cost structure or organizational culture [2].

Economic and financial performance is translated in terms of production volume in most cases. A large number of products offered in reasonable amounts in relation to market demand will contribute to performance improvement which is evaluated in relation to the potential demand coverage for such products. Production volume is directly correlated with entities position on market, and an increased production volume can be properly managed in terms of costs using ABC method. A competitive position is also generated by products mix, making it unlikely that a single product can sustain a long-term high profitability due to its life cycle.

Differences in the cost based on ABC method comparing to cost management traditional methods

Quantifying the differences between recorded profitability (Figure 2) showed a medium increase of 72% in the case of Hong Kong entities [5] while the amount costs differences calculated using traditional methods and ABC method could reach to 271%.
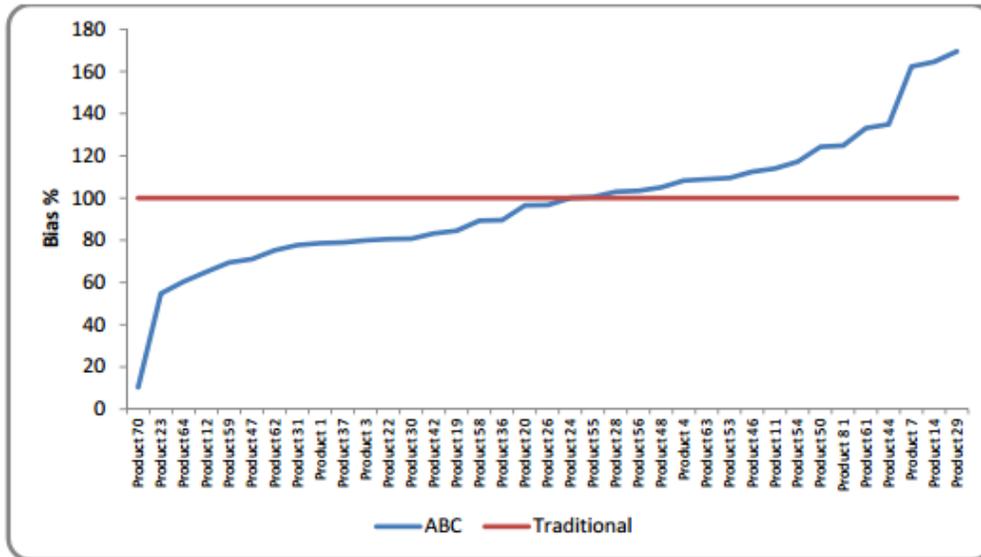
Figure 2 – Main differences in the cost based on ABC method comparing to cost management traditional methods [1]

Significant differences between the results related to profitability determined through ABC method and traditional cost management methods have been identified by many other relevant studies. Thus, in the case of traditional methods there is one-way cost deviation. In terms of cost there are overestimated or undervalued products.

The differences between the two management accounts approaches are presented in figure 2, where the percentage difference is calculated as a ratio between ABC method costs amount and traditional allocation costs calculation.

As figure 2 shown the difference between the two costs methods is significant. The costs value calculated using ABC method which exceeds the amount of the traditionally costs calculation is explained by hidden costs previously unidentified. For the products whose costs calculated by ABC are lower than those traditionally calculated, the difference is justifying by a hidden profit. The explanation of both favorable and unfavorable differences is assigned to different indirect cost configuration used by these two methods.

ABC method and the decision processes

With regard to the ABC method usefulness application in decision-making, it was shown that although there are no significant differences in terms of decision preparation time, the resulting profit provided by ABC method information is superior to the result based on the cost management traditional methods [4] (figure

3). This situation could be explained by higher transparence of cost information provided by ABC method.
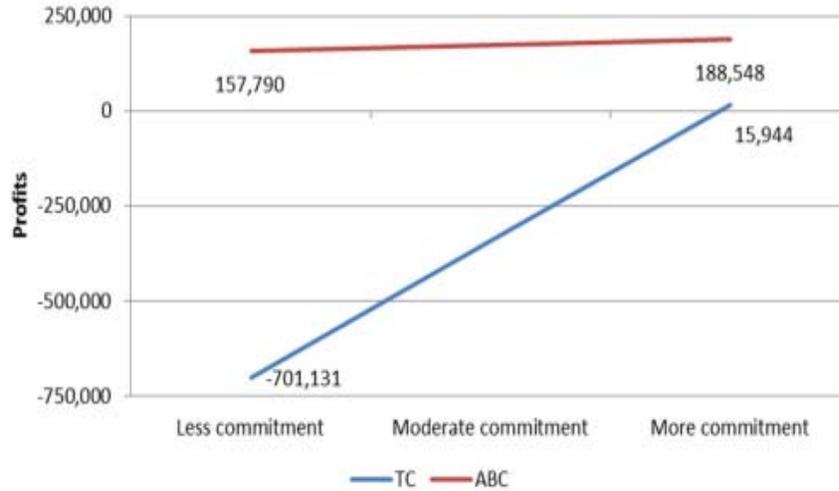
Figure 3 – Decision making based on ABC method vs. Cost management traditionally methods [4]

In addition, there are some studies related to ABC method application impact on mining industry that demonstrates that due to significant specific indirect cost amount ABC method will contribute to provide a relevant production cost [7].

According to these studies ABC method is very important for decision making process focusing on costs allocation on products life cycle. It is recommended to use present net value to evaluate equipments acquisition for a project terms.

In case of ABC method application a significant growth of financial performance could take place when this method is used in addition with managerial accounting modern methods as total quality management (TQM) or Just in time method (JIT) [2].

Methods of assessing performance variation generated by ABC method

Entities performance evaluation (entities using ABC and entities using some other methods) is a difficult task because of data collection difficulties.

Nguyen has published an interesting econometric study regarding this comparison. He has studied 20 mining companies. 17 of them adopted ABC method and 3 used some other traditional management cost methods.

It is interesting to give some details regarding the econometric model of Nguyen. We are convinced that model could be implemented in Romania in the near future.

Model ecquations are:

$$\Delta COST = \alpha_0 + \alpha_1*(\text{labor fluctuation rate}) + \alpha_2*(\text{entity size}) + \alpha_3*(\text{age of entity}) + \alpha_4*(\text{activity nature}) + \alpha_5*(\text{production}) + \alpha_6*(\text{products mix}) + \varepsilon_1 \tag{1}$$

$$\Delta COST = \beta_0 + \beta_1*ABC + \beta_2*(\text{labor fluctuation rate}) + \beta_3*(\text{entity size}) + \beta_4*(\text{age of entity}) + \beta_5*(\text{activity nature}) + \beta_6*(\text{production}) + \beta_7*(\text{products mix}) + \varepsilon_2 \tag{2}$$

$$\Delta Quality = \alpha_{01} + \alpha_{11}*(\text{labor fluctuation rate}) + \alpha_{21}*(\text{entity size}) + \alpha_{31}*(\text{age of entity}) + \alpha_{41}*(\text{activity nature}) + \alpha_{51}*(\text{production}) + \alpha_{61}*(\text{products mix}) + \varepsilon_{11} \tag{3}$$

$$\Delta Quality = \beta_{01} + \beta_{11}*ABC + \beta_{21}*(\text{labor fluctuation rate}) + \beta_{31}*(\text{entity size}) + \beta_{41}*(\text{age of entity}) + \beta_{51}*(\text{activity nature}) + \beta_{61}*(\text{production}) + \beta_{71}*(\text{products mix}) + \varepsilon_{21} \tag{4}$$

Equations (1) and (4) are focusing on performance before ABC method implementation and equations (2) and (4) are providing economic performance recorded after ABC method implementation.

Results are following Cooper and Kaplan statements according to older entities having a broader range of activities and a high products diversification level will reflect in a more meaningful manner the benefits of ABC method in comparison to small entities.

Concluding remarks

Traditional systems cost are based on the direct costs allocation which creates a distortion of accounting information. There is no relevant connection between the behavior and the amount of distribution database used. Also, for ease of calculations, there are often used very few allocation bases. ABC method brings a novelty element in the cost system by using activities drivers and activity cost allocation which allows a more relevant point of view in order to reflect production process and its activities particularities.

Production cost generated by ABC method is less than value calculated by traditionally cost methods because it reflects real costs distributed in a more rational manner.

The information provided by ABC method results can be used in many areas focusing on effectiveness and profitability, cost reduction decisions, new product manufacture decision or stopping unprofitable production, decisions concerning drawing up budgets, decisions related to the integrated management etc.

We believe that making a comparison between production costs calculated by two methods is relevant for ABC methods benefits understanding, quantified in

this information. Even if the method is not easy and requires important human and material resources, entities may decide to apply them only in the hands of certain products or departments.

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A PARADIGM OF THE NEW ECONOMY BETWEEN CONVERGENCE, COHESION AND INCREASING DISPARITIES - CHALLENGES FOR ROMANIA IN VIEW OF THE 2020 HORIZON

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Abstract
High-tech, cutting-edge disciplines, innovation and research-development have entered the daily life nowadays. 'Networks' either dedicated to research-development or industrial, economic or social ones shall define the future, and the interaction and interference of all of the above with social and cultural networks is one of the key-elements of impact for exiting the crisis and resuming sustainable, consistent and constant economic growth at European and world level.
This context, at European level is conditioned by the convergence and cohesion processes which are increasingly threatened by the considerable increase of disparities between the development level of the regions and the optimum valuation of the human capital regarding access to education, training, high-tech outcomes and products.
Romania, as all other EU Member-States makes considerable efforts for reaching the objectives mentioned by the new Europe 2020 Agenda and, as result of the experience gained in the period 2007-2013 must aim to formulate some strategies, policies and measures that would take into account both the complexity of processes and phenomena that originate in the increasingly obvious effects and outcomes of the new economy.
The present paper intends to present the manner in which policies and measures dedicated to reaching the objectives of the Agenda "Europe 2020" answer to the context created by the new economy and by the changed economic and social picture as result of the economic and financial crisis. A brief comparative analysis is made between Romania and Member-States sharing some common features from the perspective of the accession and integration process, of the regional disparities, but also from the viewpoint of cultural similarities.

Keywords: new economy, economic and social structures, high-tech, networking, human capital, competitiveness, Europe 2020 Agenda

Introduction

The economic and financial crisis which broke out in 2007 is still far from having exhausted all forms of manifestation, and its effects will continue to be felt even by the time-horizon 2020, thus risking to put into question not only the building-up of

the "Social Europe", but also the underlying principles and processes, respectively the cohesion and convergence between all Member-States. The previous programming period, under the Lisbon Agenda concluded with the acknowledgement that many objectives were not reached, and they were transposed (sometimes even without being reformulated) for the new programming period. The failure of the Lisbon Agenda, almost unanimously acknowledged by experts has its roots in the very often vague formulation of general and specific objectives, in the absence of some corresponding monitoring, evaluation and intervention systems – where necessary – from the European Union level – either by assistance/support or correction measures for much to distinct deviations of the Member-States. One of the essential reasons was the adoption and pursuing of the specific objectives according to targets expressed by the respective indicators[1], without considering the capacity of each of the Member-States to support this effort from economic and social viewpoint, even though difficulties and challenges turn manifest on the three essential dimensions for ensuring optimum functioning of the state: the governance dimension – from an administrative perspective; the economies' structural reform dimension; and the social change dimension with deep implications regarding the change of (organisational, work, etc.) culture and mentalities thus ensuring openness towards the new demands not only with respect to industrial and services' sector and to the supply of new products and technologies, but also regarding human capital and the required "educational package" that would provide for better perspectives in the transition from school to active life and that would encourage also intensifying the research-development and innovation activities.

The changes and the complex conditions to be met for resuming sustainable economic growth result mostly from the changes that the European economy and society underwent for the last decades, and which determined many experts to support and argue the adoption of an approach from the perspective of "systems thinking" as the European Union, with its institutions, organisations, bodies, rules, regulations and directives is fertile ground for such an approach[2], the more so as both economic complexity and the "new economy" are mutually supporting changing the economic and social sphere, imposing new cooperation and collaboration rules at international level, between Member-States, regions and the various networks created around different clusters – technologic, industrial, etc.

'The New Economy" is what led to formulating the phrase of knowledge society and economy on which the Lisbon Agenda was built, as result of swift technological evolutions, digitalisation and accelerated automation of all economic sectors in the last decades. Actually, the knowledge society and economy have their origins in the 'new economy' which is associated to a package of questions

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[1] The objective of changing Europe, respectively Member-States into one of the most competitive regions of the world; yet, "competitiveness" in itself is a complex element that is hard to quantify regarding quantity but mostly quality as it cannot be restricted to simple evaluation as next to objective factors also a number of subjective ones contribute.

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and dilemmas and the essential answer is whether the 'new economy' is only 'a point on the roadmap' or implies an essential systemic change at macro- and microeconomic level, but also from the social viewpoint. This phenomenon, triggered in the nineties, when the emerging 'new economy' was conceptually defined as the complex outcome of technological progress that determined the massive digitalisation and automation of most processes, hence changing knowledge into a 'ware' (Castells, 1996; Ranson, 2003). Thus, actually, according to the already formulated opinion of some experts, it might be considered that we are already dealing with a new type of "industrial revolution" (Benner, 2002:1-2) which consisted in gaining new valences for the notion of competitiveness from the viewpoint of the markets, but also from the one of human resources who contributed decisively to triggering some processes that could lead even to changes of the social structure. At the same time, the last years proved that there is neither but one answer, nor the principle "one size fits all" applicable in the field of strategies, policies and measures (temporary, or on short-, medium- and long-term) dedicated to exiting the financial and economic crisis, and to resuming economic growth. One of the critical findings of this period is that the particularities of each Member-State had an important role to play both at the time of the crisis' outbreak, but also in the subsequent period when policies and measures approaching specifically the crisis exit and resuming economic growth were based largely on austerity. The latter, far from providing the expected solutions were, to a large extent, in point and triggered a set of effects that led to deepening the crisis, in particular from the social perspective demonstrating that also the social and cultural factors play a decisive role in building-up ways of exiting the crisis. Thus, differences between Old Member-States and New Member-States were fully shown from institutional and organisational viewpoint (at the level of national, regional and local administrations), and from the economic and social one, as well. These disparities and differences were best highlighted in the way in which technological progress was put to good use in creating opportunities even under crisis conditions for generating new jobs, or optimising processes, products and services, or even for investments in research-development (not only in the technological field, but also research-development leading to educational, social innovation, etc.), as well as in encouraging innovation implementation at the level of small-, medium- and large-sized enterprises.

A brief analysis suggests, already from the start, that Old Member-States were better positioned to meet the crisis' challenges but also the biggest beneficiaries of putting to good use the outcomes of increased digitalisation of all activity fields, and of using on a large scale technological progress in most industrial and services' sectors. Practically, the 'new economy' based on knowledge and intensive computerisation of the economic, social and cultural life sectors underwent a revitalising and reconsideration of concepts as result of the economic and financial crisis, its impact proving once again the increasing importance of networks, of their integration at macro- and micro-level, but also the importance of developing some more ample processes and procedures of participatory cooperation and collaboration of all interested stakeholders from the economic and social life.

2. The New Economy and Policies regarding Cohesion and Convergence. Comparable Risks between the Lisbon and Europe 2020 Agenda

The roots of the 'new economy' are found in technological progress and ITC penetration in all fields of economic, social and cultural life. Moreover, it resulted from the increasing economic complexity which is based on accumulating "productive knowledge" at the level of societies. "Productive knowledge" is a complex factor where accumulations are realised based on individual contributions that turn aggregated under the form of human capital and resources and shared tacit experience transferred informally and non-formally between generations and which is in continuing structural change. The aggregated change is, in its turn, an essential condition for further enriching "productive knowledge". Also, "productive knowledge" contributes as well in this analysis of increasing economic complexity which gives birth to both opportunities but also essential risks in the field of cohesion and convergence with respect to increasing disparities between Old and New Member-States of the European Union.

The history of "European becoming" from its beginnings, but mostly for the last decades is an argument for the value of "productive knowledge" in the economic development and growth of the Member-States, divided as outcome of the expansion process into "Old" and "New Member-States". If Old Member-States (practically the ones standing at the basis of the current European construction) had as starting point a well-consolidated "productive knowledge" and expressed in solid institution, and sound industrial and entrepreneurial culture, the majority of the New Member-States (both from the first wave (Greece, Portugal, Spain, etc.) and from the "second wave" (Central and East-European countries, to which Romania and Bulgaria joined in 2007) shared common elements that hindered them in gaining and, sometimes, in fully putting to good use their own "productive knowledge". From this perspective, the most relevant time link can be traced between the countries pertaining to the "Mediterranean group", to which Portugal is added – an outcome of the "mental geography" [1] rather as it is correlated more with the perception and "virtual" borders than geographic reality – and those from Central and Eastern Europe as these countries meet due to the similitudes at the beginning of their efforts of accession and integration:

- Exiting comparable types of dictatorship and centralised planning systems;
- Weak or even inexistent infrastructures;
- Fragmented agricultural sectors, even though significant as weight in the economy of the respective countries;
- Industries based on intensive use of the labour force;
- Rigid economic policies not allowing for high flexibility and ongoing adjustments, with a relatively difficult regime in the field of labour market access and functioning and not very encouraging for local/international entrepreneurship and developing SMEs;

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[1] Gibson, Heather D. (2001): Economic Transformation, Democratization and Integration into the European Union, Southern Europe in Comparative Perspective, Palgrave.

- The condition of states at what is also today – relatively – perceived as the periphery of Europe, but essentially border-states between the EU and other states[Gibson, Heather D.:2001].

Obviously, there are multiple correlations between these circumstances and causes which led, even partially, not only to the failure of the Lisbon Agenda, but also to the emergence of higher risks of "divergence" and increasing disparities between Old and New Member-States even between the New Member-States with respect to cohesion and convergence at EU-27(28) level.

The Lisbon Agenda can be regarded as a first concerted exercise in a relatively reformed framework for the entire EU, and which prepared the field both for the future expansion wave, but showed also the vulnerabilities resulting from the hesitant beginnings of the Community when cohesion and convergence were perceived (and to a certain extent continues to be so) as much too general, non-specific objectives and with aims so vast, that monitoring and measuring progresses still require efforts for developing the necessary methodological, analytic and statistic instruments. Yet, we consider that precisely these two objectives can indicate the essential reasons leading worryingly and despite pursued objectives to increasing and deepening divergences between "North" and "South" of Europe, and the explanations can be found in the incipient stages of the process leading finally to the establishment of the European Union.

A 'hidden source' of the partial failure of the Lisbon Agenda was the implementation freedom at the level of Member-States (programme contents, management, monitoring, evaluation and control). This "relaxation" was counterbalanced by numerous regulations about efficiency and control over the way the European funds were spent.

The implementation of the Open Method of Coordination (OMC) left at the Member-State's latitude the engagement, amplitude, and timing, and even the implementation 'style' for measures and actions aiming to achieving the Lisbon Agenda objectives.

At the same time, the New Member States of the first wave (2004), but also Romania and Bulgaria (2007) have accessed at a time including in itself the promise of a chance of quickly 'burning up the stages' (catching-up) with the direct assistance of European funds aimed at the main objective pursued at European level: convergence and cohesion for sustainable development that would ensure harmonious economic growth, generating jobs and combating poverty and risks for vulnerable groups at European level.

These states were faced with the need of learning quickly the operation, functioning and harmonisation manner at European level. But, contrary to the circumstances of the "old" accession/integration Member-States the NMS did not have the same "period of grace" as in former stages as result of the increasingly obvious signs of the approaching and then triggered financial and economic crisis at world level. A first finding is that for the period 2000-2006 – even if an 'accession wave' was expected for countries facing considerable issues precisely in the field of convergence and cohesion, the funds allocated to this essential point of the European agenda remained stable due to increased pressures related to growing unemployment, but also pressures of those aiming a much too strong fiscal

consolidation at EU level[1]. Thus allocations for the cohesion policy in the period 2000-2006 were of 213 billion Euros, from which 39.6 million Euros for phasing-out assistance.

At the same time, the continuation of reforms was emphasised on four main directions aiming: (i) higher concentration of support for reforms; (ii) implementation decentralisation at the level of Member-States by attributing essential responsibilities for contents, management, monitoring, evaluation and control of the programmes; (iii) simplification of programming and implementation, especially by formulating more concisely the programmes' contents; (iv) in counterbalance to decentralisation and simplification, changes were implemented that aimed at higher efficacy and strict control of expenditures, both summed up under the new principle of efficiency. All these measures, taken already before the accession of the first wave from Central and Eastern Europe, were the expression of increasing concern about full employment opportunities of the labour force, about reaching a higher degree of cohesion and convergence, including by improved diminishment of regional disparities that, as mentioned already, were one of the 'constants' with considerable effects on the European economy right from the beginning, about increasing European competitiveness as compared with the one of USA and Japan, about increasing the positive effects of research-development and innovation. The latter, in particular, aiming at the sector which proved to have the highest potential of swift growth, including from the perspective of generating and creating new jobs: the SMEs. From this viewpoint, it can be underpinned that there are considerable differences at EU-27(28) level between the various 'clusters' of countries, respectively the ones from the North-Western area, the Mediterranean area and the East-European one, the capacities of stimulating SMEs and research-development and innovation activities being much lower for the latter group of states. Practically, a strong, efficient and dynamic SME sector is the one that might be able to support to a large extent research-development and innovation activities that would result in the creation of new jobs, but also occupations and skills in accordance with the demands imposed by the technological progress, the intensive automation and digitalisation of economic sectors, but also of sectors with social and environmental protection impact.

Thus, the reform directions according to the Lisbon Agenda and the cohesion and convergence policy from the period 2000-2006 prepared already the better correlation between the Lisbon Agenda objectives and the ones of the cohesion and convergence policies – the expression of solidarity at European level by which support is ensured for the New Member-States for reaching a level comparable with the one of Old Member-States with respect to sustainable development, economic growth, etc. This moment, respectively the period 2000-2006 and the subsequent period were the two key-moments which on one hand, led to, but also highlighted the 'errors' having as outcomes the (partial) failure of the Lisbon Agenda, and on the other hand proved why – for avoiding repeating the errors, in our opinion, but also according to European experts, the objectives – be they

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[1] The increasing concerns about unemployment was reflected by adding a specific title within the Treaty of Amsterdam from 1997.

'flagships' of the European Union cannot be set on the same size and to the same extent for all Member-States of the European Union.

The indicative signs of this state-of-affairs can be found, actually, in the most recent reform dedicated to the cohesion policy, in the period 2007-2013.

First of all, at the time of operating these changes, there were already 10 NMS, to which Romania and Bulgaria were added as of 2007, so that the reform need was stringent. At the time of accession of the 10 NMS it became obvious that the imbalance between regions doubled, and many of the former beneficiaries exceeded in the new context the 75% threshold required for continuing to benefit from convergence and cohesion funds. The immediate consequence was that, contrary to former stages, now the main beneficiaries of the cohesion policy were from Central and Eastern Europe, and the former stage beneficiaries (Spain, Portugal, Greece, Ireland, etc.) were now called, on one hand to contribute in assisting the new members from Central and Eastern Europe, and on the other hand to continue (at a superior level and by changing financing methods) the cohesion and convergence processes at national and regional level.

2.1 Lisbon Agenda and Europe 2020: challenges and opportunities for NMS and Romania

The cohesion and convergence policies, both for NMS but also for EU-27 as a whole developed in the period 2000-2010 on the background of necessary structural changes imposed by the shifting economy due to the swift processes triggered by globalisation, intensive automation of entire industrial and services' sectors, which again attracted with them the increase in the specialisation level required on the labour market, along with relative value added increase for sectors promising or already delivering high performances; at the same time, at social level changes triggered by demographic alterations (marked demographic ageing of European population, decrease of birth rates as result of postponing the time of setting-up a family, of inter- and extra-community migration, etc.) took place, and these demographic 'transitions' exercised increased pressures also on changes of a cultural nature, etc.

The first programming period 2000-2006 was one of the most complicated due to the foreseen accession of the New Member-States, and to the increased alarm signs with respect to employment, to the emergence of demand for new occupations and professions on the labour market, to growing requirements for lifelong learning and training, to changing occupation due to automation and technological increasingly complex contexts, to increased demand of new skills and competences for the superior stage in which the EU entered as result of computerisation and digitalisation.

One of the main pursued objectives, once they were changed for the programming period 2007-2013 was the one of regional competitiveness, by which was pursued to obtain performances in the main economic sectors, but also to ensure full employment and better living standards in all Member-States.

Additionally, this period emphasised even more the need to better understand which were the economic, social and territorial dimensions of the cohesion

policies, and the stakes of these dimensions for all countries from Central and Eastern Europe, including from the perspective of "productive knowledge".

One of the essential dimensions was considered the convergence – at European Union level – but also transposed at national level by increasing convergence between regions of the same country, because especially in the case of the 12 NMS internal regional disparities were already considerable at the time of accession, and were not attenuated but even increased thereafter. Thus, next to regions regarded as "core" for the national policies and programmes and which underwent swift development during the entire catching-up period due to the inflow if FDI, to the emergence and (relative) strengthening of entrepreneurship and SMEs creation, other regions suffered as result of structural reforms, of even considerable structural unemployment manifestation, of increased poverty thresholds and of the social exclusion risks in other regions. This phenomenon, common to the majority of the 12 NMS was strongly shown also in Romania, as result of the concentration trends for activities around urban centres that turned to development centres and true "poles" of attraction for foreign investors, and national level entrepreneurs (Bucharest, Cluj, Constanta, Timisoara, etc.), but less in the case of the towns from the Eastern and North-Eastern area where the issues tended to remain the same, one of the crucial reasons being the absence of critical infrastructures in particular for delivering goods and services that could be produced in the respective areas.

In this programming period of considerable support benefitted, firstly, the EU-10 NMS (Czech R., Estonia, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia) by means of the "Transnational Instrument for Financing Rural Development of New Member-States, of the Socrates', Leonardo da Vinci and Youth programmes, and funds for education, vocational training, as well as through the "Schengen facility".

2.2 The 2007-2013 Programming Period: A start under the Sign of the Financial-Economic Crisis Outbreak

The programming period 2007-2013 brought about essential changes regarding the cohesion policy, the objectives 1, 2 and 3 of the 2000-2006 programming period being replaced with three new objectives: *convergence, regional competitiveness and employment,* and *territorial economic cooperation*. This reform aimed, specifically, to correlate and pinpoint in the framework of the objectives targeting cohesion and convergence the main objectives pursued also by the Lisbon Strategy, as results also from the reformulation of the three policy objectives. Moreover, for avoiding confusions, and giving up objectives that gave birth to more or less veiled criticism related to inconsistencies within the aimed objectives and much too "diverse" financial allocations, from the new objectives were excluded the community objectives regarding rural development and fishing. Yet, for ensuring the coordination between the Directorates'-General and a certain type of support for fishing and agriculture, their classification as instruments dedicated to the cohesion policy was abandoned as of 2007.

It can be noticed that the new objective *"convergence"* is very close to the purposes pursued by objective 1 from the previous planning period, but also to one

of the targets on which most emphasis was laid on within the Lisbon Agenda, respectively *growth and the creation of new jobs*, their target being that even less developed countries of the EU to be able to recover from the historically inherited disadvantages, to introduce required structural reforms within economic sectors, but also with respect to human capital so as to build up a solid foundation for contributing to the purposes pursued by the knowledge-based society, and to turn more flexible and more adjustable to change, at the same time disposing of more efficient administrative and environmental protection capacities for changing European economies and industries into "green" ones, based on higher levels of innovativeness, and intense valuation of some new resources, including non-conventional ones. These all were intended to contribute significantly at sustainable development and ensuring new opportunities, including in the field of labour force employment at regional, national and European level.

Also in this period were maintained the persistent contradictions existing right from the beginning of pursuing some "systemic" and "systematic" objectives of the cohesion and convergence policy, so that it can be stated that even if as a whole, at a so-called "global" level the convergence and cohesion degree increased between Member-States, severe inequalities continued to show between various regions of the same Member-State and, in some instances, even a growth of these inequalities and differences can be seen.

The majority of specialised studies share the opinion that these disparities are to a large extent due to a moment of regional municipalities growth (county municipalities) a fact confirmed apparently for both Old and New Member-States from observations made in the Netherlands and Great Britain in the period 2001-206 when differences of about 30 percentage points were noticed against the EU average for GDP per capita between region with the most rapid and the most slow growth. Yet another motivation can be found in the distance from the symbolic centre of intense economic activities, and in the distance from the regions with intense industrial and technologic development, even in the cases where this distance is relatively small.

For Romania the differences between the various regions is shown on distances that are not necessarily geographic but, rather, determined by the higher or lower specialisation differences inherited from the centralised economy period, but also by the attraction exercised by the "development poles and centres" that knew how to adjust quicker to the rigors of transition but also to free and competitive market conditions, especially in the field of trade, services, and of developing various types of financial intermediation but also of goods (mainly real estates).

These differences, also for the future, cannot be covered only by the cohesion and convergence policy (a telling example is the case of the Mezzogiorno region from Italy), if next to these policies, in particular after this period of financial and economic crisis, are not added also national, regional policies that stimulate the cooperation between neighbouring regions (counties), so as to put to good use the potential, including the investment one of more developed regions in favour of less developed regions of the same Member-State, by developing some intra- and inter-regional integrated policies. This method could support even a more efficient and effective development not only of lacking infrastructures, but also the creation of

new industrial and services' clusters that would put to good use the comparative and competitive advantages of the respective regions.

2.3 Particularities for Romania

For Romania, the period 2007-2013 meant first full participation as Member-State of EU-27(28) to programmes and projects of the European Union. Already in the pre-accession period, Romania attempted to adjust its position to the Lisbon Agenda objectives as preparation for the new programming period 2014-2020, and as of 2007 the country benefitted also from the various instruments dedicated to cohesion and convergence at European level.

Romania during this stage was marked, in general, by the same issues with which had been faced also the other NMS, respectively: lack of national capital which made imperative the existence of investments based on attracted FDI inflows; absence of strong essential infrastructures (especially in the field of transports); lower development degree of the business sector which is in most cases the true "driver" for research-development at international level, including innovation (also valid for Old Member-States (Netherlands, Germany, France, etc.), correlated with the relatively modest capacity of the public (state) sector to support this type of activities; the need of reforming the educational and vocational training system; lack of experience in carrying-out programmes and projects benefitting from European financing; difficulties in building-up "internal and external networks" on industrial branches and activities, etc.

Next to the reasons shared with other NMS, other reasons were due to the regional and national particularities: high weight of energy-intensive industries, combined with the existence of mono-industrial areas, and labour-intensive activities; the existence of industrial sectors for which the modernisation and revamping capacity was not fully put to good use in the period before 1990; the restructuring of the industrial sector did not follow the principles of efficiency but was made, rather, by restricting activities and even 'dismembering' large industrial complexes; the decrease in the industrial sector weight and shifting to the services' sector within structural reforms; fragmentation of lands in agriculture combined with the absence of a clear strategy in the field; the absence of a sound road, rail, river and maritime transportation infrastructure which is contrary to the provisions at EU-27(28) level; the excessive dependence on foreign direct investments for diminishing disadvantages due to the lack of national capital, the low research-development and innovation capacity (as national support means and instruments were lacking), the delay, postponement, and even giving up some consistent reforms for the heavy, bureaucratic administration, with many failures and risks related to clienteles and which still requires consistent legislative and institutional reforms in the context of accession and in the perspective of full integration within the EU-27(28).

In 2007, once accession to the EU was achieved, it was found that major risks existed with respect to the absorption capacity, on one hand, and on the other hand related to the manner in which these programmes and instruments could be used at national and regional level.

Up to 2007, the convergence model applied both in Romania and the other NMS was based on sustained entries of foreign capital under the form of FDI in the financial-banking, and real estates' sector, but also based on the entry of foreign companies which transferred part of their manufacturing activities in Central and Eastern Europe: this meant new investments and productivity increases. Yet, these progresses, acknowledged as contributing directly to increasing competitiveness and implicitly convergence of NMS, including here Romania do not provide for guarantees with respect to convergence on long-term, that is sustainable convergence. The crisis period had a considerable direct impact and showed one of the great sensitivities of the Romanian growth model: after the outbreak of the financial and economic crisis, FDI in Romania decreased, some investment that were regarded as for long-term and ample ones were even abandoned (leaving aside considerable financial losses, this also contributed to unemployment increase, a case in point being the Nokia factory from Jucu), others were downsized and the financial, goods, and services' markets' uncertainty was increasingly more severely felt. Thus, the crisis' period proved that the growth model based on FDI is not enough as foreign companies from developed countries, irrespective if these countries are EU-27(28) Member-States or not, shall not give up the 'hidden' competition pursuing even when realising such investments to maintain their leading positions in the field of innovation, technological development and strategic decision-making. An argument in this respect is brought even by one of the European Commission reports regarding competitiveness in 2020, where it is stated that: *"in spite of the high levels of internalisation within EU-12 (New Member-States), the majority of research-development and innovation activities are realised by and between the EU-15 countries (Old Member-States). [European Competitiveness Report, European Commission, 2010b]*.

Another particularity for Romania, from this perspective, was that the majority of FDI was concentrated less in productive sectors and more in the banking sector, of real estates' investments and other sectors without direct productive and commercial value.

Thus is explained also the much more 'vulnerable' position of some countries like Romania and Bulgaria where domestic capital could not become strong enough, especially due to difficulties in accumulating such capital in the period 2000-2007 and after this period due to the difficult bureaucratically hindered development of the SME sector.

3. Conclusions

The economic and financial crisis can be regarded, to a certain extent, as opportunity both for old and new cohesion Member-States of the European Union. The imposed continuation of the structural reforms meant to contribute to healthier economy and of an increased fiscal discipline, implementing the austerity packages had as effect on one hand the reconsideration of the European economic and social development model, and on the other hand contributed to better understanding and better knowledge about the limits of cohesion and convergence for both old and new cohesion and convergence Member-States. Moreover, it seems that the

financial and economic crisis was the inflexion point from which it becomes necessary to design more concretely the cohesion and convergence programmes in direct connection with the European Agenda, respectively the one of the new programming period 2014-2020.

Also, the period crossed by Romania together with the other NMS since 2007 and up to 2013 has shown a higher flexibility of Romania and of the countries from the Central and Eastern Europe as compared with Mediterranean countries in adopting measure, adjusting strategies and national projects to the new conditions resulting from the diminishment of the foreign direct investment flow, of the export capacities, of the demand for goods and services, etc.

A significant element requiring a more in-depth analysis is the level of the so-called social capacity of accepting the conditions during severe economic periods, as well as of the main social and cultural components that will contribute more or less to resuming economic growth and exiting the crisis. This fact is due to the recent trends at European and international level, but also due to increasingly important progresses in the field of information and communication technology and especially of their applications in the daily life, their impact on the action way at the level of groups and of the society as a whole.

Therefore, in the next stage, the economic policies of the NMS, and the ones of the old cohesion Member-States and at the level of EU-27(28) shall have to analyse the probability and possibility of changing the current meaning of the cohesion and convergence policy, if the intention is to avoid an European level implosion. The strict rules and regulations of fiscal policy, the ones referring to GDP per capita, to real and nominal incomes of the population from old and new cohesion and convergence Member-States are all necessary but not sufficient conditions for blurring the differences between the old and new Europe. Moreover, a careful analysis should be made about the main models operating at the European level (see Gösta Esping Andersen "The Three Worlds of Welfare Capitalism"), respectively the liberal, corporatist/state and social-democratic models to which is added the Mediterranean model for adjusting the cohesion and convergence policies to the economic policies from the old and new cohesion and convergence Member-States, in accordance with their classification within these models. Even though none of the models is found in "pure state" in reality, it is found that the Mediterranean model is the most relevant because both old cohesion Member-States from the respective group and the NMS are represented by this cohesion model where family and 'network' relationships operate both at social and economic level.

Thus, more and more takes shape the possibility of delimiting, defining and adopting a new and typical convergence model for the countries that "borrow" as result of the comparable historical conditions, but also of the shared "mental geography" same characteristics, but also methods of formulating, implementing and continuing their national economic policies, respectively the countries from the Mediterranean area and the Central and Eastern European one.

By assuming the objectives of the Europe 2020 Agenda, the Member-State must formulate their economic policies for these objectives and the cohesion and

convergence policies in accordance with the new circumstances generated by the economic and social climate in full changing and transformation process.

The main stated objective of the *new social economy* represents an ambitious desiderate and which can be reached only in the context in which the lessons from the failure (even if only partial) of the Lisbon Agenda are 'learned'. Thus, the following elements should be retained that could contribute to reaching successfully the objectives supported by the new programming period:

- the cohesion and convergence policies of the former period included objectives that were in an overlapping relationship with the Lisbon Agenda, in particular in the field of employment and equality of chances and gender; this overlapping, far from being redundant/useless should be deepened and even underpinned within the initiatives related either to the cohesion and convergence policy, or to the programmes' and projects framework which are launched by the European initiative Horizon 2020;

- at European level increased emphasis is laid on formulating some threshold and terms for measuring progresses and economic evolutions much more differentiated, starting from the actual conditions from each Member-State for being able to evaluate correctly and in a concrete manner progresses, but also the possible delays and deviations from the common Agenda;

- including some determinant social factors in the equation of measuring by indicators the obtained outcomes in the new programming period is necessary not only for ensuring a higher rate of success in reaching the major objectives of the Europe 2020 Agenda, but especially in the context of cohesion and convergence policy that are the expression of stability and solidarity, inclusively social at European level.

The increasingly more often formulated fears of the experts are that the objectives of the future Europe 2020 Agenda are just as vaguely formulated as the ones of the Lisbon Agenda, and a list of open questions needs to be in-depth analysed to identify possible answers: is there an assumed common vision at the level of all Member-States regarding the major objective of a social economy market? Which is the possible value added of the new European agenda for the required processes of structural reforms, of re-industrialisation and of social and cultural changes that the numerous aimed objectives involve? What composite/aggregated indicators of quantitative and qualitative nature shall be necessary, useful and precise in estimating and evaluating the new objectives and the new agenda? Is the initiative of increased centralised, strengthening and disciplining fiscal policies based on austerity packages at the level of institutions with responsibilities in the field beneficial? And so on.

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SOCIAL AND ECOLOGICAL DIMENSIONS OF SUSTAINABLE DEVELOPMENT

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Abstract
A priority of sustainable development is to solve the economic and social problems.

The major cause of the continued deterioration of the environment on the global level is the deficit model of consumption and production, especially in industrialized countries.

Poverty eradication is a challenge which is faced the mankind for a long time and further expansion will lead to major crisis of humanity.

Keywords: sustainable development, environment, social inclusion and exclusion, poverty eradication, development of Romanian society

JEL Classification: Q01, Q57, P46, I32, I39

Reorientation of Consumption and Production in Line with Current Needs

Agenda 21 is the plan of actions on key policies to achieve sustainable development and approach to environmental issues [C. Ciupagea (coord.), *Direcţii strategice ale dezvoltării durabile în România,* European Institute for Romania Publishing House, Bucharest, 2007, p. 19].

According to Agenda 21, the action plan for sustainable development adopted at the 1992 Earth Summit in Rio [*Rio de Janeiro Conference*, 1992], "the major cause of the continued deterioration of the environment on the global level is the deficit model of consumption and production, especially in industrialized countries". 15% of the world population which is living in developing countries account for 56% of global consumption while the percentage of 40% - representing the poorest people in developing countries - account for only 11% of consumption. Although most people consume more today - given the world economic development and higher standards of living in many countries - consumption in a typical African household is 20% lower than it was 25 years ago.

Consumption is not, however, only a matter of rational use of resources. If everyone in the world would live in the average income of a person in a high income country, we still need 2.6 planets to reach for all according to the

"Ecological Footprint Measure Sustainability" - an independent assessment based the UN statistics. Even current levels of consumption and production, environmental measurement based on global average, are 25% higher than the ecological capacity of the planet. This means that at current levels, humanity eroding the natural capital of the planet at a rate significantly.

Production and consumption in industrialized countries have moved from material and energy intensive sectors towards services. Correlated with improved energy efficiency, this resulted in lower consumption of raw materials per unit of output. European Union, for example, has managed to achieve significant economic growth in the 90s, without increasing importance of fossil fuel consumption. However, these increases in efficiency were offset by the increase in consumption of goods and services. It consumes increasingly more natural resources and it generates increasingly more pollution.

Since *Earth Summit* were used new methods for efficient consumption and production:

Many governments have used economic incentives and legislation, such as environmental taxes, pollution taxes, operating licenses pollutant emissions and water use; guarantees repayment plans for waste management, tax compliance and performance bonds and codes environmental conduct.

Many companies have introduced production processes safer and more effective environmental pollution and other factors have reduced environmental impact through models, packaging and organic labels.

The population became increasingly aware of its responsibilities and consumer choices. In addition to the three R dissemination practices - reduce, reuse and recycle - is a willingness to pay more for green products.

Annual output of the world economy has increased from 31 trillion USD in 1990 to 42 trillion in 2000, up from 6.2 trillion in 1950. This increase in economic activity has created millions of new jobs and allowed people to consume more. For example, the number of telephone connections increased globally by 62 % - from 520 million in 1990 to 844 million in 1998.

Although per capita income grew by 3% annually in 40 countries since 1990, over 80 countries have per capita incomes lower than that recorded a decade ago. One fifth of the world population lives on less than a dollar a day, without having the means to buy basic goods and services.

World energy consumption increased significantly in 1992 and it is projected to continue to grow at a rate of 2% per year until 2020. Global consumption of fossil fuels has increased by 10% in 1992-1999. The highest per capita use remains in developed countries, which consume up to 6.4 tons of oil equivalent per year, ten times more than the consumption in developing countries.

Consumers pay often 50 to 100% more for products without chemicals and pesticides. As a result, the organic food industry grew by over 20% annually in 90 years in the United States, with similar rates of growth in other industrialized countries.

Continued existence as possibilities planet is not a viable long-term option. The problem is changing patterns of consumption and production fast enough to keep pace with growth. This can be achieved by technological change. It is

unlikely that businesses take green initiatives voluntarily if they are expensive. Increasingly more people need to change their mindset that increasing material consumption is progress or success. A more efficient use of resources will reduce social conflicts.

According to the UN Secretary General on the implementation of Agenda 21, it takes significant resource efficiency both in developed countries and the developing ones. The proposals include:

- Achieving efficiencies four times higher in terms of energy and resources in the next two or three decades, and a possible tenfold increase resource efficiency in developed countries in the long term;
- Increase the accountability of corporations through measures such as the global agreement and the Global Reporting Initiative and environmental management and reporting tools such as environmental;
- Provide incentives to industry and public institutions to accelerate research and development of safer production technologies;
- Promoting the use by government actions including environmental reports national tax reforms and measures for environmental conservation purchases.

Poverty and its Eradication

Poverty is the lack of time to satisfy basic needs, lack of financial resources necessary for normal life to the standards prevailing in that community [Gh. Răboacă, *Piaţa muncii şi dezvoltarea durabilă,* Tribuna Economică Publishing House, Bucharest, 2003, p. 59].

To emphasize once again the seriousness of problems posed by global poverty and the European Community, will present some of the definitions and types of poverty, as formulated in *National Action Plan on Anti-Poverty and Promotion Social Inclusion (Planul Naţional de Acţiune Anti-Sărăcie şi Promovare a Incluziunii Sociale) [*CASPIS, *Planul Naţional Anti-Sărăcie şi Promovare a Incluziunii Sociale,* 2003,]:

1. *Extreme poverty:* a lack of financial resources so severe that the person living conditions are absolutely unacceptable for a civilized society, human dignity seriously impaired, causing rapid deterioration and hard reversible capacity of normal social functioning, in children blocks the normal development of personality, reducing to zero the chances of normal adult developments. Extreme poverty tends to fix the chronic marginalization and social exclusion, chances out of poverty becomes insignificant.

2. *Severe poverty:* a level of resources that provides modest stressed life, full of gaps and limitations that prevent normal social functioning, but not blocking any effort to escape poverty, and no recovery, where resources back normal.

3. *Relative poverty:* a standard of living within the parameters of decency, but in relation to the collective aspirations of life, creates discomfort, frustration.

4. *Relatively low income:* those with incomes significantly lower than standard income community.

European Union uses to identify poverty "incomes below 60% of median income in the country". Relatively low income is therefore a relative threshold, designating not necessarily absolute poverty, but one relative to the prosperity of others. Relatively low income produce not necessarily, poverty itself, but rather a state of relative frustration, leading to feelings of inequity, inequality excessive. The term is often used to refer to multiple deprivations of economic polarization effect.

Social exclusion refers to the placement of a person outside the normal forms of social life, as a result of multiple deprivations, with little chance of reintegration into a normal social life. Result of discrimination, lack of opportunities and aggregation of deprivation, degradation/undeveloped capacity for normal social functioning or a lifestyle that marginalizes individually or collectively.

Social marginalization, term used generally the same content as social exclusion refers to the position of individuals/groups outside the normal social life of the community. In recent years it tends to be even replaced by the latter, which emphasizes more collective responsibility for the state of marginalization/exclusion.

Social inclusion is the process of reintegration into normal life forms in a normal social functioning of persons in situation of exclusion/marginalization or high risk of marginalization, capacity-building and construction opportunities.

Virtually all measures, delayed development efforts in Africa to take effect more than in any other region, and at the Millennium Summit of the United Nations, governments agreed on imposing special efforts to eradicate poverty and sustainable development in Africa. While in South Asia are more poor population, the proportion of people living in poverty in Sub-Saharan Africa is the largest in the world - nearly half of Africans survive on less than 1 USD/day. African issues have not been addressed properly and continued to increase during the last two decades. In the 90s, when most countries of the world record economic growth in African countries, with few exceptions, this has not happened. An overlooked globalization plan, the African participation on international trade is minuscule and shrinking. Conflicts are rampant in many countries, HIV/AIDS has a devastating impact, the desert stretches and deforestation continues. Meanwhile, international aid given to this area decreased.

In Africa there are recent initiatives to change this situation and establishing a new course of development. But the international community must provide assistance. The principles of sustainable development recognize that poverty and environmental degradation will affect an area recently and the world. During the negotiations before the summit in Johannesburg, African governments have stressed that Africa Summit must address directly.

While developing countries' exports have grown at a rate of 9.6%/year in the 90s, African exports have grown at a much slower pace, and the participation of the region in world trade declined from 2% in 1990 to 2.1% in 2000. Almost half the population of Sub-Saharan Africa living in poverty and the number of people living in poverty has increased substantially. Almost a third of Sub-Saharan Africa is undernourished and the percentage increasing.

While most nations increased consumption in recent years, the average African household consumption expenditure is 20 % lower than it was 25 years ago.

Deforestation rate in Africa is among the highest in the world, '90s recorded a loss of 5.3 million hectares of forest every year.

Over 40% of urban African households live in poverty, on less than a dollar a day. Official development aid granted most African nations had fallen by nearly 25% in the last decade and for seven countries, official development aid declined by over 50%.

In Sub-Saharan Africa there are 25 million people with AIDS and over 12 million have died of AIDS in Africa - more than two million in a single year. Around 13.2 million African children have been orphaned by the epidemic. Over 500 million people in Sub-Saharan Africa depend on firewood. Burning wood and other biomass components, account for 90 to 98% of the energy needed in households in most African countries. In Sub-Saharan Africa, about 30% of children die or become disabled due to acute respiratory infections in 60% of cases are caused by pollution.

If soil degradation continues at the current rate, African crops could fall by 50%. Almost 65% of the lands for agriculture have been affected already.

A new initiative has made its presence felt in Africa in the past three years, driven by the presidents of South Africa, Nigeria, Algeria, Senegal and Egypt.

Known as the New Partnership for Africa's Development (NEPAD) initiative aims to eradicate poverty and place their countries, individually and collectively, on the path of growth and sustainable development. It should also targets to stop of the marginalization of Africa in the globalization process, to restore peace, security and stability and to promote the role of women in all areas of activity. African governments have expressed hope that the Johannesburg Summit, especially because it takes place in Africa, will be a major catalyst in getting support for NEPAD by attracting resources, funds and technology partnerships that and fostering institutional and human capacity development.

Secretary General of the United Nations, Kofi Annan, in his report for the implementation of Agenda 21, along with Dr. Emil Salim, Chairman of the Training Summit have identified several major areas on which Summit decisions on sustainable development Africa needs to focus:

- Support for regional, sub-regional and national development, peace, security and stability.
- Provide increased financial support in the fight against HIV/AIDS.
- Restructuring of international aid and the establishment of appropriate and effective levels of support.
- Support key social development goals, such as drinking water, literacy and healthcare.
- Promoting initiatives providing access to diversified sources of energy, especially in rural areas.
- Promoting access to technology for African companies.
- Removing the digital divide and marginalization of Africa.

- Supporting small and medium enterprises in Africa, focusing on the industries of agriculture.

African ministers at a preparatory meeting for the Johannesburg in October 2001 agreed on the objectives of development and poverty eradication, this depends on good governance in each country and at the international level and on transparency in the financial, monetary and trade. Also African ministers have stressed that multilateral trade and financial system fair, rules-based, predictable and non-discriminatory is essential [D. Caracota, C.R. Caracota, *Dimensiuni contemporane ale dezvoltării durabile şi competitive,* 2004].

Poverty eradication is a challenge which is faced the mankind for a long time and further expansion will lead to major crisis of humanity [C. Zamfir, *Dezvoltarea socială – câteva elemente teoretice*, în Zamfir, C., Stoica, L. (coord.), O nouă provocare: Dezvoltarea socială, 2006].

A priority of sustainable development is to solve the economic and social problems.

Sustainable Development - a Primary Requirement Romanian Society Development in the Current Decade

Romania has since the end of 2008 the second National Sustainable Development Strategy, undertaken by the Government. However, the strategy is ineffective because there is not a National Implementation Plan and approved budget. It is also difficult to define what would be the program to stimulate the implementation of this strategy or responsible institutions, departments.

Although considered a horizontal policy, which means that its application should be made in each sector, it is not visible or is poorly understood, both in the government program and the initial investment in recent years. Moreover, if in 2006-2008 steps have been taken to develop the institutional capacity of central government through the establishment of specialized departments within each ministry, as of 2008, most of them were closed.

Of major importance is how the funds are used structural and cohesion so that project results will lead to real and sustainable development objectives assumed by Romania in Europe 2020. Although according to European Community regulations, sustainable development is considered horizontal objective and all programs should provide indicators of sustainable development, both in the evaluation and monitoring of projects, this indicator is treated superficially [*Research Report „Dezvoltarea Durabila a Resurselor Umane"* realized by „Salvati Dunarea si Delta" Association]. The study reveals valences necessary and useful for all actors in the system (beneficiaries, potential beneficiaries and managing authorities). Such evaluation projects to achieve sustainable development indicators should be carried out within axes technical assistance for all operational programs.

Regarding sustainable development programs at the national level, the only dedicated programs that could contribute to the implementation of sustainable development are managed by the Environment Fund Administration. While the time was made a number of changes, program guides are suffering from incomplete or unclear. Another major problem is the lack of predictability of these

programs because there is a schedule of opening periods of funding and no estimate of the period of evaluation of proposals submitted.

Often the opening lines of funding was delayed or canceled without specifying an exact term. An example in this regard was Casa Verde program, announced in late 2008, shortly postponed and later canceled in summer 2010. Even with the start of the program, there is no assessment of the benefits that it brings to the environment.

The same uncertainty was highlighted programs for NGOs that are very restrictive (for information, awareness, management of natural areas and biodiversity conservation), although environmental organizations often demonstrated in other externally funded programs that are capable of both the proper management and to address other issues. Also, programs for NGOs suffer due to inadequate provisions on staff remuneration, administrative, implementation and can co-partnership projects from other sources.

Regarding the education of sustainable development as the emergence and development of environmental Brundtland Report [The Report was developed by the World Commission on Environment and Development established by United Nations in 1987] and especially after the Rio Conference (1992), the need to introduce education for sustainable development has become increasingly clear. In addition to caring for the global ecosystem, the concept includes the fight for social justice, democracy, respect for minorities, multiculturalism etc.

It is widely recognized that education is the most effective means available to society to meet the challenges of the future. From the perspective of sustainable development, education effectiveness is measured ultimately by changes taking place in the attitude and behavior of people individually and socially. Education for sustainable development requires the involvement of many people. It is necessary to extend this education sector by involving not only teachers, but also representatives of civil society, professional associations, business community representatives etc.

Proposals

Recognition of sustainable development as a horizontal policy and implementation tools that lead to this:

- Adoption of a National Action Plan for the National Strategy for Sustainable Development and creating the necessary infrastructure for its implementation;

- Development of specific budget allocations to programs leading to sustainable development;

- Waiver of investment projects affecting the environment irreparably (for example: Roşia Montană Project);

- Behavior changes of public administration so that it represents a model for the implementation of criteria and indicators of sustainable development;

- Consultation with all stakeholders and in particular non-governmental organizations (NGOs) in the development of public policies related to sustainable development;

- Promoting best practices and demonstration projects;

- The introduction of sustainability criteria and monitoring their compliance in all publicly funded projects.

Using structural and cohesion funds so that project results lead to real sustainable development:

- Evaluating and monitoring more seriously sustainable development indicators in the operational programs;

- Encouraging educational projects on sustainable development for project managers, and staff management of operational programs;

- Evaluating the achievement of sustainable development indicators in projects under implementation or completed;

- Promoting best practice in sustainable development;

- For the next financial allocation to provide for the priority axis to consider projects aimed at environmental protection and other areas, such as improving and adapting to climate change, desertification and other issues when they are not covered by any program.

Operation of national sustainable development programs, clear and predictable, to help the transition to a green economy:

- Review guidelines for NGOs implementing the Environmental Fund, so that the funding may not be as restrictive as subjects, and reconsidering the type and composition of the budget for the project;

- The establishment of an annual calendar with specific dates for implementation and evaluation;

- Acceptance of projects in partnership with other institutions and co-financing from other sources.

Improving the formal and non-formal education and increasing public awareness regarding sustainable development [These requests were made by „Climate Action Network - Romania" through an open letter addressed to the mentioned ministries and Romanian Government since 2008.]:

- Further promote education for sustainable development initiatives, as well as curricular and extra-curricular activities by Ministry of Education, Youth and Sports;

- Support collaboration with Ministry of Environment and Forests for the development of joint programs to promote environmental education and sustainable development;

- Promoting a structured initial training, continuing professional education and in the wider framework of the adults involved in education for environment and sustainable development;

- Support awareness campaigns on issues that affect the acute socio-human (for example: climate change, biodiversity loss, desertification etc.);

- Supporting investments to ensure mitigate the impact of school infrastructure on the environment (for example: application of green public procurement procedures).

All these requirements could be solved if the government level would build a National Strategy for Education for Sustainable Development through broad consultation with all stakeholders. The aim of this strategy is to recognize the central role of sustainable development in the context of current educational and

ensure effective implementation at all levels of its principles and measures in the Romanian society.

Conclusions

The priority of sustainable development consists in the solution of economic, but also the social problems.

Poverty eradication is the challenge that humankind is facing for a long time and its extension leads to the major crisis of humanity.

Continuing the existence under the opportunities of the planet is not a long term option. The problem is given by the changing of patterns of consumption and production fast enough in order to keep up with the economic growth. But this can not be achieved only through technological changes. On a voluntary basis, it is unlikely that the enterprises take environmental initiatives if these are expensive. People must change their mentality according to which the increasing of consumption represents progress or success. Through more efficient use of resources will be reduced also the social conflicts.

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THE IMPACT OF ACCOUNTING INFORMATION SYSTEMS (AIS) ON PERFORMANCE MEASURES WITH VALUE RELEVANCE OF AUDITORS' COMMUNICATIONS

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Abstract
The auditor's report the final outcome of the audit process and also is a way of communication linking the auditor with parties benefiting from the audit process, due to the importance of the report came the idea of doing research addresses the role of the auditor's report in narrowing the gap of expectation between auditors and users of accounting information systems and diagnose cons of this report is to shorten the expectation gap between auditors and accounting information systems.

1. Introduction

Accounting Information Systems (AIS) are a tool which, when incorporated into the field of Information and Technology systems (IT), were designed to help in the management and control of topics related to firms' economic-financial area. But the stunning advance in technology has opened up the possibility of generating and using accounting information from a strategic viewpoint. Since this is important for all firms, it is more important even for medium-sized and small ones which need this information to deal with a higher degree of uncertainty in the competitive market (El Louadi, 1998). Thus, they need to improve their systems and data processing capacity to match their information needs (Van de Ven and Drazin, 1985) investing in staff training, improving the quality of products and internal processes and increasing AIS investment. As information and communications technologies cover a wide range and include all the areas in which a firm acts, this research work has focused on a specific part of them, the accounting information systems (AIS) to show that computerized accounting tools are directly related to the economic and financial results and productivity in small and medium-sized business organizations. AIS are systems used to record the financial transactions of a business or organization. This system combines the methodologies, controls and accounting techniques with the technology of the IT industry: user interface, computers and sophisticated software. The software used to track transactions provides internal reporting data, external reporting data, financial statements, and trend analysis capabilities.

1.1 Background
Financial accounting

Financial accounting is a process involving the collection and processing of financial information to assist in the making of various decisions by many parties external to the organization (Deegan and Unerman, 2006, 32).

The process of financial accounting leads to the generation of financial reports: financial statements. The principal classes of users of financial statements (financial statement users) are investors, bank lenders, trade creditors, employees, financial analysts, governments and the public.

The International Accounting Standards Board (IASB), an independent accounting standard-setter, published a *'Framework for the preparation and presentation of financial statements'* (the Framework). The main objective of the Framework is to create a sound foundation for future accounting standards that are principles-based, internally consistent, and internationally converged.

Auditing and the audit report

In a decision-making process, decision makers rely upon information, financial statements, as prepared and presented by the management of an entity. The possibility that the information upon decided on is inaccurate is called the 'information risk'.

Elder et al. (2006, 9) state that the most common way for users to obtain reliable information (reducing the information risk) is to have an independent audit performed. To enhance the degree of confidence of the intended users in the financial statements, a financial statement audit will be conducted. Decision makers use the audited information on the assumption that it is reasonably complete, accurate, and unbiased.

Based on an audit, an audit report will be issued. The audit report represents the auditor's communications of findings to financial statement users. The audit report contains information about the audit, including its scope, and an opinion regarding the fair presentation of the financial statements.

Value relevance audit report

Financial statement users rely on the auditor's report to provide assurance on the company's financial statements. One important question hence is whether auditor communications communicate the appropriate information. Is the audit report effective in communicating important information about, for example the audit process, the auditor's duties and 'going concern' or do investors need more (better) information to facilitate their investment decisions?

Concerning the information content and the effectiveness of the auditors' communications, several studies already have explored. Various shortcomings of the audit report have presumed and, to address the perceived shortcomings through all years, several solutions have proposed. For example AICPA 1978, Porter 1993,

Hermanson et al. 1991, Gay and Schelluch 1993, Manson and Zaman 2001, Porter et al. 2006 etc.

Accounting information system (AIS) and performance measures existing literature offers scant evidence of the relationship between these AIS and performance measures; though it is important to highlight the study made by Ismail and King (2005) which discovered a positive association between AIS alignment and SME strategy and performance measures. In posits an indirect relationship between AIS and firms' performance via the varying strategies that may be adopted by companies. Thanks to investment in AIS, the scope for action is expanded, thus providing time saving in trips to and dealings with banks, the Administration, etc. This reduces firms' costs. Productivity increases when these innovations are properly used. Insofar as a firm's culture is open to the introduction of new accounting information systems this will lead to a more holistic view of it and make for greater flexibility and dynamism in organizational search for improved results.

1.2 Objectives

The purpose of this research is to investigate the value relevance of the auditors' communications. 'Value relevance' implies the ability of auditors' communications, i.e., the audit report, in communicating effectively about the audit process, the responsibilities of the auditor, the nature of assurances provided by the auditor and other items, which could be important in a decision-making process for Accounting information system.

1.3 Problem definition

What is the value relevance of the auditors' communications, i.e., does the audit report enhance the financial statement users' understanding of the auditor's duties, the audit process, assurances provided and other important topics, or is additional and / or other information required in facilitating a decision-making process in accounting information system?
In order to realize an answer to the main research question, the following sub questions need to be answered:

- Does AIS play an important role in planning the firm's strategies?
- How long have you been doing your accounting with a computer program?
- Does computerized accounting AIS allow you to manage your cash position with banks?
- Does AIS allow you to manage your fiscal affairs with Government bodies?
- Do you think that the organization and administration in your firm have improved since using AIS
- What is the purpose of performing audit and assurance services, and concerning the audit?

- Which theoretical explanations underlie the demand?
- What is the purpose of issuing an audit report?
- Which research method is most suitable to investigate the value relevance of auditors' communications?
- When comparing the output of different classes of financial statement users, which differences exist?

1.4 Methodology

The problem in this research could best defined as an explanatory problem. The purpose of the research is to establish and to demonstrate the causal character of the association between the form and the content of the auditors' communications and users' understanding of certain topics, like the audit process, auditors' duties, assurances, going concern, to improve Accounting information system. In light of the research problem, objectives and importance has to relay Search:

1- **Inductive approach** to study and extrapolation of literature on the locus of research and extending benefit.
2- **Deductive approach**, which relies on deductive reasoning transferred to the link between the different aspects of the research problem.

Different classes of financial statement users will be involved in this research. In this research, the 'financial statement users' are institutional investors, bank lenders, and financial analysts. These user groups have different approaches in processing information and making economic decisions and consequently will use and analyze the audit report in a different manner.

2. Theoretical framework for auditing

Provides an overview of the existing, explaining theories on accounting and auditing, auditing theory helps explain why society needs auditing: the role and purpose of audit services in communication between a company and its environment.

2.1.1 Theories of auditing

This paragraph presents some of the theories on the demand concerning auditing. The agency theory is the most prominent of the existing theories. Less significant audit theories are the 'policeman theory' and the 'lending credibility theory'.

The policeman theory claims that an auditor is responsible for searching, discovering, and preventing fraud. The focus of the audit however, has moved towards the verification of the truth and the fairness of the financial statements and

the provision of reasonable assurance. The policeman theory is not able to explain fully the role and the purpose of auditing.

According to the lending credibility theory, the primary function of the audit is to add credibility to the financial statements. Audited financial statements increase the financial statement users' confidence in the financial figures and the faith in management's stewardship. The lending credibility does not explain other functions of performing audit services; this theory is limited in explanatory power.

2.1.2   Limperg's Theory of Inspired Confidence

In 'The PCAOB and the social responsibility of the auditor' (2004), D.R. Carmichael; chief auditor at the Public Company Accounting Oversight Board (PCAOB), comments the social responsibility of the independent auditor and the possible mechanisms for ensuring that audits meet society's needs. Carmichael focuses on the role of the PCAOB and its performances in restoring the confidence of investors in the independent auditors of public companies.

According to Carmichael (2004, 129), the principles of Limperg's theory are especially relevant in this phase of the development of the audit function. "We have a particular need in our current environment to try to understand and to appreciate the social significance of auditing and the implications concerning in which way an audit should be performed."

The Theory of Inspired Confidence connects the community's needs for reliability of financial information to the ability of audit techniques to meet these needs, and it stresses the development of the needs of the community and the techniques of auditing in the course of time (Limperg Institute, 1985, 3).

2.1.3   The information theory

As described in the 'agency theory', financial reporting is central to monitoring purposes. An alternative or complement to the monitoring principle is the information principle, focusing on the provision of information to enable users to take economic decisions.

Investors require audited financial information on behalf of their investment decision-making and assessing of expected returns and risks. Investors value the audit as a means of improving the quality of financial information.

An audit is also valued as a means of improving the financial data used in internal decision- making. Data that are more accurate will improve the internal decision-making.

2.1.4   The insurance theory

The insurance theory is a more recent explanation for the demand for the role of the audit, that is, the ability to shift responsibility for reported data to auditors lowers the expected loss from litigation to managers, creditors, and other professionals involved in the securities market (Cosserat, 2006, 44). When using

audit services, managers and other professionals can demonstrate that they exercised reasonable care.

2.1.5 The agency theory

In 'Theory of the firm: managerial behavior, agency costs and ownership structure' (1976, 306), M.C. Jensen and W.H. Meckling refer to the firm being a 'black box', operated so as to meet relevant marginal conditions with respect to inputs and outputs, thereby maximizing profits, i.e., present value. The authors signaled that no theory exists, explaining the way in which the conflicting objectives of individual participants will brought into equilibrium to succeed in value maximization.

2.1.6 The assurance theory

An assurance service is a service in which a public accountant expresses a conclusion about the reliability of a written assertion that is the responsibility of another party (Cosserat, 2006, 20). Elder et al. (2006, 8) define an assurance service as an independent professional service that improves the quality of information for decision makers. Individuals responsible for making business decisions seek assurance services to help improve the reliability and relevance of the information used as the basis for their decisions.

Following Elder et al. (2006, 9), one category of assurance services provided by auditors is 'attestation services'. Performing attestation services, the auditor issues a report about the reliability of an assertion used by another party. Five categories of attestation services are distinguished:

Audit of historical financial statements

An audit of historical financial statements is a form of attestation service in which the auditor issues a written report expressing an opinion about whether the financial statements are fairly stated in accordance with the applicable accounting standards. Financial statement users value the auditor's assurance because of the auditor's independence from the client and knowledge of financial statement reporting matters.

Audit of internal control over financial reporting

An audit of internal control over financial reporting is a form of attestation service in which the auditor evaluates management's assertion that internal controls have been developed and implemented following well-established criteria. The auditor's evaluation increases user confidence about future financial reporting, because effective internal controls reduce the likelihood of future misstatements in the financial statements.

Review of historical financial statements

Performing an audit of historical financial statements, the auditor provides a high level of assurance. For reviews of financial statements, the auditor provides only a

moderate level of assurance. Because less evidence will needed, reviews of financial statements can be performed at a lower fee than an audit.

Attestation services on information technology
Performing attestation services on information technology, the auditor evaluates management's assertions about the reliability and security of electronic information.

Other attestation services that may apply to a broad range of subject matter
Numerous of other attestation services can be performed. In each case, management must provide an assertion before the auditor can provide the attestation

2.2 Other theories

In this paragraph, the Positive Accounting Theory (PAT) and the legitimacy theory will be commented. PAT and legitimacy theory do not necessarily explain the demand concerning auditing. These accounting theories however, underlie the practice of financial accounting and consequently are valuable in understanding the demand for and provision of financial accounting information and the interests and behavior of different parties. In addition, this paragraph presents a description of the stewardship theory.

2.2.1 Positive Accounting Theory (PAT)

In *'Towards a Positive Theory of the Determination of Accounting Standards'* (1978), Watts and Zimmerman seek to develop a positive theory of the determination of accounting standards. "Such a theory will help us to understand better the source of the pressures driving the accounting standard-setting process, the effects of various accounting standards on different groups of individuals and the allocation of resources, and why various groups are willing to expend resources trying to affect the standard-setting process" (Watts and Zimmerman, 1978, 112).

According to Watts and Zimmerman (1990), Positive Accounting Theory (PAT) is concerned with explaining accounting practice. It has designed to explain and predict which firms will and which firms will not use a particular method.

PAT focuses on the relationship between the various individuals involved in providing resources to an organization and in which way accounting can assist in the functioning of these relationships (Deegan and Unerman, 2006, 207). PAT is based on the central assumption that all individuals' action is driven by self-interest and that individuals will always act in an opportunistic manner to the extent that the actions will increase their wealth.

2.2.2   Legitimacy theory

According to Deegan and Unerman (2006, 271), legitimacy theory asserts that organizations continually seek to ensure that they are perceived as operating

within the bounds and norms of their respective societies, that is, they attempt to ensure that their activities are perceived by outside parties as being 'legitimate'.

Legitimacy theory relies upon the conception of a 'social contract' between the organization and the society in which it operates. "The concept is used to represent the multitude of implicit and explicit expectations that society has about in which way the organization should conduct its operations" (Deegan and Unerman, 2006, 271).

2.2.3   Stewardship theory

According to Donaldson and Davis (1991, 51), stewardship theory holds that there is no inherent, general problem of executive motivation. "The executive manager, under this theory, far from being an opportunistic shirker, essentially wants to do a good job, to be a good steward of the corporate assets.

3. The contents of auditing and the audit report

This chapter introduces auditing and assurance services and discusses types of audit reports and the development of the standard audit report. This chapter includes a description of the form and the content of the audit report and presents the main criticisms concerning the standard audit report.

3.1   Auditing and assurance services

This paragraph introduces the nature and content of performing auditing and assurance services and describes the types of audit services. In addition, this chapter briefly discusses the audit process and attends to the European Commission Green Paper on Audit Policy.

3.1.1 Introduction to auditing and assurance services

Concerning economic decisions, decision makers like investors, creditors, financial institutions, and analysts rely on financial accounting information. Financial information is useful if it helps users in their decision-making.

Financial accounting information provides information on behalf of the user's economic decision-making. Financial reporting furthermore helps investors predict future cash flows. Investors use disclosed and undisclosed information to produce estimates of future cash flows. At last, financial reporting provides information on the company's economic resources, obligations and the effect of economic transactions on the existence of resources and obligations.

Publication of financial accounting information does not solve the 'agency problem', which is due to the information asymmetry and due to the conflicts of interest. Because the management is responsible for the financial reporting and in addition has a position to exercise discretion, a risk exists that the information is inaccurate, the 'information risk'.

Information asymmetry causes a need for an independent intermediary, the auditor, to verify and provide assurance of financial accounting reports, prepared by management. The role of the audit is to reinforce trust and confidence in financial reporting. Auditing can be qualified as a social control mechanism in securing the stewardship and the accountability of the agent.

The demand for auditing in addition can be attributed to users' needs of reliable information and the consequences of users' erroneous decision when dealing with inaccurate information. The audit function adds to the credibility of the financial statements and, consequently, users create decisions that are more accurate.

Accounting and reporting practices become more and more complex. To evaluate the quality of financial statements, a thorough understanding of accounting and reporting practices and business processes governance practices is required. Most financial statement users are not enough knowledgeable to fully understand financial reports, neither to detect errors. The auditor is hired to provide users an assessment of the quality of the information.

Financial statement users do not have direct access to the accounting records from which financial statements are prepared. Due to this remoteness, users are restricted from 'auditing' the financial statements themselves and consequently have to rely on the auditors' services that assist them in assessing the quality of financial information.

Elder et al. (2006, 9) state that the most common way for users to obtain reliable information is to have an independent audit performed. Decision makers use the audited information on the assumption that it is reasonably complete, accurate, and unbiased.

The audit or review of historical financial statements is one example of an assurance service; a service in which a public accountant expresses a conclusion about the reliability of a written assertion that is the responsibility of another party (Cosserat, 2006, 20).

Individuals responsible for making economic decisions seek assurance services to help improve the reliability and relevance of the information used as the basis for their decisions. Some other categories of assurance services are the attestation on internal control over financial reporting and assurance services on information technology.

3.1.2 Audit services

Elder et al. (2006, 4) report the next definition of auditing: "Auditing is the accumulation and evaluation of evidence about information to determine and report on the degree of correspondence between the information and established criteria. Auditing should be done by a competent, independent person."

Major types of audits conducted by external auditors include the audit of financial statements, the operational audit, and the compliance audit. A financial statement audit examines financial statements, records, and related operations to ascertain adherence to generally accepted accounting principles. In determining whether the financial statement information is true and fair (in accordance with

GAAP), the auditor gathers and evaluates evidence on which he finally bases his opinion.

An operational audit examines an organization's activities and procedures in order to assess performances and develop recommendations for improved use of business resources. A compliance audit is conducted to determine whether an organization is following established procedures or rules, for example laws and regulations and internal procedures.

3.1.3 The audit process

The audit process has four specific phases. In 'planning and designing an audit approach' (phase I), the client's business strategies and processes are studied. The auditor assesses the risk of misstatements in financial statements, and evaluates internal controls and their effectiveness (Elder et al., 2006, 162).

3.2 Introduction to the audit report

Throughout the world differences exist concerning the form and content of standard audit reports, for example those related to jurisdiction-specific reporting requirements, such as language and the level of detail in describing the responsibilities of management and the auditor. The primary objective of audit reports however, is relatively uniform: "to express clearly the auditor's opinion on the financial statements and to describe the basis for that opinion" (IOSCO, 2006, 7).

According to Elder et al. (2006, 56), materiality is an essential consideration in determining the appropriate type of report for a given set of circumstances. Deciding on actual materiality in a given situation however, is a difficult judgment. "A misstatement in the financial statements can be considered material if knowledge of the misstatement would affect a decision of a reasonable user of the statements".

Standard unqualified
When the financial statements presented are free of material misstatements and are represented fairly in accordance with the Generally Accepted Accounting Principles (GAAP), the auditor will issue a standard unqualified audit report.

Unqualified with an explanatory paragraph with modified wording
An unqualified audit report with an explanatory paragraph or with modified wording will be issued when all criteria for an unqualified report have satisfactorily met, but the auditor believes it is important or is required to provide additional information.

Examples of situations in which an explanatory paragraph will be added:
- lack of consistent application of generally accepted accounting principles;
- substantial doubt about going concern;
- emphasis of a matter;
- reports involving other auditors.

Qualified

A qualified report will be issued when the auditor encountered situations that do not comply with generally accepted accounting principles, a qualification of the opinion, or when the scope of the audit has been restricted, a qualification of both the scope and the opinion.

A qualified report is issued when the auditor concludes that the financial statements overall are fairly presented.

Adverse or disclaimer

An adverse opinion will be issued when the auditor determines that the financial statements are materially misstated and, as a whole, do not provide a true and fair view of the financial position and results of operations in conformity with GAAP.

A disclaimer of opinion will be issued when the auditor could not affect an opinion on the financial statements. The disclaimer of opinion report will be supplied when lack of independence exists between the auditor and the audited or when a severe limitation of scope exists. In addition, the auditor can issue a disclaimer of opinion concerning a going concern problem.

3.3 Development standard audit report

Once the audit of an issuer's set of financial statements is completed, the auditor issues a report, which contains information about the audit, including its scope, and an opinion regarding the fair presentation of the financial statements (IOSCO, 2006, 3). The standard audit report is the primary means by which auditors communicate to users of financial statements regarding their audits.

The standard format currently used in 24 Member States of the European Union is ISA 700, *'Forming an Opinion and Reporting on Financial Statements*.

In developing its standard audit report (2004), the International Auditing and Assurance Standards Board (IAASB) intended to increase the understandability of the auditor's role and of the auditor's report. The understandability of the auditor's report should be improved by using simple language and being concise, while still aiming to be informative (IOSCO, 2006, 4).

The new form audit report contains the heading: 'independent auditor's report' (controleverklaring van de onafhankelijke accountant). The addition of the word 'independent' affirms that the auditor has met all of the ethical requirements regarding independence and, consequently, distinguishes the independent auditor's report from reports issued by others.

3.4 Form and contents standard audit report

ISA 700 requires from the audit report to give explicit information concerning the auditor's responsibility and to express an opinion on the financial statements based on the conducted audit. Included in the auditor's responsibility section is an explanation of the audit procedures and scope to ensure the user understands the extent and scope of an audit.

Following ISA 700, *'Forming an Opinion and Reporting on Financial Statements'* (IFAC, 2006, 658) the form and content of an audit report (audit report for audits conducted in accordance with ISA) is as follows:

Title
The audit report has a title that clearly indicates that it is the report of an independent auditor.

Addressee
The audit report has addressed as required by the circumstances of the engagement.

Introductory paragraph
The introductory paragraph in the audit report:
   a) identifies the entity whose financial statements have been audited;
   b) states that the financial statements have been audited;
   c) identifies the title of each statement that comprises the financial statements, for example a balance sheet, an income statement, a statement of changes in equity and a cash flow statement;
   d) refers to the summary of significant accounting policies and other explanatory information; and
   e) comprising the financial statements specifies the date or period covered by each financial statement comprising the financial statements.

Management's responsibility for the financial statements
This section of the audit report describes the responsibilities of those in the organization that are responsible for the preparation of financial statements. The audit report uses the term, for example 'management' or 'those charged with governance', that is appropriate in the context of a particular legal framework.
The audit report describes management's responsibility for the preparation of the financial statements: 'the preparation and fair presentation of financial statements'. The description includes an explanation that management is responsible for the preparation of the financial statements in accordance with the applicable reporting framework, and for such internal control as it is necessary to enable the preparation of financial statements that are free from material misstatement.

Auditor's responsibility
The audit report states that the responsibility of the auditor is to express an opinion on the financial statements based on the audit and refers to the conduction of the audit in accordance with International Standards on Auditing (ISA).

The audit report explains that the auditor is required to comply with ethical requirements and that the auditor plans and performs the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

Auditor's opinion
Expressing an unmodified opinion on the financial statements, the auditor's opinion is that the financial statements are prepared, in all material aspects, in accordance with [the applicable reporting framework]. If the reference to the applicable reporting framework is no to International Financial Reporting Standards (IFRS), the auditor's opinion identifies the jurisdiction of origin of the framework.

Other reporting responsibilities
If the auditor addresses other reporting responsibilities in the audit report on the financial statements, these other reporting responsibilities need to be addressed in a separate section in the audit report.

Signature of the auditor
The auditor's signature is either in the name of the audit firm, the personal name of the auditor or both, as appropriate for the particular jurisdiction.

Date of the audit report
The audit report is dated no earlier than the date on which the auditor has obtained sufficient appropriate audit evidence on which to base the auditor's opinion on the financial statements.

Auditor's address
The audit report names the location in the jurisdiction where the auditor practices.

4. Value relevance standard audit report
Proposed changes to the standard audit report particularly involved the education of financial statement users about the audit process and the responsibilities of management and the auditor for the financial statements. The exposure draft attracted a high volume of response from financial statement users as well as auditors and their clients and encountered significant opposition.
Statements, the nature of assurance provided for accounting estimates, and content in the auditor's report have changed very little. Without revisions to the audit report, and the financial reporting models, the expectation gap will keep increasing.

The International Federation of Accountants
The IFAC notes some additional areas where stakeholder awareness could be enhanced:

- A greater understanding of the role of the auditor and the implications of the auditor's work;
- Enhanced disclosure about critical areas of risk which may occur in discussions between the auditor and the audit committee;
- The criteria used by audit committees and boards for selecting an auditor;

- A greater understanding of the various communications by the auditor beyond the auditor's report (e.g., more comprehensive and detailed communication to those charged with governance).

5. Questionnaire design and data analysis

In examining respondents' opinions and interpretations regarding messages in the audit report, survey research is the most applicable research strategy. A mail survey (e-mail survey) will be performed in which questionnaires will be used to elicit information from sample items.

Following Swanborn (2006, 119), response size depends on the object of research in relation to the target group and the efforts of the researcher to acquire as large a response as possible. "With face-to-face and mail surveys, in several countries the response varies between 25% and 50%. No remarkable differences exist between paper-and-pencil and computer versions."

6. *Conclusions*

A recapitulation of the research, and provides an answer to the main research question. The research results are compared with the results of prior research.

The financial audit role, as an independent examination and expression of opinion on the financial statements of an entity, is to report on the truth and fairness of the financial statements on behalf of their users. When reporting that the financial statements present a true and fair view in accordance with the relevant financial reporting framework, auditors provide 'reasonable assurance' that the financial statements as a whole are free from material misstatement, whether due to fraud or error from software based on Accounting information system.

Auditors seek to minimize the risk that historical financial information, presented in compliance with an accounting framework, is materially misstated.

The results reveal that the greater part of the respondents do agree that the audit report enhances the credibility of the financial statements. In addition, respondents believe that the purpose of the audit is clearly communicated in the audit report. Respondents support the effectiveness of the audit report in communicating on audit procedures and the application of auditing standards.

From this, it could be concluded that the respondents support the value relevance of the audit report. The audit report clearly communicates the role and the purpose of the audit. The respondents are less familiar with the concept of 'professional judgment'. The greater part of the respondents does not understand the role of judgment in the formation of an audit opinion from software.

7. Recommendations

Considering the limitations of this research, in order to effectively investigate the financial statement users' understanding of the audit report, and the effectiveness of the audit report in communicating on the audit process, the auditor's responsibilities, and the nature of assurances provided, further research should be performed

1. Applied Audit Manual world in Egypt and the countries of the European your study and evaluation of internal control systems.
2. Must study and analysis of the influential factors in the risk assessment inherited.
3. Rewrite Local Audit Manual to keep pace with the international standard Walt.
4. The need to unify and requirements of the laws and regulations and unified accounting system.
5. Must improve the communications with users of the financial statements in order to sensitize them to the correct expectations.
6. Organizations must examine the professional accounting standards in order to implement the scope of accounting alternatives which Directors can choose from.
7. Professional organizations should expand the responsibilities of auditors relating to the discovery of errors and fraud from software.

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THE POSITIVE COLLISION ABOVE THE LONG TERM PERFORMANCE OFFERED BY RISK MANAGEMENT

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Abstract
According to the classical theory of decision, the risks are also defined phenomena of possible occurrences, but still uncertain socio-human processes. Its effects are harmful, deficient with an actual irreversible character. Signifies the chance or probability of loss or separation of predictive of results to be obtained. In parallel, the uncertainty includes both positive aspects as well as negative and for this reason cannot be confused with the risk. An uncertain event, which if they do rise can generate positive or negative effects on the project's objectives. The uncertainty is permanent and cannot be removed. At the same time we are aware that during the execution of a project there are both risks and positive elements. In defining the concept of risk uncertainty is persistently and constantly removing the emergence of two possible values. Risk management comprises a range of different methods or means through which uncertainty can be managed. He is mostly known as the essential element of risk factors in order to achieve the objectives set. Risk management refers to the knowledge of the factors that could prejudice a company. We recognize that uncertainty is a fact of life, and thus the reaction to uncertainty should be an ongoing concern. It will focus on limiting or preventing permanent problems that could instigate unnecessary damage to the company. We must not forget the fact that risk management is a very important element of any draft because risk can develop problem indolence in carrying out the projects.

Keywords: *risk, uncertainty, risk management, performance, proactive management.*

JEL Codes: *D29, D81, P49, P47.*

1. Introduction

Risk can be defined as departures from both positive and negative from the objectives set by the organization or work on projects. Such deviations may result in poorer performance than expected or even the delay of results. In this context it can be perceived as threats with a probability greater than or less than, their materialization having consequences, sometimes hard to measure organizational activities. So people, tasks, resources, or performance objectives can be easily affected [2].

The risks are analyzed and interpreted as a correlation between the probability and impact. Be identified at any level where it is found that the results are available on the fulfilment of the objectives and specific measures will be adapted to the problems found by the risks in question.

Risk management is part of the organisation's management system and through secure toolkit helps us to achieve the objectives. Basically gives us the solution leverages on the causes which crystallized efforts to achieve the objectives. It represents an element of the system of internal control, which can be identified reliably and quickly to significant risks [3].

Operation and implementation of risk management can be presented easily through the following successive stages: assess, manage, measure, decide in accordance with Figure No. 1.
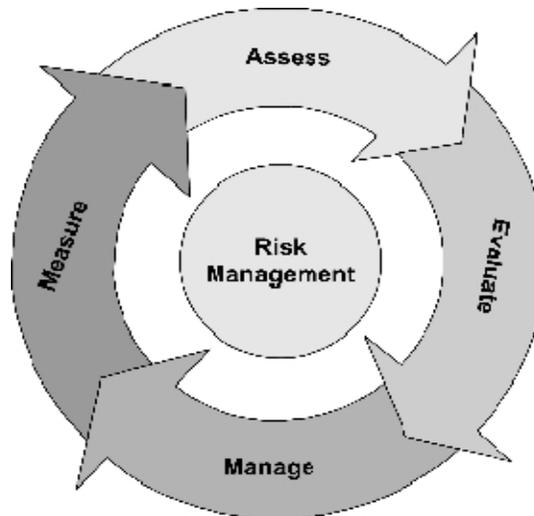
Figure No. 1: The operation of risk management
Source: Data processed by author

2. Proactive risk management

Limiting reagent management is insufficient for control of a high performance management. We cannot lead an organization solely on the principle of "seeing and doing". It is important to identify potential threats, always before they can materialize and to affect adversely the objectives set. This means to adopt a proactive management style.

Proactive management works based on the principle of "it is better to prevent than to note a fact" [5].

Risk management is a proactive process, applied with the aim of eliminating any problems still before the occurrence, thus increasing the chances of a successful outcome of any organizations. This process involves the identification, analysis, reaction and management of risks within each department involved [4].

Proactive management is a way to force certain people to head off problems or inconvenience that may seriously affect the company's ability to carry out the transactions.

Organizations can help reduce the occurrence of risks through the adoption of such a system. Hypothetically, it could comprise the following steps [6]:

a. *Development of a driving tactics*: so employees can be gradually sight with incentives to think about actions carried out.

b. *Definition of the specific risks faced by a company* (the primary objective of risk management).

c. *Creating a standard response system for managing business risk*: even if there is a possibility that these standard replies may not fit perfectly to each situation, they can be a start for improvement or business risk mitigation.

d. *Retention for further risk analysis*: a proactive risk management requires that any organization to archive all information present in a previous situation of risk management at your fingertips. Thus we can anticipate future risks and limit their impact them.

e. *Identification of alternative risk mitigation operations*: finding less risky activities in support of company managers to be more proactive in implementing risk management.

3. Favourable aspects of risk management [8], [10].

a. *Raising the achievement of objectives*

Risk management is an important component of any project, because by neglecting risk carrying out the projects is questioned.

b. *Assuming a proactive management*

Works on the principle "it is better to prevent than to note a fact".

c. *Prioritize resource allocation;*

d. *Rapid identification of opportunities and threats;*

e. *Compliance with national and international regulations and standards*

In accordance with national and international regulations and standards finding optimal solutions to eliminate or at least mitigation is achieved more quickly, easily and effectively.

f.   Risk management requires change management style

Typically, managers must adopt a reactive management style, which means that it is necessary to design and implement measures to mitigate likely risks manifestation. Forecast analysis enables organizations to master, within acceptable limits, the risks listed, which is the same as increasing the chances to achieve its objectives.

According to literature proactive management becomes easily a prospective management; the management tries to define those risks that may arise from strategic or environmental changes. Organizations must be prepared to adapt and cope with the inherent changes.

g. Risk management facilitates the efficient and effective organizational objectives

We are aware that when we know what threats do we class them according to the event of an embodiment according to the impact on the objectives and the costs imposed by the solutions used to reduce the chances of developing or limit undesirable effects. It is very important that the organization "to focus all our energy" on what is really important avoiding a possible waste of resources with destinations irrelevant.

Regular review of risk in accordance with law, result in the reallocation of resources, proportional to the change of priorities.

In other words, risk management focuses on concentrating resources on areas of current interest.

h.   Risk Management provides the basic conditions for a healthy internal control

Definition of internal control is given by all measures established by management to obtain reasonable assurance that objectives will be achieved. Thus it appears that risk management is one of the important ways in which this is done as follows precisely the management of threats that could have a negative impact on objectives.

Therefore, if we follow the strengthening of internal control, risk management implementation is essential.

Activities to be undertaken to achieve the objectives must relate to measures that mitigate risk and plan manifestation of resolving difficult situations (risks materialize).

4. IBM - The Road Map towards the safe performance

Because he wants to change the pattern of reacting in a predictive model, IBM - The International Business Machines Corporation is considered to be the "most promising company in the world". The foundation that puts a smarter planet, where the solutions provided efficient operation of companies. Moreover, they will transform the information provided in perspective and will connect people.

Managing very well the idea of prevention and mitigation [1] and operation of an efficient and effective risk management, every year, IBM presents its own performance through a Road Map – a Map Direction / a Road / the performance

without risk. Is a long-term perspective that provides security company that has a good position to take advantage of the great changes in technology, business and related global economy.

Thus, for 2015, with Road Map's, the Company has established the following five key objectives:

- ✓ To increase profit from software to represent 50% of global profits;
- ✓ To achieve 30% revenue growth geographic market;
- ✓ To generate $ 8 billion "productivity" by transforming the company;
- ✓ To return 70 billion stakeholders;
- ✓ To invest $ 20 billion in acquisitions.

These facts are demonstrated in Figure 2 [9].
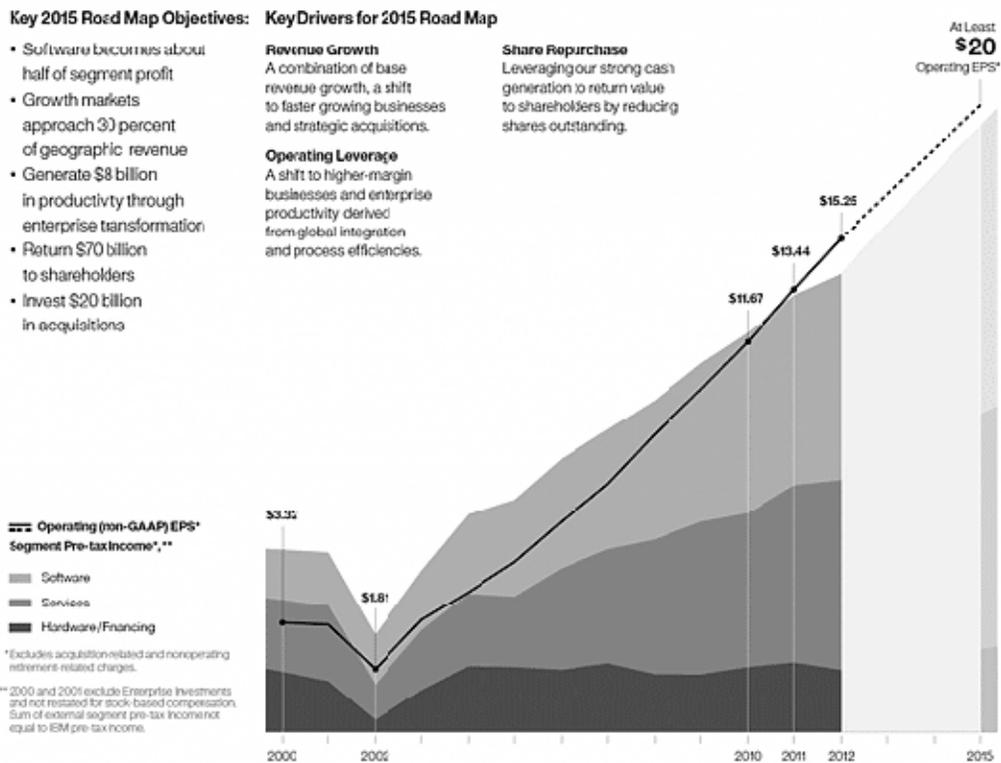
Figure No. 2: Using the Road Map's for setting the direction
Source: www.indicatorideperformanta.ro

IBM states that to "support a model of innovation in our industry, a company must not only adapt to major changes in technology." To maintain a productive enterprise, IBM has to continue learning and development at both making and what tools or means do. The Company shall continue to provide high value products and skills, and operations and management practices. Remember: customer conversion capabilities should not be overlooked again.

5. Conclusions

Within the organization and within the environment in which it operates, there is always the uncertainty of achieving the objectives manifested in the form of threats or opportunities. Therefore, any manager must manage very carefully threats because, otherwise, and defeat its objectives or not to capitalize on opportunities to obtain economic benefits (demonstrating efficacy) for the organization, it was would disqualify.

Risk management refers to the knowledge of the factors that could prejudice a company.

We recognize that uncertainty is a fact of life, and thus the reaction to uncertainty should be an ongoing concern.

Risk management will focus on limiting or preventing permanent problems that could instigate unnecessary damage to the company [7].

That is why it is very important to know and implement in organizations, an effective risk management.

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WHEN HEALTH IS AFFECTED BY CORRUPTION

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*Health is one's most precious and at the same time most easy
to lose treasure; and yet it is one's worst guarded treasure.*
Guillaume Victor Émile Augier,
French playwright and poet
(b. 1820 – d. 1889*)*

Summary

This paper emphasizes the most important features of corruption acting as a disease, its interaction with the official economy, the way this complex and multistructural phenomenon develops, as well as the consequences of ignoring this harmful phenomenon. In fact, considering the way things happen, there is an aggressive act on the state and the honest citizen; thus nowadays there is a deeper inequity in terms of income and living conditions. Ignoring such a phenomenon leads to a deeper inequity, which seems to be one of the most current and disturbing issues with consequences on the social development.

The gap between incomes grows bigger every year, according to statistics, in almost all the countries in the world, but mostly in the former communist countries; there are some very rich person as opposed to most of the citizens with lower income; it is one of the reasons why people are unhappy and accordingly they become distrustful, selfish, greedy and social chaos appears. The way chosen to control this inequity makes people feel nostalgia for the past times, like the communist system that seemed to be able to control the situation; in fact it is proved to have failed. One of the systems proving these inequities is the health system, where citizens interact with the state, and where the poor cannot benefit from basic proper health assistance, whereas the rich get special, different treatment; this causes increased social tensions. It has been a system with continuous increasing funding but at the same time it has failed to deal with the health of the population; various failures occur all the time, some are very serious, and media presents tragic cases that have not been solved by the system. It is known that the individual as the bearer of labor services is of particular importance in an economy; the population size at a given time and all the changes depend on key demographic processes (birth and death rates; the development of these elements represents the natural increase of population) under social and economic factors, such as life span and life expectancy, overall health, living standards, networking and spending on education and expenditures on health preservation.

*The serious phenomenon of corruption tends to become visible everywhere, in every circumstance and it is perceived as becoming an increasing aggression on the citizen; it is a cost that must be permanently considered, which is an additional stress. Eventually the effect translates in amounts that never reach the general consolidated budget or amounts that are ineffectively spent, which spread all over the health system and economy; the major result is that the state loses track of important resources of the budget generating lack of confidence both in the public health system and economy. The consequences are serious and they cannot lead to providing a decent living or promoting a climate of social peace. Permanent limitation of this phenomenon in the health system has a major importance in the economic and social development of the country as **the quality of labor** is closely interrelated on the one hand with overall health and, on the other hand both with the level of general education and training - an expression of the efforts of the individual, family, businesses and society as a whole.*

The general health of the population is affected when corruption affects the health system and the consequences are visible in the economic and social development of the country.

Keywords: health, freedom, development, confidence, economic crisis, corruption.

1. **Introduction**

When analyzing the evolution of human society from ancient times to the present day one finds out that corruption is not a new element; it occurs not only in developing societies, but it represents a permanent danger to any economy; it is a constant of human existence for it manifests itself where power is exercised.

Corruption in Romania has constantly preoccupied our society undergoing a long process of transition from a centralized economy, existing until the end of 1989, to the market economy, which is still an evolving process nowadays.

Professor Ph. D. H.C. Valeriu Ioan - Franc shows in the reason for the editor's opinion on "Corruption in Transition Economies" [1] (Matei, 2013) that corruption is a topic of large interest. He emphasizes that "People have been talking about corruption from the beginning of the world and people will write about it for the duration of the world. There have been discussions about the effects of corruption during the transition from one system to another or about parts of it undergoing special conditions as well. The works devoted to the *transition from flat* – i.e. deep centralized economy to *market*, namely the self adjustment and free building based on initiative, entrepreneurship and profit earned as a reward for the risk free assumed are less and less frequent and poorly articulated than the first ones. Therefore people wrote less. The reasons are various, but the main one is

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[1] Matei, Adrian-Ducu (2013) – Corruption in Transition Economies, Bucharest, Expert Printing House, 2013.

that the transition from plan to market does not have its own articulated and perennial literature... ".

After the transition to the market economy after the changes in December 1989 a number of negative phenomena such as corruption, underground economy and tax evasion appeared shyly at the beginning, but they developed subsequently; this time the phenomena are complex and undermine the credibility of the country in the economic, monetary and financial relations at an international level. At the same time there is a negative influence on the international borrowing costs, ultimately affecting the economic and social development; this means that citizens bear the consequences by having low standards of living.

The fight against these negative phenomena will not be an easy one, but with perseverance one can achieve encouraging results that will restore confidence in the principles and values that will be placed on their natural place; only then good results will be seen as gains that citizens will be able to feel.

Corruption usually occurs amid development issues and it turns into situations of transition of society and economy from one form of organization to another, indicating the existence of malfunctions. What is even worse is when political corruption meets the bureaucratic corruption; they are both visible and dangerous when supported by specific conditions of political competition, slow and uneven economic development of an underdeveloped civil society not mature enough.

So political and bureaucratic corruption have slightly different features, but both are in fact serious cases that become extremely destructive phenomena when combined and when they meet as organized, pervasive and monopolistic entities.

Corruption is a destructive disease that can be found in organized form when there is an internal coordination, transmission and exchange of information and benefits. It facilitates the existence of domestic economy, which is not always visible; it links the leaders to the performers and it is known as the informal economy, black or underground economy.

Corruption in a country can have a very wide range of distribution, acting upon sub-levels, so there is little alternative to approach the issue of corrupt officials; thus is how corruption becomes omnipresent.

Bureaucratic corruption is a form of corruption that can be found everywhere, mainly when citizens interact with government when applying for permits, licenses, certificates, approvals; it is specific for countries and economies moving from a system of organization to another, namely in periods of transition.

A particular form of corruption is the one affecting the health system; indifference and lack of action affect one's ability to work, the right to life and, even worse, they seriously jeopardize the ability of economic and social development of the country, given that the work resource is the active and decisive factor of production.

Corruption in general, but especially in healthcare has to be diminished so that labor resource can be of good quality and enough in terms of quantity.

2. Corruption

Corruption is not a new element, it has existed since the ancient times as a complex, multi-structural, multidimensional economic, social and political phenomenon, whose complexity is determined by various factors, which can be grouped into: economic, institutional, legal, political, social, educational and moral.

Economic causes lie in: the increased cost of living, with a tendency of continuous growth; degradation of the economy and, as a result, the impoverishment of the population; low wages paid late to the civil servants; unsustainable state budget; over-regulating the private sector.

A note should be made regarding the phenomenon of over-regulation by laws, namely that excessive legal regulations do nothing else but to legitimize some of those actions which generate corruption; this leads to situations in which the laws issued restrict competition and free market access for all participants, generating corruption itself through these laws; the beneficiaries of these laws legitimize their actions even through the legal provisions themselves.

The institutional causes mainly include: flawed personnel policy; promoting the incompetent and corrupt on key positions; the lack of transparency in central government and local law enforcement agencies; excessive freedom given to decision makers; little possibility of exposing the corrupt persons; law enforcement insufficiently equipped with technical means; lack of human resources, logistics and effective tactics.

The *legal causes* are the gaps in the legislation, the lack of effective mechanisms for its implementation.

Political causes are: lack of political will and responsibility; the existence of internal and external factors that impose group interests when taking decisions; errors in the process of economic and social reforms; unfair political competition; traffic influence on the media and law enforcement, directing funds to media trusts so as not to present the correct data.

Social causes are related to culture, mentality, traditions, heritage of corrupt bodies of law; they include the following: disintegration and demoralization of society; erosion of ethical values; insufficient information to civil society; civic apathy and passivity; public tolerance; social polarization; dependence on mass media.

The many causes of corruption determine the diversity of the affected fields and the complexity of the actions needed to prevent and combat this phenomenon.

*The **educational** and moral reasons* related to culture, education, mentality, traditions, heritage bodies of corrupt power and law, family and educational institutions; they consist of: disintegration and demoralization of society; erosion of ethical and moral values.

The severity of this negative phenomenon is given by the **consequences of corruption**, and as it is shown by the official statistics and by those presented by nongovernmental organizations in the field, but especially as it is shown by the scientific research results, socio-criminology, law enforcement information, data in

the judicial statistics and media; the conclusion is that corruption has affected important areas such as politics and institutions, economy, the judicial field and law, training and education, social and health assistance, investments and international trade; state authority is severely undermined, as citizens lose confidence in state institutions.

This phenomenon also generates tax evasion due to the fact that honest citizens or traders are not motivated to pay taxes anymore, considering that public funds constituted as special funds and sources of budget is spent badly and ineffective.

If we were to notice what actually happens in society, we would be able to seize the economic impact of corruption that manifests itself in various ways.

Bureaucratic exaggeration manifested by postponement of documents and decision-making, the state's inability to provide security to the manufacturers, lobbying, protectionism, intercession, unfair competition, excessive state regulations and controls that affect the mechanisms of market economy and free competition, deterring potential investors and entrepreneurial initiative, lead to an increase in the cost of public projects, the decrease of economic efficiency, increased tax evasion, the reduction of payments to the budget and the development of underground economy.

Functional, political and moral degradation of central and local public authorities, which is a result of the expansion of political corruption by reducing transparent and responsible political competence, the impoverishment of population and the increase of social tension are some of the socio-political effects of corruption.

The effects of corruption in the activity of the executive bodies are: low quality of public administration, a system of informal decisions, strong ties between organized crime, public servants and corrupt politicians and others.

The effects of corruption that affect the international relations are major; they consist of incompetent, irresponsible, provocative, subjective and conventional behavior of the persons occupying positions of responsibility, which, in dealing with foreign partners, promote mainly personal and corporate interests instead of national interests, which irreparably undermines the country's image and credibility in its capacity as a partner in international relations.

An extended level of corruption affects savings, investment, economic growth and development[1] (Paolo Mauro) as well as the degree of freedom.

Of course there are some **differences in terms of corruption** and an assessment based on its aggressiveness; we could present corruption under its less serious or severe form.

In some countries, corruption is not very serious (Denmark, Norway, Canada) and its opponents benefit from real options. Resistance against corruption is not only based on fear of sanctions, but also on a set of rules and traditions, education, legitimately shared, from economics and politics. These opportunities

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[1] Mauro, Paolo (1997) – *The Effect of Corruption on Growth, Investment, and Government Expenditure: A Cross-Country Analysis*. In Kimberly A. Elliot, ed., Corruption and The Global Economy. Washington, D.C.: Institute for International Economy.

are, once again, political and economic and powerful enough to use money in order to buy political power and use it in order to get money and control, as Samuel Huntington[1] (1986) and Michael Johnston[2] (1997) point out.

3. Health And Its Role In Providing Quality Work Resources For Economy

Our vision is that we face an opportunity that has to be rendered profitable in our society, which is fighting against corruption in our country; we begin our detailed research on this phenomenon by including the health system, which is one of areas that a nation must consider a priority, as a healthy nation can diligently work in order to achieve results that bring prosperity. The organization and the beneficial channeling of the energy used in this battle will bring benefits for a long time, if we understand that we have to transform energy into a war against this disease and not to improve our image.

This disease has and will always exist, because it is part of human nature, but it grows and develops if the individual and society provide favorable environment and conditions. We will have to continually try to treat this disease, make efforts to prevent and eradicate it by destroying its supportive environment. I have never lacked optimism while learning about different situations where corruption has reached much higher levels than in our country and seeing the successful actions of individuals adherent of freedom and social development, such as economic recovery, triggering healthy mechanisms of economy such as free market access, competition, production of goods and services in terms of economy, efficiency and effectiveness.

It is very important to promote such people who can transform situations of corruption, apparently hopeless into the catalysts of successful reforms. There are many highly trained young people who have the necessary strength and experienced people having special qualities, which the young ones can ask for advice; they can do wonders, using this privilege that is using one's ability to promote the principles of ethics and morality in their fields.

Corruption Affects The Health System As Well

We live in terrible times, when corruption attacks the health system itself, hardly a month passes and we find out about other cases, even in the health system, the one that should provide the support for citizens to restore their ability to spare no effort in order to work, enjoy life and its benefits.

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[1] Huntington, Samuel (1968) – *Political Order in Changing Societies.* New Haven, Conn.Ş Yale University Press.
[2] Johnston, Michael (1997) – *Public Officials, Private Interests and Sustainable Democracy: Connections between Politics and Corruptions.* In Kimberly A. Elliot, ed., Corruption and The Global Economy. Washington, D.C.: Institute for International Economy.

The effects of corruption limit the acquisition of the necessary goods and services, as well as the provision of the social development of improving the quality of living standards, ensuring a better life for the new generation. The reduction of free access to guaranteed healthcare, the increased number of people-victims of this phenomenon and later a pessimistic public perception of society towards the performance of the health system are some of the consequences of corruption acting upon the health system.

In reality there is no longer optimal public health assistance as an organized effort of society to protect and promote health of the citizens.

Public health care is a component of the public health system; public health care should be done by all the political and legislative measures, programs and strategies to the determinants of health and by organizing institutions with a view to fundraise the necessary amounts in better conditions, restricting the informal elements, tax evasion and providing all necessary services, as well as using funds in terms of economy, efficiency and effectiveness. This may provide public health assistance order summary in health promotion and disease prevention and quality of life. Thus a public health system that can aim to provide health within healthy communities can be ensured.

In reality things are far from satisfactory, especially since although funding is increasing, tax evasion and the informal are and corruption in this field are also increasing; the quality of health insurance has not been proportionally increased in spite of the increase in health budgets as shown in the Table. 1 Evolution of the National Health Insurance Funds budgets for the period 2004 to 2014; even worse, there are a lot of cases reported by the media and other tragic situations of mishaps of patients through healthcare and hospitals in Romania.

Table no. 1

The evolution of National Health Insurance Funds between 2004 - 2014

Euro, thousand million

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1,76	2,49	3	3,56	4,17	3,61	4,08	4,12	4,39	5,2	5,12

Source: The National Health Insurance House, author's own analysis
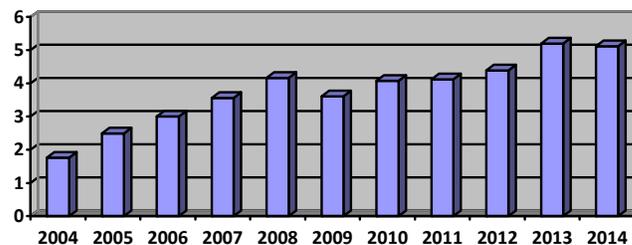
Figure no. 1 – The Budget For The National Health Insurance House
The evolution of National Health Insurance Funds between 2004 – 2014

This is highlighted in the **European Commission Report on Corruption in the EU Countries**[1] (EC Report on Corruption, 2014) that the European Commission released on February 3rd, 2014; it is the first report on corruption conducted throughout the European Union. At the same time there were released the results of the 2014 Eurobarometer report 2014, whose results correspond to those of the Global Corruption Barometer released by Transparency International last year. The analysis of the two instruments shoes that a percentage of about 65%, which represents 2 out of 3 Romanians, believe that corruption has increased lately in Romania, compared to 56 %, which is the average of the EU countries. There is a note in the Report regarding corruption in the health system; it is estimated that "*informal payments are widespread in the Romanian health system. Low salaries of doctors and medical staff in the public sector make it more difficult to effectively address this issue.* " .

Such a phenomenon is revealed by the Special Eurobarometer 2013 on corruption[2] (Special Eurobarometer, 2014), showing that 28 % of the Romanian respondents who used the services of public medical institutions last year had to make an additional payment or give a gift or donation in addition to official fees. It is estimated that this is the highest percentage in the EU, well above the EU average of 5 %. At the same time it highlights the fact that half of the respondents (the highest percentage in the EU, compared to the EU average of 19 %) felt the need to make an additional payment or provide a gift before medical care. There are references to a study conducted locally[3] in 2011 showing that only 33 % of respondents believed that informal payments in the health system could be reduced through co-payments, while 83 % felt that medical staff is poorly paid and claimed that this is a fundamental cause for corruption in this field.

The fact that corruption of the health system is omnipresent is highlighted by a number of studies and surveys such as ASSPRO EEC, the European collaborative research project (2008-2013) where informal payments in six countries[4] were studied; the results show that such payments were made by 55% of beneficiaries in outpatient care and 72% of recipients of care hospitalized in Romania[5]. It is also shown that 81% of respondents would have preferred a conversion of current payments to a more formal payments system, while 54% would prefer to use private services instead of paying bribes. Another finding is that 34 % of respondents considered informal payment to be inevitable.

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[1] http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/organized-crime-and-human-trafficking/corruption/ anti-corruption-report/docs/2014_acr_romania_chapter_ro.pdf

[2] Special Eurobarometer 397 in 2013, released in Februarie 2014 - European Commision **„Special Eurobarometer 397 / Wave EB79.1 – TNS Opinion & Social"** - http://ec.europa.eu/public_opinion/archives /ebs/ebs_397_en.pdf.

[3] The Romanian Institute for Evaluation And Strategy regarding the general view regarding health in Romania (RIES) 2011.

[4] Poland, Romania, Hungary, Bulgaria, Lihtuania and Ukraine

[5] 20-35 % of them had to borrow money in order to be able to pay, while one third of the patients did not see the doctor due to the lack of money

According to another research conducted by INSCOP Research for the "Adevarul" newspaper[1], corruption in health tops, so that 78.1% of respondents believe that the medical system is badly and very badly affected by corruption - "Public Opinion Barometer – The Truth about Romania".

If one were to identify the main directions of corruption phenomena in the health system, it would be appropriate to bring up the fact that it is found on both sides of the budget, both on the revenue side and the expenditure side, affecting patients and doctors, population in general.

An analysis of corruption in health care cannot rule out the way in which The National Health Care Insurance Unique Fund achieves the income; in most of the cases there is tax evasion and the incomes are getting lower.

This is one of the consequences of the lack of proper control from the state; the control is particularly ineffective on fighting against undeclared work, working with no legal documents, which is done both by employers but also by the tax payers allowing such behavior.

The phenomenon of undeclared work, which means hiding the wage expenses by companies while hiding the income of some employees so as not to pay contributions to The National Health Care Insurance Unique Fund, creates the premises of the development and perpetuation of underground economy, the informal economy, with negative effects on the health budget.

This phenomenon often occurs with the participation of state officials, who often do not do it for free, thus making the first step towards bureaucratic and administrative corruption.

As the Romanian Court of Accounts appreciates in the Summary on the Audit Report Concluded with the National Agency for Fiscal Administration (NAFA) - *Performance Audit on Tax Collection Due To Public Budget For 2007-2010*, posted on the institution
website[2] "tax evasion is a phenomenon quite extended and generalized in some sectors of the national economy; a key role in preventing and fighting it is that of NAFA control bodies (territorial and central tax audit departments, Financial Guard, customs inspection bodies, General Directorate of the Public Finances, etc.). "

Considering the estimates of the Ministry of Finance (National Prognosis Commission, the National Institute of Statistics) that appreciates an underground economy in Romania of about 16-18%, but also taking into account the estimates of international research and specialists etc. indicating an underground economy of

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[1] The report can be found at
http://www.curteadeconturi.ro/sites/ccr/RO/Publicatii/Documente%20publice/
Rapoarte_de_audit/Finante_publice/finante7.pdf

[2] The study was conducted between May 28 to June 3, 2013 on 1,055 persons, representative of the Romanian population 18 years and over 18 years. MPE data is ± 3% at a confidence level of 95%; http://adevarul.ro/news/societate/infografie-adevarul-despre-romania-sondaj-romanii-cred-sanatatea-vama-cele-mai-corupte-1_51c05e68c7b855ff56a395af The Raport can be found at The Raport can be found at
http://www.curteadeconturi.ro/sites/ccr/RO/Publicatii/
Documente%20publice/Rapoarte_de_audit/Finante_publice/finante7.pdf

about 28.4% ~ 30%, as detailed in Annex. 1 *Size and Development of the Shadow Economy of 31 European Countries and five other OECD from 2003 to 2013: A Further Decline* by Friedrich Schneider[1] and other estimates that are higher (in some cases the estimates reach 35% -40%) one can appreciate, as the methodologies used are very different, that the limit of 28.4% - 30% is more reliable. The Court of Accounts conducted a simulated calculation of the revenues collected by NAFA in 2010 in order to estimate the impact of NAFA performance increase in the budget revenues economy:

Tabel nr. 2

Indicator	Case 1 (underground economy ~17%)	Case 2 (underground economy ~ 30%)
The weight of taxed economy in GDP	83%	70%
The weight of underground economy in GDP	17%	30%
Estimate – uncollected taxes from underground economy (% GDP)	5,68%	11,88%
Estimate - uncollected taxes from underground economy - RON	29,2 mld. Lei	60,9 mld. Lei
Estimate - uncollected taxes from underground economy - EUR	**6,9 mld. Euro**	**14,5 mld. Euro**

Source : **Romanian Court of Accounts** - Summary On The Audit Report Concluded With The National Agency for Fiscal Administration (NAFA) - *Performance Audit On Tax Collection Due To Public Budget For 2007-2010*, posted on the institution website at:
http://www.curteadeconturi.ro/sites/ccr/RO/Publicatii/Documente%20publice/Rapo arte_de_audit/Finante_publice/finante7.pdf

The main directions of corruption regarding expenditures from the National Fund for Health Insurance are those with the procurement of medical equipment or purchases at inflated prices, or the purchase of unnecessary equipment, or the purchase of medicines and medical supplies at inflated prices with commissions earned by purchasers, current and capital exaggerated repair costs or which have not been done in reality.

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[1] Prof. Ph. D. Friedrich Schneider, Department of Economics, Johannes Kepler University, Alten-bergerst. 69, A-4040 Linz, Austria, Phone:+43 (0)732 2468-8210, Fax: +43 (0)732 2468-8209, Mobile Phone: +43 (0)664/308 5228, E-mail: friedrich.schneider@jku.at, http://www.econ.jku.at/schneider

Another area is that of defrauding the amounts reimbursed by the National Fund for health insurance, that is the deduction of transactions which have never happened in reality, recording some operations while other are actually done, or lately deducting medical services to deceased persons or deducting medical services performed abroad on uninsured individuals[1] as reported by the media, the complicity of medical staff and patients, but also the indecent salaries paid to health professionals.

4. Conclusions and suggestions

To summarize, we have identified a number of areas that are affected by the phenomenon of tax evasion, the underground economy and corruption related to income and expenditure budget of the National Health Insurance as part of the general consolidated budget.

They concern illegal work and have consequences in reducing budgetary revenues resulting lack of funds to financing health care units; this is shown by the inability of medical care units to provide quality healthcare to citizens.

Regarding the expenditure of this fund, we have identified above the areas affected by corruption, namely procurement exaggerated prices or unnecessary procurement or poorly done current or capital works or even not done at all, or deducting medical services for the deceased or the uninsured.

Given the truth and actuality of thought of the illustrious French playwright and poet from the beginning of this paper - "*Health is ones most precious and at the same time easiest to lose treasure; and yet it is one's worst guarded treasure.*"- altogether with the facts mentioned above, we have some proposals meant to promote a treatment, which is participating in the reduction of negative phenomena caused by the disease of corruption that has been affecting the Romanian health system.

In our opinion the regulations imposed by the state on tax policies should be reviewed and reconsidered, as follows:
- Collection level of public financial resources;
- Allocation and use of budgetary expenditure;

At the same time there should be considered a reduction of the tax burden by reducing the categories of taxes, especially those concerning labor cost.

Another suggestion concerns national cooperation regarding the interconnection of databases with information of the deceased, the insured and the retired who receive money so as to avoid the phenomenon of defrauding health funds.

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[1] Ziarul Financiar, 7th February 2014 - National Fund for Health Insurance Insurance was damaged in 2012 by over 39 million lei for various irregularities including prescriptions issued in the name of the deceased and settlement services performed abroad for the benefit of the unsecured; the information used from the public 2012 Court document stating that damage to the FNUASS budget was 39.052 million lei, posted at http://www.zf.ro/zf-news/decontari-pentru-decedati-sau-neasigurati-pagube-de-peste-39-mil-lei-la-fnuass-in-2012-12040365.

There should also be measures that activate one's self-conscience or fiscal ethics, such as citizens' attitude towards the state.

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*** *Corruption, Democracy and Human Rights in West Africa: Summary Report of a Seminar organized by the Africa Leadership Forum in Cotonou, Benin, September,* 1994 (ALF Publications: Ibadan).

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*** "Political Corruption in Brazil"*,* in: *Crime* (1997), *Law&Social Change* Vol./Issue Date: P.: 297-321.

***   http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/organized-crime-and-human-trafficking/corruption/   anti-corruption-report/docs/2014_acr_romania_chapter_ro.pdf

*** Raportul Comisiei Europene asupra corupţiei din ţările membre ale UE, 2014 - http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/organized-crime-and-human-trafficking/   corruption/   anti-corruption-report/docs/2014_acr_romania_chapter_ro.pdf

*** European Commision „Special Eurobarometer 397 / Wave EB79.1 – TNS Opinion & Social" **-**
http://ec.europa.eu/public_opinion/archives/ebs/ebs_397_en.pdf

CLUSTER POLICY RELEVANCE ON REGIONAL DEVELOPMENT

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Abstract
The financial perspective 2014-2020 attaches a great importance to supporting SMEs as a factor in industrial competitiveness and economic growth. The importance of an enabling environment for business and entrepreneurship, particularly for SMEs is complemented by the need to improve the impact of the economic-financial crisis from Europe, since disparities of economic development and structural economic differences still persist. In this context, the implementing clusters support policies became a priority for the European industrial policy. In addition, the Europe 2020 Strategy specifically stipulates the importance of clusters for business, especially for SME. Our paper is focusing on the European framework and the efforts made by Romania for cluster promotion as a new organization of the industrial activity.

Keywords: EU 2020, cluster, economic competitiveness, industrial policy

 JEL Classification: R 1, R 3, L 5

Europe 2020 Strategy, which aims to create the framework for a smart, sustainable and inclusive growth includes among others the initiative entitled "An industrial policy for the globalization era".

In the next programming period 2014 - 2020 the European policymakers will direct the EU budget firstly for supporting the competitiveness of industry and in particular SMEs, in order to correct market failures such as access to finance, and to strengthen and diversify the domain - so that the European industry could compete on a global scale.

Also, the participation of small and medium enterprises to financing programs will be a priority objective of the European Strategy for industrial competitiveness and SMEs, which aims at:
-a simplification of the rules
-to reduce the cost of participation
-to accelerate the evaluation, selection and contracting
-to provide single points of contact, etc..

Specifically, the European Commission proposes the establishment of a special program called "Competitiveness and SMEs", as the successor of the current Competitiveness and Innovation Framework Programme (CIP). Also, all support measures for SMEs, including the innovative component of the CIP, would be included in the Common Strategic Framework for Research and Innovation. The "Competitiveness and SMEs" program will focus mainly on measures to promote dynamic, competitive SMEs internationally. In other words, the financial perspective 2014-2020 attaches *a great importance to supporting SMEs* as a factor in industrial competitiveness and economic growth.

Regarding this new strategy, the European Commission[1] mentions that " the EU industry is in shape and has the potential to restore the European economy back on the path of growth." Developing an EU industrial base requires industry to be "modern, innovative, competitive, based on low-carbon emissions, resource and energy efficient."

Improving the overall competitiveness of the European industry is essential, given that 75% of the EU exports come from manufacturing companies of which also carries 80% of R & D in the industry.

Communication identified the following main areas where the competitiveness of the EU economy could be further strengthened in order to achieve significant progress in meeting the objectives of Europe 2020 Strategy [2]:

- Orientation of structural changes in the economy towards more innovative and knowledge-based sectors
- Supporting innovation in industry, in particular by further concentration of research projects in areas such as nanotechnology, advanced materials, industrial biotechnology;
- Promoting innovation and use of clean technologies
- Improving the business environment
- Supporting innovative, full implementation of the Single Market regulations, in particular Directive Services[3]
- Facilitate professional and market interconnection, internationalization and market access of SMEs.

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[1] COM 642/14 octombrie, Comunicare a Comisiei catre Parlamentul European, Consiliu, Comitetul Economic si Social si Comitetul Regiunilor, Politica Industriala: Cresterea Competitivitatii,
2011http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com%2820 11%290642_/com_com%282011%290642_ro.pdf
[2] http://ec.europa.eu/romania/news/171011_competitivitate_industriala_ro.htm
[3] Directiva 2006/123/CE a Parlamentului European si a Consiliului din 12 decembrie 2006 privind serviciile in cadrul pietei interne http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006L0123:RO:HTML

The importance of an enabling environment for business and entrepreneurship, particularly for SMEs is complemented by the need to improve the impact of the economic-financial crisis from Europe, since disparities of economic development and structural economic differences still persist, as shown in the following table:

Table 1

	GDP / capita above the EU average	GDP / capita below the EU average
Industry priority - advanced technologies	Austria, Belgium, Denmark, Finland, France, Germany, Ireland, UK, Netherlands, Sweden	Czech Republic, Malta, Poland, Slovakia, Slovenia, Hungary
The developmeant of the industry is based on less technologically-advanced sectors	Cyprus, Greece, Italy, Luxembourg, Portugal, Spain	Bulgaria, Estonia, Latvia, Lithuania, **Romania**

Source: processing information from "Performance and policies of the Member States in terms of competitiveness 2011", Report of the European Commission, 2012

In the context of the metamorphosis prepared by the European policymakers regarding the industry, implementing clusters support policies first began in 2006. Note, however, that this new organization form of the industrial activity has emerged as a solution to an older deficiency which is competitiveness of the european industry compared to the advanced level of industry from Asian countries (Korea, Japan and to a lesser extent China).

As the European industry has become more innovation oriented, the European Commission noted the need to form clusters of excellence, by „gathering high-technology SMEs around research and technological institutions or by developing geographical concentrations around large enterprises. Therefore, the European Cluster Cooperation Platform platform was launched to facilitate and strengthen transnational cooperation between clusters.

According to specialists, cluster policies create economic growth, productivity, competitiveness, innovation and jobs. Cluster-based economic development as part of supporting innovation and competitiveness of the European industry has become a topic of interest for the European Union in terms for the Lisbon Agenda. In addition, the Europe 2020 Strategy specifically stipulates the importance of clusters for business, especially for SME.

What is new and innovative about this concept known in economic literature as cluster, is that in this formula an action is being determined along the entire value chain of companies from the industrial sectors: suppliers - distributors -individual interactions of companies - collateral actors, etc.; what is important to note is the size of the analyzed value chain, considering the business involvement of the companies not only nationally but also internationally.

Beneficial effects on cost and on the increased capacity for innovation clusters - compared to individual companies, and the overall industry should not be omitted.

The enhanced role of clusters in EU strategic documents (on business and industry) is also justified by the increased competitiveness of individual companies as part of many European clusters already visible in the international economic landscape.

It is important to mention that about two-thirds of those employed in industrial sectors are part of small and medium enterprises, which emphasizes the interest to integrate into industrial clusters.

The first European policies regarding clusters have materialized around 2006, by launching the PRO INNO (2006) and INNOVA (2007) platforms and also the "Regions of Knowledge" program, designed to financially encourage the development of clusters based on innovation, followed by other European programs and platforms - under development (for example: VALOR, INNO - NET: Development and validation of a holistic framework for implementing value-policies , IP4INNO, INNO - Action, CLUNET, INNO - Net, CEE - Cluster Network, INNO – Net, Enterprise Europe Network[1], EEN, EUREKA, etc.).

In 2007, the European Cluster Observatory is formed, with the role of monitoring and providing statistics on the evolution of clusters in Europe (managed by the Stockholm School of Economics and funded by DG Enterprise & Industry), which is continuously adapted according to changes in activities of industrial companies, new statistical methods of analysis and new permanently-developed concepts by the specialists.

Meanwhile, a number of documents relating to the development and implementation of the cluster concept have been developed, from which we mention the Report the European Commission (DG Research) from 2008 on "Research-intensive regional clusters and science parks."

The report illustrates how a cluster consisting of research institutes / universities, businesses and the public administration have gathered around an economic actor, contributing substantially to the recovery of regional economies by exploiting the results of research and development (http://ec.europa .eu / research / regions / pdf / sc_park.pdf).

In this context, Romania is working to improve its industrial performance in order to encourage innovation in industrial processes and technology, and promotes measures to encourage the transition to a 'green economy' and modernization of industrial sectors, including the promotion of innovative clusters and cooperation between the latter and the academic environment, research and government.
According to experts and existing documents from the Ministry of Economy - national authority regarding national cluster policy - both the private sector and the regional public institutions are not well acquainted with the idea of cluster. Therefore, the development of regional clusters would require a more intensive information campaign on the subject and to stimulate interest expressed by companies and SMEs for the formation of such economic entities. This would be beneficial both to regional awareness of the concept and method of economic organization but also to help public institutions formulate better the future regional policy in this area.

Romania is among the countries with a number of clusters that are below the European average, but is in a good position in terms of export rate of enterprises belonging to the cluster and also in terms of the rate of R&D enterprises in the cluster and cluster management personnel.

In general, in terms of companies involved in the activity of the Romanian clusters, the main factors that contributed to the shy promotion of clusters are:

- Industry as the main engine of the cluster generation process: 3 of 5 are clustered based on the business industry;
- The role of the underlying cluster organisations: all Romanian region clusters are formed around highly motivated organizations: large companies (like the textile industry), small enterprises (eg. ICONIC), industry associations (in tourism) Regional Development Agencies (medical) and R&D Institutes (Agro Ind-Pol);
- Innovative financial schemes: because officially no public funding is available for clusters, innovative financing solutions were identified: members' contributions (iconic textile, Ind-Agro-Pol), FP7 (IMAGO MOL) or a mix of funding sources: member's fee + projects of the members indirectly used for the development processes of the cluster+ sales (Cluster Tourism).

- The fully implemented cluster activities include connecting with other business clusters and networks in the country. Among the activities less implemented in the cluster is the joint participation of the cluster members in various auctions in the EU or elsewhere.

The internationalization strategy, which is especially followed by the Romanian clusters, includes the following activities: participation in events, fairs, international study tours, etc.., business meetings, participation in international

projects and participation of cluster organizations in international projects as seen from the diagram below:

Table 2

The main activities included in the strategy of internationalization

Participation in international events, exhibitions, studio visits, etc.
Business meetings
Participation in international projects
Participation of cluster organizations in international projects
Including foreign enterprises in the cluster
Biroul de cluster / reprezentarea în exterior.The cluster office / external representation

In the past two years, regional clusters have produced several international cooperation agreements with similar structures in Europe. Regarding the cooperation between neighboring countries, the most intense cooperation occurs between Romania and the vast southern region of Hungary. Topics cooperation for the neighbor countries are detailed in the following table.

Table 3

No.	Region	Cluster/Organiz ation	Domain	Country
1	West	ROSENC	Renewable sources energy	Hungary
2	West	ICT Vest	IT Cooperation Cluster IT Solutions for non-IT business	Hungary
3	West	Timiş Chamber of Commerce	Border cooperation in the field of "green building"	Hungary
4	West	ICT Vest	Border cooperation in the field of TIC	Serbia
5	South-West	City Council Dolj	Border cooperation in the field of agriculture and food	Bulgaria
6	South-East	Constanţa Chamber of Commerce	Border cooperation in the field of tourism and in the field of agriculture and food	Bulgaria
7	North-East	City Council Iaşi	Border cooperation in the field of agriculture and food	Moldova, Ukraine

Source: Ministry of Economy, 2013

At European level, we should be mention the cooperation between The Energy Cluster from the Central Region of Romania and the Brandenburg region of Germany and the cooperation between clusters like Green Energy, Agro Food and Pro Wood County Covasna (Central region) and other similar clusters in Hungary.

Overall, more projects from South-East Europe(eg Smarter Cluster Policies in South East Europe - ClusterPoliSEE, Adriatic Danubian Clustering - ADC, INTERREG IV C - Clusterix and CIP - SEENECO) are being implemented, aiming at integrating the romanian clusters into the european landscape.

Conclusions

Given the national context and recommendations of the European Commission, the policy of promoting clusters in Romania should be read in conjunction with the stimulation of R&D at both the private and public level, high-tech industries enjoying a sustained promotion.

As it is shown from the experience of developed countries in this respect, implementation of the industrial policies and support for clusters, is improving over time depending on the specific national / regional industrial structure, economic development, public policy type applied and there is no single "recipe for success" but a set of models.

We believe that the most relevant European documents for the apparition of clusters in Europe are: The European Commission Communication accompanied by "The 2011 European Competitiveness Report 2011" and a report on "Performance and policies of the Member States in terms of competitiveness in 2011." The most important findings of these reports are that the recovery from the crisis of the European industry remains slow and fragile, given that industrial competitiveness is becoming more integrated, increasingly depending more on the performance of a large variety of actors from different sectors and locations.

At an European level is becoming more prominent a paradigm shift from a sectoral approach to a horizontal approach, based on innovation, specialization, creation of horizontal key technologies (key enabling technologies).

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THE STRUCTURE OF THE POPULATION BY AGE GROUPS AND OCCUPATIONS

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Abstract

Population age structure-the comparative size of specific age groups relative to the population as a whole-can help illustrate where countries' risks and opportunities lie in relation to critical issues such as democracy, development and security. In fact, the influence of age structure on a state's governance, risk of an outbreak of civil conflict, and economic development is both significant and quantifiable. Given these linkages, investments in family planning, infant and maternal health, education and economic opportunities for girls, women and young people can vastly affect the shape of things to come.

Keywords: populations, age groups and occupations

Introduction

Countries with a favorable age structure-those with a large proportion of working-age adults and relatively few dependents-ares generally more peaceful and democratic, allowing governments to better meet the needs of their people. An adverse age structure is more challenging to governments, particularly when national resources are insufficient to improve economic and social welfare. Countries that progress along the demographic transition-changing from high death rates and birthrates to smaller families and longer lives-generally demonstrate more favorable age structures.
Population distribution refers to the ways in which the population of a given country is distributed into certain categories such as age, sex, occupation and geographical distribution.

1. Age distribution

This is the break down of the population of a country into age groups. Age distribution in economics is very important as it shows the usefulness of population and the supply of labor required in different sectors of the economy. The population of a country can be divided into the following three age groups. These are; 0-14 years, 15-59 years and 60 years and above.

World	1960	1980	2000	2020	2050
< 14 age	36.84	35.14	30.04	25.11	20.19
15 - 59 age	55.0	56.3	60.0	61.3	58.1
> 60 age	8.14	8.61	10.01	13.61	21.68
EUROPE					
< 14 age	26.71	22.18	17.53	15.02	15.02
15 - 59 age	60.2	61.8	62.2	59.1	50.5
> 60 age	13.1	16.04	20.28	25.87	34.5
ROMANIA					
< 14 age	28.18	26.67	18.29	14.01	13.38
15 - 59 age	61.2	60.1	62.6	62.4	49.1
> 60 age	10.6	13.26	19.07	23.56	37.57

Source: ONU - World Population Prospects 2011

From the above classification, the population within the age bracket 0-14 years includes the infants, children, pupils in nursery, primary, secondary and tertiary institutions. This age group is called dependent population because they are not economically productive as they cannot be employed in the labor market. They will need to depend on the other groups for their needs. If the population of this age group is very high, it has lots of economic implications such as putting more pressure on the working class, low savings, provision of schools and other children goods and services.

The age group 15-59 years is popularly referred to as the active population or working population or labor force. This is the economic age bracket that is involved in productive activities or employment. Because they are the working population and depend on themselves for substance, they are collectively called independent population. If the number of people in this group is high, there will be higher supply of labor and higher standard of living.

The age group 60 years and above is the old age, just like the children (0-17 years), they do not involve themselves in productive activities hence they are also classified as dependent population. In summary, the age distribution of any given population can be grouped as follows:0-17 years are children (dependent population) 18-60 years is adult (working population or labor force) 60 years and above: Old age (dependent populations).

➢ *Importance of Age distribution of Population*

1. Determination of tax: With the knowledge of age distribution of the population, the expected tax can be determined based on the number of people in the working group of labor force.

2. Knowledge of dependent: The number of the dependents (0-17 years and 60 years and above) can be determined easily through age distribution in a population.

3. Size of labor force: With a good age distribution, the number of people working can easily be determined.

4. Determination of government budget: The age structure of a population will assist government to draw up its budget. If for example the population of the children (0-17 years) is very high, it means the government will need to vote a huge amount of money to provide goods and services required by this age group than for other groups.

5. Production pattern: the age distribution of the population will help the manufacturer to determine the pattern of production to meet the needs of a particular age group.

6. It determines the nature of market: The understanding of the age structure of a population will help to determine the nature of market, eg, a population with high number of children will create more market for children goods and services.

7. It determines the birth and death rates: the age structure of a population will determine the rate of birth and death, when the population of old people is higher than that of other groups, it means the death rate is going to be higher.

8. It determines the standard of living: The age structure of a given population will reveal the income per capital and standard of living. While high dependency population reduces income per capital and standard of living, high working population or labor force increases income per capital and standard of living.

2. Age Structure Types

Population age structures yield insights into many of the political, economic and security challenges that countries face, now and in the future. For example, when a large proportion of a country's population is passing through one of life's dependent stages, such as childhood or old age, society's resources are likely to be stretched and put under greater stress.

PAI has classified current and past national populations into one of four major age structure categories: *very young, youthful, transitional* and *mature*. These four profiles represent progressive steps along the path of the demographic transition-changing from high death and birthrates, large families and short life expectancy to lower death rates and birthrates, smaller families and longer life expectancy. In the future, if fertility rates continue to fall in countries with a mature structure, a fifth type may emerge before 2025: *aged* countries.

Very Young

In countries with a very young age structure, two-thirds or more of the population is typically comprised of young people under age 30, and only three to six percent of the population is above age 60. In 2005, there were 62 countries of this type, including nearly all of sub-Saharan Africa.

Youthful

Countries with a youthful age structure are beginning to experience progress along the demographic transition. Growth among their youngest age groups (from birth through 29 years) is declining. In 2005, 27 countries fit this category, including almost all in Central and South Asia, North Africa, and parts of the Middle East.

Transitional

Although older age groups still represent a very small share of the population in countries with a transitional structure, declining fertility rates result in a more equitable distribution among age groups younger than 40. In 2005, this category included 40 developing countries from various regions.

Mature

In countries with a mature age structure, the largest age group consists of working-age adults from 30 through 59 years old, comprising 40 to 55 percent of the population. In 2005, this category included 47 countries across Europe, the former Soviet republics, and East Asia.

Romania is included in this overview facing demographic changes that have medium and long term implications. Population decreased between 1992 and 2005, with a million people and continues to decline steadily. This trend is caused by low fertility (1.3 children per woman, instead of 2.1, which would ensure population replacement) and high external migration (about 2 million Romanian is legally abroad, and the number of emigrants illegally is unknown). At the same time, however, Romania has an average mortality rate and life expectancy increases, resulting in a significant aging population. If present, of the 21.6 million inhabitants, 10.5 million are adults, 5 million - young children and 6 million are elderly, over 50 years the picture will look completely different demographic: retirees will represent more than half of the population, will decrease the number of adults and children, and significant narrowing pyramid base.

Population by age group (Romania and EU-25)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2011
0-14 years												
UE (25)	18.1	17.9	17.7	17.5	17.3	17	16.8	16.6	16.4	16.2	16	15.8
Romania	20.5	20	19.6	19.3	18.8	18.3	17.7	17	16.4	15.9	15.5	15.4
15-24 years												
UE (25)	13.8	13.6	13.5	13.3	13.2	13.1	13	12.9	12.9	12.8	12.7	12.6
Romania	15.9	15.9	15.9	15.8	15.7	15.6	15.6	15.6	15.6	15.5	15.2	14.9
25-49 years												
UE (25)	36.7	36.8	36.8	36.8	36.7	36.7	36.6	36.6	36.6	36.5	36.4	36.3
Romania	34.9	35.2	35.5	35.7	35.9	36	36.3	36.5	36.8	36.9	37	37
50-64 years												
UE (25)	16.5	16.6	16.8	17	17.2	17.4	17.5	17.7	17.8	18	18.1	18.3
Romania	16.4	16.3	16.1	16.1	16.3	16.5	16.5	16.7	16.8	17	17.4	17.8
65-79 years												
UE (25)	11.4	11.6	11.9	12.1	12.3	12.3	12.4	12.4	12.5	12.6	12.6	12.6
Romania	10.2	10.5	11	11.4	11.6	11.8	12	12.1	12.2	12.3	12.3	12.2
80 years and plus												

UE (25)	3.5	3.5	3.4	3.3	3.3	3.5	3.6	3.8	3.9	4	4.1	4.3
Romania	2.1	2	1.9	1.7	1.8	1.9	2	2.1	2.2	2.4	2.5	2.7

Source: Eurostat, March 2012

Accelerating the aging process, since 2010, is of major importance for the modernization of social policies and social protection. The objective is to ensure social protection prosperity in a society whose population is aging. Maintaining a high level of social protection in these circumstances is a challenge for the authorities.

The need to adapt to an older population and redevelopment involves reviewing policies and strategies. At the same time, reforms will have to consider the transfer of resources to an increasing number of older people do not create major economic or social tensions. On the other hand, older people should not be allowed to fall into poverty. Under one form or another, transfers have always existed and will exist. Two underlying concepts will be considered: intergenerational solidarity, aimed at financing the long term and intergenerational equity that is gaining importance in current discussions. Policy makers responsible for social protection reform should take account of this size, ensuring a satisfactory balance between the opportunities to finance long-term system of solidarity and equity between generations.
The measures that the EU meet evolving challenges of population aging are mainly confined in a general component of which:

An aging population requires a comprehensive policy approach, covering aspects related to the economy, employment, social problems. Companies must ensure not only provide an appropriate framework for older people, but also economic and social sustainability in an aging world. Policies in this area should take into account the full complexity of interactions between demography and society.

Structure of occupation and age categories

Labor markets in European countries have begun to adapt to profound changes the age structure of known active population. However, aging is foreseen for the coming decades may have a magnitude of which has still not be envisaged at present. It is therefore uncertain to predict that companies will face new requirements, the increasing labor market. Policies must be rethought and adapted to new realities so as to be offered this category of employees to acquire new knowledge and to upgrade, make daily powers to be able to reuse them. Following clues that are currently available, older employees, having a level of training and are regularly training and information to be updated with new discoveries and technologies are well able to pay the tasks.

At present, older employees are confronted with attitudes and policies practiced by employers in respect of: remuneration, training and recruitment. Most times these policies aimed at older workers when it comes to staff layoffs. Older employees facing unemployment inside the impossibility of finding a new job, and if ultimately succeed, it must accept most of the times, a salary below the level that

I had. Given the foregoing, it can be concluded that domestic policies and attitudes of employers and labor must adapt to new realities that are emerging increasingly stronger labor market. Central Government agencies (mainly governments) must contribute and be involved in promoting educational activities designed to lead to awareness of the aging of the population by all the factors present in the labor market.

Occupational Structure:
1. Primary activities: includes agriculture, hunting, forestry and fishing
2. Secondary activities: includes manufacturing and power,
3. Tertiary activities: includes transport, communication and other services,
4. Quaternary activities: includes more intellectual occupation whose task is to think, research and development ideas.

An "attractive" low enough for young people seem to show health and education sectors and social assistance. Although the negative demographic trends make the number of students are becoming less and, consequently, the number of departments and teachers to continuously reduce the fact that a significant proportion of the teaching staff is older or threshold retirement, and young people are increasingly less willing to choose a career in education can lead to a serious shortage of teachers with an appropriate level of professionalism in all regions of the country (especially in rural areas), so the absolute level and specialization. A similar situation is recorded in the health and welfare and the implications on the quality and availability of those services in all areas of the country can be very serious because an aging population in general led to a significant increase in demand for these services.

For industry, developments were different in the case of mining and energy industry and the manufacturing industry. The first two branches, subject to a strict process of restructuring and liquidation of enterprises or the restructuring process is carried out, privatization, modernization and improvement in order to operate in market conditions in most regions recorded a subunit ratio of employment to young oldest. In addition to these factors, however, be taken into account the need to ensure adequate professional skills in sensitive and strategic sectors, which may explain in part the bigger share of the employed population in age groups with more professional experience.

Areas where the ratio of the employed population and the older woman is biased in favor of the first in all regions are in general service sectors (particularly trade, hotels and restaurants, real estate and other services). Although these sectors is clearly a trend of development and the availability of jobs is expected to increase the attractiveness of lower wages, increased job insecurity, seasonality may result in lower employment of young people, which combined with the aging of the labor existing work in these sectors makes a certain time horizon appear shortage of qualified personnel in a sector or another or a particular region.

Employment structure by age groups in 2011
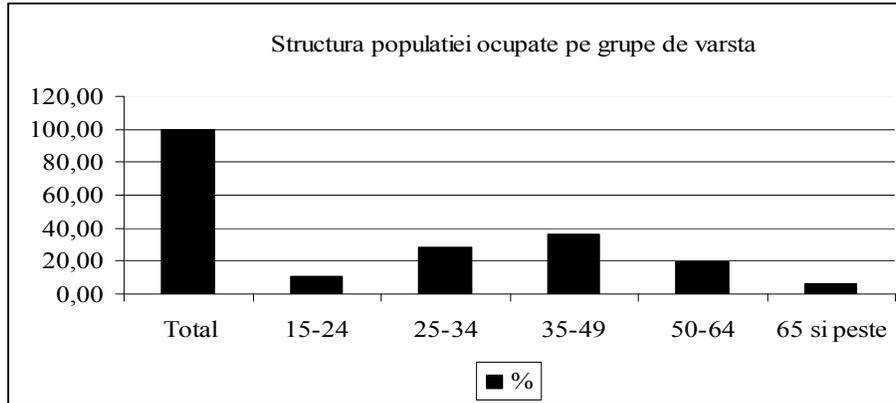
Source: Romanian Statistical Yearbook 2012, INS

Developments in the structure of employment by activity, however, are even more dramatic. Thus, regardless of the method, in agriculture, hunting and forestry, electricity, gas and water, education and health and social relationship between groups of population employed "young" and older is less in almost all regions and for almost all the analyzed period. Furthermore, agriculture is also encountered a rather large percentage (even if the slight decrease) of population employed in the age group over 65 years: 16.8% of total employment in 2005 in North-Eastern region, 13.3 % in South-Eastern region, 16.9% in the South region, 18.2% in the South-West (the worst situation in this case), 10.6% in Western region, 13.4% in North-West, 9.1% in the Central region and 8.4% in the Bucharest-Ilfov. Even if the trend of employment in agriculture is a clear decline, low growth and low productivity of the branch, very low level of income obtainable, fragmentation and low socio-economic development in rural areas will remain as attractive to industry be very low among young people, and the possible migration and emigration among agricultural workers and farmers are still high, leading to worsening problems facing rural and elderly population in its level.

Conclusions

For the industrialized world, aging is the same explanation: population developed societies tend to have increasingly fewer children. Women postpone pregnancy for the benefit of creating a career, or simply give up the idea of having children. The birth rate is becoming smaller as the generations of women are younger and at the same time, decreases inversely with the level of education.

Unfortunately for Europe, the solutions are limited: the acceptance of immigrants, increasing population (solution increasingly unlikely in conditions of genuine nationalist wave - France, Germany) or gradual loss of influence in the world. But even accepting immigrants is a solution that will lead, in time, all the demographic imbalance conditions, in order to compensate for very low birth rate,

Europe should accept a million immigrants per year, which is considered be unacceptable to most Europeans.

However, demographic projections are difficult because it is difficult to predict whether the birth rate will remain constant or increase (which has happened in recent years in France and Romania). Indeed, a higher birth rate, combined with immigration, and can stop the aging European population decline. But for this, we need coherent social policies and more interest and concern of the governments concerned.

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A STRATEGY TO IMPROVE THE INFLATION RATE FORECASTS IN ROMANIA

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Abstract
The main goal of this research is to improve the degree of accuracy for inflation rate forecasts in Romania. The inflation was forecasted using a vectorial-autoregressive model. According to Granger test for causality, the relationship between the two variables is reciprocal. The inflation rate volatility is due mainly to the evolution of this indicator, the influence decreasing insignificantly in time, not descending under 96%. More than 87% of the variation in unemployment rate is explained by the own volatility for all lags. For the first lag the inflation is explained only by its evolution, the contribution of the unemployment rate to inflation variation being null. The inflation rate dynamic simulations (deterministic and stochastic) on the horizon 2011-2013 were more accurate than the predictions based on Dobrescu model. The combined forecasts proved to be a good strategy of improving the VAR forecasts and those based on Dobrescu model only if the dynamic and deterministic simulations were combined with Dobrescu's anticipations on the horizon 2011-2013.

Keywords: forecasts accuracy, combined forecasts, Granger causality, VAR model, inflation rate

JEL Classification*: C51, C52

1.   Introduction

The main objective of this research is to construct a VAR (vectorial-autoregressive model) model for inflation rate and unemployment rate in order to make ex-post forecasts of these indicators. The VAR approach allows us to evaluate the variance decomposition of each indicator. In this way, we can determine if the variation in the variable's evolution is mainly due to the other variable or to its own evolution. The model was applied for the Romanian economy on the period from 1994 to 2013, predictions being made for 2011-2013.

Inflation rate is an important macroeconomic indicator used by many institutes in decision-making process. The central bank is directly interested by the most accurate inflation rate forecasts in its targeting. Predictions for inflation rate in Romania are made by national institutes like Centre of Macroeconomic Forecasting of Academician Emilian Dobrescu and National Commission for

Prognosis, but also by international organizations like European Commission, OECD or International Monetary Fund.

2. Literature

The forecasts performance is an important objective for many specialists in forecasting. Our objective is to evaluate the performance in order to apply a suitable strategy for growing the degree of predictions performance. In economic crisis the performance decreases, the necessity of assessing the performance growing. The forecasts performance is a very large domain of research, an exhaustive presentation of it being impossible. But, some of the recent results will be described.

Bratu (2013) proved that the filters and Holt Winters technique could be used as strategies to get more accurate predictions for inflation rate in USA, when the initial expectation are provided by SPF. The Holt-Winters method gave better results. According to Bratu (Simionescu) (2012), the combined forecasts are a suitable way of improving the unemployment forecasts in Romania.

Deschamps and Bianchi (2012) concluded that there are large differences between macroeconomic forecasts for China regarding the accuracy measures for consumption and investment, GDP and inflation. The slow adjustment to structural shocks generated biased predictions, the information being utilized an inefficient way.

Allan (2012), who used quantitative and qualitative techniques to assess the forecasts accuracy, proved that combined forecasts are a good strategy to improve the OECD predictions for GDP in G7 countries. Dovern and Weisser (2011) showed that G7 countries' forecasts are in general biased because of shocks, for accuracy and efficiency the results being different from a country to another.

Most international institutions provide their own macroeconomic forecasts. It is interesting that many researchers compare the predictions of those institutions (Melander for European Commission, Vogel for OECD, Timmermann for IMF) with registered values and those of other international organizations, but it is omitted the comparison with official predictions of government.

Abreu (2011) evaluated the performance of macroeconomic forecasts made by IMF, European Commission and OECD and two private institutions (Consensus Economics and The Economist). The author analized the directional accuracy and the ability of predicting an eventual economic crisis.

In Netherlands, experts made predictions starting from the macroeconomic model used by the Netherlands Bureau for Economic Policy Analysis (CPB). For the period 1997-2008 was reconstructed the model of the experts macroeconomic variables evolution and it was compared with the base model. The conclusions of Franses, Kranendonk and Lanser (2011) were that the CPB model forecasts are in general biased and with a higher degree of accuracy.

Edge, Kiley and Laforte (2009) evaluated the performance of forecasts made by Federal Reserve staff and of those based by a time-series model and a DSGE model. Gorr (2009) recommended the use of classical accuracy measures

when a normal evolution of the economy is expected, while the ROC curve is more suitable for crisis times.

Lam, Fung and Yu (2008) compared the predictions performance for the exchange rate, showing that combined forecasts are better than the predictions based on a single model.

Meese and Rogoff (1983) in their study, " The empirical exchange rate models of the seventies " compared the RMSE and the bias of exchange rate forecasts, that were based on structural models and they made a conclusion that was later used to improve macroeconomic forecasts performance. They have thus demonstrated that random walk process generates better forecasts than structural models.

Recent studies target accuracy analysis using as comparison criterion different models used in making predictions or the analysis of forecasted values for the same macroeconomic indicators registered in several countries.

Heilemann and Stekler (2007) gave some reasons for the lack of accuracy of G7 predictions in the last 50 years. There is a continuous critique brought to macro-econometrics models and to forecasting techniques, but also the accuracy expectations are not realistic. Other aspects for the forecasts failure are related to: forecasts bias, data quality, the forecasting procedure, type of predicted indicators, the relationship between forecast accuracy and forecast horizon.

The accuracy of forecasts based on VAR models can be measured using the trace of the mean-squared forecasts error matrix, according to or generalized forecasts error second moment, according to Clements and Hendry (2003).

Robinson (1998) got a better accuracy for predictions based on VAR model for some macroeconomic variables with respect to other models like transfer functions.

Lack (2006) found out that combined forecasts based on VAR models are a good strategy of improving the predictions accuracy.

Bratu (2012) utilized some strategies to improve the forecasts accuracy (combined predictions, regressions models, historical errors method, application of filters and exponential smoothing techniques). The limitation of these strategies is related to the fact that they are empirical, being dependent by the type of forecasts. A strategy could improve a forecast or not. The researcher has to check if his assumption is valid on a particular set of data. On the other hand, we consider that a particular valid strategy on a past horizon might give better results for future short run predictions.

3. Methodological framework

Firstly, we consider that the vector y_t has "m" variables. Each of these variables has "p" lags. The rest of the variables (the deterministic variables and the constant) are placed in a vector denoted by y_{-t} that has m* elements. The VAR model has the following form:

$$e_t \to \left(0, \sum_e \square \right)$$

$$Y_t = A(L)y_{t-1} + Cy*_t + e_t \; ,$$

Number of regressors: k= mq+m*

Number of coefficients: c=mk

The VAR model is written in two equivalent forms (X- a Tk matrix, Y and E- Tm matrices, Im- identity matrix, α- mk vector, y and e- mT vectors):

Y=XA+E (1)

$$e \to \left(0, \sum_e \square * I_T \right)$$

y= (Im*X)α+e,   (2)

For the selection of optimal lag a likelihood ratio is applied with the assumptions:

H0: VAR(p0)
H1: VAR(p1)

Different informational criteria are chosen for the optimal lag selection, the most known one being Akaike and Schwartz- Buniakovsky criterion. It is chosen the lag that minimizes the information criterion value for p=1, ..., P.

$$AIC = \ln|\omega| + \frac{2(n^2 p + n)}{T}$$

$$SIC = \ln|\omega| + \frac{(n^2 p + n)\ln(T)}{T}$$

Let us consider two random variables X and Y.

According to Granger (1969), X is cause for Y considering that the information given by X improves the prediction of Y.

Let us consider the lag length p.

$$X_t = c_1 + \alpha_1 X_{t-1} + \alpha_2 X_{t-2} + \cdots + \alpha_p X_{t-p} + \beta_1 Y_{t-1} + \beta_2 Y_{t-p} + \cdots + \beta_p Y_{t-p} + a_t$$

OLS is used to test the assumptions:

H0: $\beta_1 = \beta_2 = \cdots = \beta_p = 0$
H1: $\beta_t \neq 0$

$$RSS_1 = \sum_e a_t^2$$

The restricted sum of squares is:

$$RSS_2 = \sum_{t+p} a_t^2$$

The unrestricted sum of squares is:

$$F = \frac{\frac{RSS_2 - RSS_1}{RSS_1}}{T - 2p - 1}$$

F statistic follows a chi-square distribution with p degrees of freedom. The variance decomposition shows the contribution of the orthogonalized innovation j to MSE- mean square error for the s-step-ahead prediction.

The last relationship shows the contribution of the first innovation to MSE. The residuals decomposition for a standard VAR in a triangular way is called Choleski decomposition. Favero (2001) explained the differences between Choleski identification and Sims-Bernake one.

The optimal approach for combined forecasts is the most used in literature.

Bates and Granger (1969) used the case of two predictions denoted by f1;t and f2;t, for the indicator Xt. In the case of unbiased predictions, the error is: $e_{i,t} = X_{i,t} - f_{i,t}$. The normal repartition of parameters 0 and sigma(i) square. The covariance is computed as $\sigma_{12} = \rho\sigma_1\sigma_2$. The combined forecast is actually a weighted average: $c_t = mf_{1t} + (1-m)f_{2t}$. The error of the combined forecast is:. $e_t = me_{1t} + (1-m)e_{2t}$.

The mean of the combined forecast is zero and the variance is:

$$\sigma_c^2 = m^2\sigma_1^2 + (1-m)^2\sigma_2^2 + 2m(1-m)\sigma_{12}$$

By minimizing the error variance, the optimal value for m is determined:

$$m_{opt} = \frac{\sigma_2^2 - \sigma_{12}}{\sigma_1^2 + \sigma_2^2 - 2\sigma_{12}}$$

U Theil's statistic, used in making comparisons between predictions, can be used in two variants, presented also by the Australian Treasury.

The next notations are used:
a-actual/registered value of the analyzed variable
p- value for the predicted variable
t- time
e- error (difference between actual value and the forecasted one)
n- number of periods

U1 takes value between 0 and 1, a closer value to zero indicating a better accuracy for that prediction. If there are alternative forecasts for the same variable, the one with the lowest value of U1 is the most accurate.

$$U_1 = \frac{\sqrt{\sum_{t=1}^n (a_t - p_t)^2}}{\sqrt{\sum_{t=1}^n a_t^2} + \sqrt{\sum_{t=1}^n p_t^2}}$$

4. The construction of a VAR model used in forecasting

The data are represented by the unemployment rate provided by Eurostat and the inflation rate given by National Institute of Statistics. The data series covers the period from 1994 to 2013. The data are not stationary, this property being achieved by first differencing the unemployment rate and by applying the logarithm and the first differentiation of the inflation rate. The results of ADF test are presented in the Appendix 1.

The Granger causality test is applied for data series in order to establish if a variable is cause for the other one. In Granger acceptance, a variable X is cause for Y if better predictions result when the information provided by X is taken into account.

The results of Granger causality test show that unemployment rate is the cause of inflation rate and the inflation rate is the cause of unemployment.

Table 1: VAR Granger causality tests

Dependent variable: LOG_INFLATIE

Excluded	Chi-sq	df	Prob.
D_SOMAJ	1.238387	1	0.2658
All	1.238387	1	0.2658

Dependent variable: D_SOMAJ

Excluded	Chi-sq	df	Prob.
LOG_INFLATIE	0.092818	1	0.7606
All	0.092818	1	0.7606

Source: author's computations

Almost all the lag length criteria, excepting logL, at 5% level indicate that a VAR(1) model is the best model.

Table 2: Lag length criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-44.70026	NA	0.834157	5.494148	5.592174	5.503892
1	-28.43990	26.78177*	0.198586*	4.051753*	4.345828*	4.080985*
2	-27.01908	2.005869	0.276715	4.355185	4.845311	4.403905

Source: author's computations

All the tests necessary to be applied for checking the validity of the estimated VAR(1) model are displayed in the following tables. The form of the VAR model is the following:

LOG_INFLATON = 0.923470137451*LOG_INFLATON(-1) - 0.165340287516*D_UNEMPLOYMENT(-1) + 0.0878349862224

D_UNEMPLOYMENT = 0.0576505625253*LOG_INFLATON(-1) - 0.242190928323*D_UNEMPLOYMENT(-1) - 0.194352037925

VAR Residual Portmanteau Tests are used to test the errors' autocorrelation for both identified model. The assumptions of the test are formulated as:

H0: the errors are not auto-correlated

H1: the errors are auto-correlated

For the lag 1 up to 12, the probabilities (Prob.) of the tests are greater than 0.05, fact that implies that there is not enough evidence to reject the null hypothesis (H0). So, we do not have enough reasons to say that the errors are auto-correlated. So, after the application of Residual Portmanteau Test, the conclusion is that there are not autocorrelations between errors for VAR(1) model.

Table 3: Residual Portmanteau test for errors auto-correlation

1	1.492683	NA*	1.580488	NA*	NA*
2	2.056683	0.7253	2.214987	0.6963	4
3	6.787521	0.5597	7.891994	0.4441	8
4	8.590948	0.7374	10.21069	0.5975	12
5	11.74823	0.7611	14.58230	0.5554	16
6	15.40329	0.7529	20.06490	0.4539	20
7	16.40587	0.8729	21.70549	0.5968	24
8	17.48713	0.9383	23.65174	0.6998	28
9	19.13175	0.9647	26.94100	0.7206	32
10	19.80744	0.9869	28.46130	0.8104	36
11	23.49561	0.9825	37.94516	0.5631	40
12	24.93374	0.9909	42.25956	0.5464	44

Source: author's computations

The homoscedasticity is checked using a VAR Residual LM test for the VAR(1) model. If the value of LM statistic is greater than the critical value, the errors series is heteroscedastic. LM test shows that there is a constant variance of the errors, because of the values greater than 0.05 for the probability. The Residual Heteroskedasticity test is applied in two variants: with cross terms and without cross terms.

Table 4: VAR Residual Heteroskedasticity Tests: No Cross Terms (only levels and squares)

VAR Residual Heteroskedasticity Tests: No Cross Terms (only levels and squares)

Joint test:

Chi-sq	df	Prob.
20.38520	12	0.0601

Individual components:

Dependent	R-squared	F(4,13)	Prob.	Chi-sq(4)
res1*res1	0.443622	2.591353	0.0859	7.985198
res2*res2	0.282112	1.277169	0.3286	5.078018
res2*res1	0.545093	3.894313	0.0272	9.811668

VAR Residual Heteroskedasticity Tests: Includes Cross Terms

Joint test:

Chi-sq	df	Prob.
24.07323	15	0.0639

Individual components:

Dependent	R-squared	F(5,12)	Prob.	Chi-sq(5)
res1*res1	0.582911	3.354171	0.0399	10.49240
res2*res2	0.291800	0.988876	0.4639	5.252409
res2*res1	0.580233	3.317456	0.0412	10.44419

Source: author's computations

The normality tests are applied under the Cholesky (Lutkepohl) orthogonalization. If the Jarque-Bera statistic is lower than the critical value there is not enough evidence to reject the normal distribution of the errors.

Table 5: VAR Residual Normality Tests Orthogonalization: Cholesky (Lutkepohl)

Component	Jarque-Bera	df	Prob.
1	7.296560	2	0.0260
2	1.099606	2	0.5771
Joint	8.396167	4	0.0781

Source: author's computations

The Residual normality test provided probabilities greater than 0.05, fact that implies that the errors series has a normal distribution when Cholesky (Lutkepohl) orthogonalization is applied. The impulse-response analysis and the decomposition of error variance are made.

Figure 1: The responses of each variable to own shocks or the other variable shocks
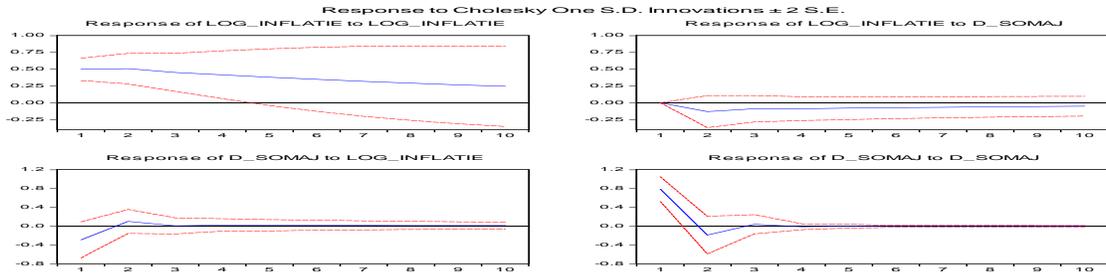
Source: author's graph

The inflation rate volatility is due mainly to the evolution of this indicator, the influence decreasing insignificantly in time, not descending under 96%. More than 87% of the variation in unemployment rate is explained by the own volatility for all lags. For the first lag the inflation is explained only by its evolution, the contribution of the unemployment rate to inflation variation being null.

Table 6: Variance decomposition of the variables

Variance Decomposition of LOG_INFLATIE:			
Period	S.E.	LOG_INFLATIE	D_SOMAJ
1	0.498138	100.0000	0.000000
2	0.723505	96.75490	3.245096
3	0.858191	96.62304	3.376960
4	0.958401	96.44153	3.558466
5	1.034525	96.35929	3.640709
6	1.094298	96.30221	3.697788
7	1.141946	96.26380	3.736196
8	1.180382	96.23599	3.764013
9	1.211640	96.21532	3.784677
10	1.237215	96.19956	3.800439

Variance Decomposition of D_SOMAJ: Period	S.E.	LOG_INFLATIE	D_SOMAJ
1	0.8405 51	12.05223	87.94777
2	0.8676 71	12.62276	87.37724
3	0.8685 50	12.60084	87.39916
4	0.8690 26	12.66877	87.33123
5	0.8692 15	12.70637	87.29363
6	0.8694 04	12.74191	87.25809
7	0.8695 54	12.77079	87.22921
8	0.8696 82	12.79514	87.20486
9	0.8697 88	12.81549	87.18451
10	0.8698 78	12.83254	87.16746

Source: author's
computations

The VAR model is used to make inflation rate forecasts on the horizon 2011-2013. For the VAR predictions four types of scenarios are considered: S1 scenario (Dynamic-Deterministic Simulation), S2 scenario (Dynamic-Stochastic Simulation), S3 scenario (Static-Deterministic Simulation) and S4 scenario (Static-Stochastic Simulation).

Table 7: Predictions of inflation rate (%) based on VAR(1) models

Year	VAR(1) model (S1)	VAR(1) model (S2)	VAR(1) model (S3)	VAR(1) model (S4)
2011	5.4199	5.4553	7.7203	7.7509
2012	5.3629	5.1797	9.8158	9.3453
2013	5.1932	5.1005	12.1870	11.4340

Source: own computations

The second scenario generated the lowest forecast errors for the inflation rate compared to the other three scenarios. If we make the comparison with real data, this scenario generated the most accurate predictions and it could be used to make forecasts for 2014 and 2015.

Table 8: Combined predictions of inflation (%) based on VAR(1) models and Dobrescu model anticipation

Year	S1+Dobrescu model	S2+Dobrescu model	S3+Dobrescu model	S4+Dobrescu model
2011	5.1746	5.2260	4.7626	4.7486
2012	4.1514	3.3715	11.0927	10.5960
2013	5.1837	5.4339	3.1784	3.1106

Source: own computations

All the forecasts were assessed using U1 Theil's coefficient. Not all the combined predictions have improved from accuracy point of view.

Table 9: The values of U1 Theil's statistic for the mentioned forecasts on 2011-2013

Forecasts	U1 value
S1	0.0977
S2	0.0973
S3	0.3885
S4	0.3734
Dobrescu model	0.1004
S1+Dobrescu model	**0.0955**
S1+Dobrescu model	0.5151
S1+Dobrescu model	0.6162
S1+Dobrescu model	0.6072

Source: own computations

The combined forecasts based on the first scenario of simulation and Dobrescu model are more accurate than all the proposed forecasts. The U1 value in this case is the lowest one. The other combined predictions are less accurate than the initial predictions. The first and the second scenario based on VAR model provided a higher degree of accuracy compared to Dobrescu model.

5. Conclusions

According to this analysis based on VAR model, we can conclude that for the inflation in Romania during 1994-2013, the relationship between inflation rate and unemployment rate is reciprocal.

The inflation rate volatility is due mainly to the evolution of this indicator, the influence decreasing insignificantly in time, not descending under 96%. More than 87% of the variation in unemployment rate is explained by the own volatility for all lags. For the first lag the inflation is explained only by its evolution, the contribution of the unemployment rate to inflation variation being null. The inflation rate dynamic simulations (deterministic and stochastic) on the horizon

2011-2013 were more accurate than the predictions based on Dobrescu model. The combined forecasts proved to be a good strategy of improving the VAR forecasts and those based on Dobrescu model only if the dynamic and deterministic simulations were combined with Dobrescu's anticipations on the horizon 2011-2013.

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APPENDIX 1

Null Hypothesis	Augmented Dickey-Fuller test statistic	t-Statistic
D(LOG_INFLATIE) has a unit root	-5.982483	-3.857386 -3.040391 -2.660551
D(LOG_INFLATIE) has a unit root	-5.787331	-4.571559 -3.690814 -3.286909
D(LOG_INFLATIE) has a unit root	-5.753883	-2.699769 -1.961409 -1.606610
D(SOMAJ) has a unit root	-5.108500	-3.857386 -3.040391 -2.660551
D(SOMAJ) has a unit root	-5.054070	-4.571559 -3.690814 -3.286909
D(SOMAJ) has a unit root	-5.259380	-2.699769 -1.961409 -1.606610

The t-statistic is computed at 1%, 5% and 10% level of significance

EVOLUTIONS AND TRENDS ON HARMONIZATION
AND
TAX COORDINATION

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Abstact
   The study of harmonization and tax coordination process is opportune to highlight the importance of a legal framework consistent throughout the Community and ensuring achievement awards Fiscal Union.
   An European harmonized and coordinated tax system is beneficial to prevent or mitigate potential negative economic imbalances of the application of the 28 different tax systems on full integration.
   In this context, it's necessary to present and analyze the measures taken, methods and techniques used by the Member States in order to achieve harmonization and tax coordination.

Keywords: tax harmonization, coordination of fiscal, direct tax, indirect tax

1.   Introduction.

   Fiscal policy is considered an essential component in economic policies by all Member States of the European Union. At European level it should be designed and implemented with respect to two European principles, namely that of subsidiarity and acceptance of all other national fiscal policies.
   To obtain the purposes of financial stability and economic convergence fiscal policy should include a tax efficient, able to provide the necessary budgetary resources, equitable distribution of tax obligations, not the least discrimination in the application of fiscal rules.
   In other words, fiscal policy should be uniform, represented by the European tax system fully integrated, where the internal market distortions caused by the existence of 28 different tax regimes to be removed.
   In this context, follow the directions outlined in the text of the Maastricht Treaty, the Stability and Growth Pact or the Fiscal Pact designed to achieve the coordination and harmonization of national fiscal policies.

2. Concepts and significations for the harmonization and tax coordination.

Asymmetry created by applying several fiscal policies in the European Union correlated with the existence of a single monetary policy in the euro area, are two causes that generate negative consequences on the provision and allocation of resources between states, the fair tax competition and to establish a "fiscal balance" between Member States.

In terms of tax, assuming a common position is obviously necessary, thus making it possible to obtain compatibility of tax systems to eliminate existing differences in tax regimes.

Gradually these attempts turned into a real process, known in the literature as the harmonization and tax coordination.

However, its definition has known multiple formulations. The tax harmonization is the process by which laws and legal standards in the field of various tax European countries are improved in order to meet the requirements of the acquis communautaire.

On the other hand, complement this fiscal coordination, stressing fiscal policy coherence within the Community.

According to R. Nechita, tax harmonization must „be understood as a compatibility differences, [...] or as an elimination of differences, a uniform tax."[1]

While the process of harmonization and tax coordination was seen as a way to act to eliminate disparities „between national tax systems to the point that they do not distort the allocation of resources between states without being canceled incentives arising from tax competition."[2]

Developments and trends manifestation of this process applicable laws targeted specifically direct and indirect taxation. In terms of direct taxation, the tax harmonization aimed to improve the functioning of the tax system in the single market, initially manifested by increasing fiscal coordination between Member States.

Later, the process of harmonization and tax coordination becomes consistent, trying to outline a single architecture to direct taxation. This new construction, have as a prerequisite to obtain uniformity in the administration of taxes, the tax base and tax rates.

The indirect taxation, subject to harmonization process was marked by simplifying the application of value added tax, the calculation of its uniformity and not least to establish limits on VAT rates.

However, harmonization actions were directed and the excise tax regime. Changes were considered to set minimum rates of excise duty (only for certain

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[1] Capital   newspaper   of   February   24,   2011,   and   reappeared   in *http://www.ecol.ro/content/europa-are-nevoie-de-concuren%C8%9Ba-fiscala-nu-de-armonizare-fiscala*;

[2] Negrescu D., Comanescu A., *„Trends of tax harmonization in the European Union. Challenges for Romania"*, European Institute of Romania, Project SPOS 2007 – Strategy and Policy Studies, Study no. 5, Bucharest, 2007, pp. 42;

categories of products), and rules on the holding, movement and monitoring information for products subject to excise duty.

In these circumstances, we can say that we have the complete harmonization process, characterized by the implementation of a centralized fiscal policy at European level or just coexistence tax regimes as a result of good coordination of fiscal policies.

However, practice shows that in fact tax harmonization imposed observance of the „prevalence of Community rules in relation to national, so that national tax rules to be restructured and adapted as far as possible consistently and fiscal relations between the member countries of the Union to based on fiscal neutrality."[1]

3. Harmonization and tax coordination in the direct tax system.

The onset of the process of harmonization and tax coordination in the field of direct taxation was perceived differently in each of the Member States of the European Union. In large part, this process has taken the form of fiscal reforms, characterized in some cases by implementing its own tax rules and measures at national level and in other situations of improving tax systems already in place, introducing new elements require or recommended by European Union.

However, a different perception of each of the leads on the one hand the EU Restricting freedom and on the other to diminish the possibilities of protection of the internal market; which attracts the several adverse effects on economic and social environment.

In this context, the national direct tax systems must respond to fiscal targets equally to domestic and European requirements on the elimination of double taxation, discrimination, abuse, or non-taxation, tax simplification and lower costs of this procedure.

Tax harmonization trends direct taxes aimed primarily corporate profits, corporate income tax, respectively, and less revenue individuals.

In this respect, tax harmonization and coordination was concentrated on the main elements of the tax, including the tax base may be mentioned, the rate of taxation and the administration of the tax.

The Harmonization of European tax base meet the requirements of a cross-border tax losses reduction, eliminating tax costs, as well as „measures to combat the problems of transfer pricing."[2] Currently, the latter being subject to regulations designed to prevent income transferable to another country without being taxed correctly.

A potential solution at this problem was provided by the European Commission in 2001, by which method of calculation of corporate profits has been

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[1] Chilarez D., Ene G. S., „*Harmonization and tax competition in the European Union*", Magazine „*Managerial Strategies*", pp. 95, *www.strategiimanageriale.ro*;

[2] Negrescu D., Comanescu A., „*Trends of tax harmonization in the European Union. Challenges for Romania*", European Institute of Romania, Project SPOS 2007 – Strategy and Policy Studies, Study no. 5, Bucharest, 2007, pp. 52;

simplified. This system is the recognition of tax rules in the country of origin and is known as the Home State Taxation (HST).

According to the Commission Communication to the Council and the European Parliament, the use of this system allows „the profits of a group of companies active in more than one Member State, be calculated in accordance with a single tax system"[1], usually the rule of origin headquarters is located, using tax rates established under national law.

The original concept for SMEs was later developed and adopted in 2011 in a complex formula called Common Consolidated Corporate Tax Base (CCCTB). Through this system the method of determining the base for the income tax has been enhanced by the introduction of new formulas, which related to the common base of each fiscal year is divided among group members according to the following relationship sharing[2] quota - parts:

$$C_A = \left[\frac{1}{3} \times \frac{Sales^A}{Sales^{Grup}} + \frac{1}{3} \left(\frac{1}{2} \times \frac{Payments^A_{salarii}}{Payments^{Grup}_{salarii}} + \frac{1}{2} \times \frac{N^A_{employees} \cdot}{N^{Grup}_{employees}} \right) + \frac{1}{3} \times \frac{Av^A}{Av^{Grup}} \right] \times CTB$$

$$(1)$$

Where:

C_A − apportioned share of Company A;

$N_{employees}$ − number of employees of the company and for the group;

Av − active;

CTB − consolidated tax base.

As can be seen, the rule establishing a fair share is distributed as each of the three factors (sales, assets, employment) are assigned equal weights.

In terms of tax rates the harmonization process has not reached the expected performance at EU level is easily observed remarkable differences between them.

Thus, in the year 2013 in countries such as Belgium, France, Malta and Spain are applied rates exceeding 30%, while in others such as Slovenia, Luxembourg, Ireland, Romania, Germany and Cyprus they are below the 20%. The highest rate of tax being practiced in France, where it reaches 36% and the lowest rate of corporate tax practice in Cyprus is 10%.

In terms of management of revenues from this tax bracket, this is a responsibility that belongs in general to the Central Authority or Federal Tax Administration, in Austria.

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[1] Commission of European Communities, *„Tackling the corporation tax obstacle of small and medium-sized enterprises in the Internal Market – outline of a possible Home State Taxation pilor scheme [...]"*, Brussels, 23.12.2005, COM(2005)702, pp. 8;
[2] According to the Directive (CCCTB) 11 2011/0058, Chapter XVI "The distribution of the tax base" art. 86;

Changes of tax regime in profits during the process of harmonization and tax coordination have an influence of annual fiscal results, both at Member State level and on the whole, that the average in the European Union and the Eurozone. The differences of share taxes on corporate income in total income and tax rates related to European Union states are plotted in Fig. No. 1:

Fig. No. 1 Income tax and tax rates in the Member States, EU-27 and EA-17

for 2011
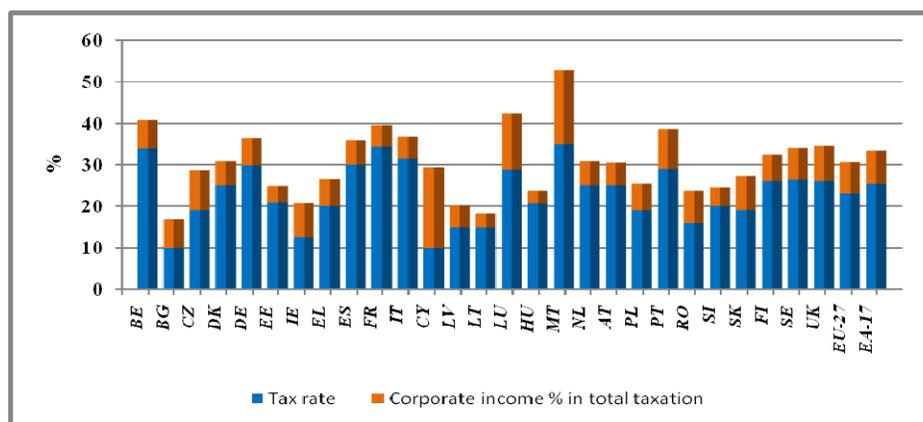
Source: Author's own processing after: Eurostat Statistical books, *„Taxation trends in the European Union"*, 2013 Edition

Chart analysis reveals that, in 2011, in countries where the tax rate is higher than 30% (for Belgium, Spain, France, Malta), the share in total income tax revenue varies between 5.2% and 6.8%, except for Malta where tax accounts for 17.8% of the total.

In countries such as Bulgaria, Ireland, Cyprus, Latvia and Lithuania, where corporate tax rates are between 10% and 15%, receipts from this source recorded weights ranging from 3.2% of total in Lithuania and 19 4% of the total, to Cyprus.

This proves that not always practicing high tax rates can provide a significant increase in revenues.

4. Harmonization and tax coordination in the field of indirect taxation.

Unlike harmonization and tax coordination in the field of direct taxation, consumption taxation system was achieved significant progress.

Along with entry into force of the Treaty of Maastricht, bring into question aspects of the process of harmonization of indirect taxation. Aim of this process being to facilitate the movement of goods and services in the Community, to increase the efficiency of collection of indirect taxes, reducing inflationary impact, and the elimination of tax evasion.

Implementing a common indirect tax system useful in removing tax obstacles, was the harmonization of the tax base, to determine accurately the tax payers, total or partial exemption from payment of tax obligations and not least uniform tax rates (especially VAT).

The harmonization of VAT, the VI Council Directive refers to the introduction of a common system of VAT, which contains a uniform basis of assessment.

In this respect, according to art. 2 of Directive no. 77/388/EEC, recently sphere VAT included:

- Services and supplies of goods effected for consideration within the country;
- Imports of goods.

Also, are considered taxable, „any person who independently carries out in any place any economic activity"[1] of the above, and those who carry out transactions on an occasional basis in areas such as: production and sale of goods, provision services (mining, agricultural or professional) in order to obtain revenue.

In terms of the tax base, it's determined differently depending on the origin of goods, respectively goods / services within the country or imported goods.

In the first case, the taxable amount is the payment has been or will be received by the supplier to the buyer (amount includes direct subsidies on the supply price). However, in determining the tax base includes taxes, fees and other expenses, excluding VAT effective.

In the second case, that of imports of goods, the tax is determined using the same elements as in the previous case, with the addition amount of excise duty paid or due to other Member States, the customs duty, customs fee, and other expenses.

The tax base so determined shall apply its quota, set at national level, but compliance with regulations concerning VAT rates limits.

Another category of indirect taxes subject to harmonization and coordination is the excise duty.

Harmonization of excise duties has a special significance because they are placed in particular on those categories of products that have a high level of consumption (such as fuel and energy), the major influence on production costs.

The absence of tax harmonization in this area caused significant distortion at Community level, with negative effects on the functioning of the single market.

The measures of harmonization to excise duties it was oriented:

- Establish taxable object, namely: oil, alcohol, tobacco products, etc..;
- The tax base;
- The tax rates in the fixed quotas me this common for certain categories of products;
- Movement and monitoring of products subject to excise.

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[1] Official Journal no. L 145/1977, Directive no. 77/388/EEC of 17 May 1977 *on the harmonization of the laws of Member States relating to turnover their taxes - common system of value added tax: uniform basis of assessment*, article 4, par. 1;

Harmonization and tax coordination in the indirect tax system yielded the following fiscal developments in the Member States of the European Union, represented graphically in Fig. No. 2.

Fig. No. 2 Evolution of indirect taxes in the Member States, EU-27, EA-17, as a percentage of GDP for 2011
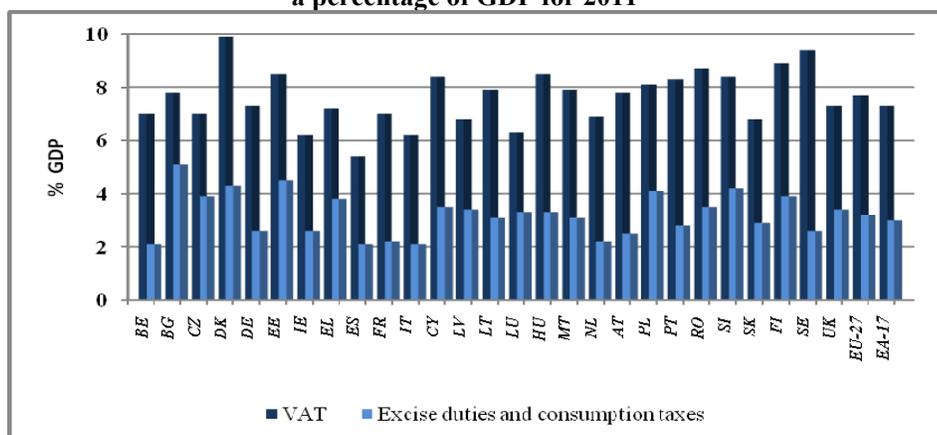
Source: Author's own processing after: Eurostat Statistical books,
„Taxation trends in the European Union", 2013 Edition

In most Member States of the European Union VAT collection efficiency can be observed for 2011. Tax revenue from this source ranged from a minimum of 5.4% of GDP for the Spain and 9.9% of GDP percentage for Denmark.

The European average is calculated for this year of 7.7% of GDP by approximately 0.4 pp higher than the euro area average.

In terms of excise receipts from this source have exceeded the 5.1% of GDP (Bulgaria) in any member state of the European Union. In developed countries, characterized by the existence of a stable tax system and tax policy coherent national, such as Belgium, Spain, France, Italy or the Netherlands, revenues from excise duty and other taxes on consumption at only represented 2.1% of GDP, according to the statistics of 2011.

European average (EU-27) was 3.2% of GDP, exceeding by 0.2 pp average earnings in the euro area (EA-17).

5. Conclusions

The process of harmonization and tax coordination has proven to be a slow, conducted in several stages, often doomed to failure, the fiscal sovereignty is maintained and protected.

In order to improve the quality of this process is necessary to establish uniform tax rules, compliance with which will not impede fiscal objectives of the Member States or which have the effect of enhancing the tax. Therefore,

implementation of the new rules must be performed using a transparent and consistent legislation, implementing tailored actual capacity of each state.

Currently, the failure process of harmonization and tax coordination in the field of direct taxation, led to a migration of capital investment and labor into countries that have a tax system permissive and attractive, favorable development of economic activity.

This proves that the introduction of the common ways of calculating the corporate tax base is not sufficient to achieve the objectives of the EU economy.

Therefore, intensification of this process should be continued in terms of tax rates (by enclosing them within certain limits or by introducing progressive taxation system throughout the community area), and the other evidence used in determining taxable income respectively deductible expenses, deductible or limited deductibility (in this case to establish a unique formula in determining calculation base and allowances applicable).

In consumption taxes, uniform legislation has been a real success led to the removal of tax barriers such economic exchanges between Member States becoming easier.

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CHALLENGES OF SOCIAL POLICY TRANSFORMATIONS IN ROMANIA

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 Abstract
The paper is analysing the development of a new social policy paradigm in Romania during the post-communist transition. The first part explores the impact of transition period on the development of post-communist welfare system in Romania. The standpoints of the analysis are the communist heritage in terms of wide-coverage social design and the shift form planned economy to market economy. The second part of the paper aims to analyse the change of social policy paradigm in Romania. It includes an outline of the existing situation and prospects the main directions of the national social reform. The main argument of the paper is that the social policy paradigm in Romania is shaped both by failures in adopting efficient social policy reform early '90s and by national policy answers to the EU accession pressure. Lessons learned from previous accession experiences could improve the negotiation process to the European Union with positive long term impact on old and new member states. Accomplishment of EU common goals in the social field and not only is highly depending on this.

Keywords*:* welfare state, social policy

JEL classification*:* Z180

Introduction

When referring to social well being of citizens, the literature is offering several well known concepts among which we mention briefly: welfare state, social policy, social security, social protection, welfare regime, and social assistance. It is not our intention to detail each of these terms within this paper. Our attention is mainly focus on the public system of Romanian social policy viewed as the "main preoccupation of modern public policy" [1].

Concerning the redefinition of social welfare, Esping-Andersen pointed out that their subjects of interest are not anymore the welfare states but rather the welfare regimes seen as individual entities. Welfare regimes refer to the modality in each the provision of welfare is allocated between stat, market and household [2]. In the reviewed form of its theory presented in "The Three Worlds of Capitalism", the three welfare regimes are: the liberal welfare regime, social democrat welfare regime and conservative welfare regime.

The concept use in this paper is the social policy interlinked with the welfare state. Green-Pedersen distinguishes two sets of definition of the welfare state. In a wide sense, the welfare state refers to the "space" between state and labour and it is focus on specific areas such as social policy, macro-economic policy, industrial policy, tax policy and industrial relations. In a more narrow sense, the welfare state is synonym with the social security including different transfers as unemployment benefits, pensions, social assistance, social services and health services, childcare and education [3]. In this paper, we approach the welfare state in the narrow sense due to our research interest to prospect the national social policy transformations.

Referring to Romania, we preferred to use rather the term of social policy then the welfare state. Social policy as public policy includes the state action which through its specific instruments is concern for the provision of welfare to its all citizens. The state intervention is in line with directions established by political actors [4]. The social policy of a country can be seen as the result of a complex consultation and permanent collaboration with all relevant actors involved: stakeholders, representatives of trade unions, representatives of civil society, and representatives of various categories of beneficiaries. From this point of view, the social policy can be defined as activities of the Government and other actors which modify the free play of labour forces in the form of social redistribution, social regularisation and social rights [5].

The mains purpose of this study is to prospect the social policy transformations in Romania in the context of post-communist transition and accession to the European Union. Particularly referring to the post-communist states, main challenges they confronted with after the fall of communist regime were both the economic stability (on short term perspective) and institutional reforms (on long term perspective). The accession of ex-Russian satellites to the European Union was considered both a modality to orient their foreign policies to the West and also a guarantee of ending the long relation with Russia [6].

In an international dynamic context, the welfare state reforms can be seen as modalities to intensify the self-government capacity of people and communities [7]. The future of the social policy is highly influenced by demographic tendencies and globalisation process which can lead to a closer cooperation in the social field at EU level. Analyse of demographic tendencies can provide a clear prospect of the future labour force capacity in relation with the financing the social policy. Consequently, scenario on the necessary social measures could be drafting [8]. Expenses required to support different social programs could be reduced either by the "demand" of international financial markets either for reused under other social programs frameworks. A descendent demographic trend would consequently impact on the financing of the social security schemas on the long run and could determine the allocation of supplementary financial resources as for example for the protection of elderly or pensions system.

The configuration of social policy during the communist regime in Romania

The paper analyses the Romanian welfare system by providing a general overview of the social policy configuration during the communist regime. The starting point of the analysis is the communist heritage in terms of wide-coverage and social design.

Looking back at the communist regime, one legitimate question that could arise would be: what is to be defined under "socialist" social policy framework? Trying to offer an answer to this particular question, Bob Deacon assumed that "the welfare state is not seen as the provider of socialist policy" [5]. From Deacon's point of view, the abolition of labour division and eradication of oppression of women have represented the central points of Marx's visions. In a first stage socialism would assure the use of "capitalist" experts under workers'control while in the second one, communism would be more focused on abolishing the hierarchical division of labour and free movement between horizontally divided technical skills [5].

Referring to social policy in Romania but also to other East European countries during the communist period, one could identify at least two widely respected taboos: the unofficial recognized unemployment [4] and excessive social expenditures [9]. First taboo was in force despite the fact that in the '80s the number of unemployed people constantly increased. Officially, the lack of unemployment was interpreting as a complete use of the available labour force with the purpose to achieve ideologically established economic goals. The communist regimes were very proud to successfully implement the communist ideology in terms of collecting individual work contributions to build collective welfare. The second taboo represented a more sensitive issues connoted with fair to show the true about real costs of maintaining the socialists society An honest realist cost-benefit analysis could have exposed the political elites to the potential risk to assume the responsibilities for financial necessary changes, which implies loosing the public support from workers not willing to accept social benefits decrease.

The fundamental aim of the communist welfare project was concentrated on "creating a prosperous socialist society characterized by a highly homogeneous among citizens, not necessarily totally equal but at least low social inequalities in between" [10]. The welfare communist regime was rather focus on assuring an optimal and relatively homogenous level of welfare to all through subsidized social services, free access to education, health, and housing for all workers. Social policies emphasized the equality among citizens, reducing the vertical inequalities and didn't officially recognise the social problems [11].

As ideological key concept, the "work" represented simultaneously an individual duty to the society and a right assured by the state to anyone. As the state was the main provider of collective welfare, the state employment policies were very much aware about assuring a work place to each person able to work. The social system could be characterised as between American "workfare" and Scandinavian "productive" one in the meaning that the socialist presented two consecutive compulsory issues: people were obliged to work for her /his welfare and the state obliged to assure the jobs [12].

Work participation represented a compulsory key condition to distribute social benefits to workers eligible both by accessing the labour market (i.e. child allowance, housing, scholarships, holiday and treatment tickets, health care, sick and maternal leave)   and contributing to the earning-related system (ex. pensions). In this context, persons outside the labour market were completely excluded from the social benefits system. Four types of welfare benefits for social support were used in the communist regime: universal transfers of benefits and services, income-related benefits related to work contributions (i.g. the social insurance system), social transfers dictated by needs but conditioned by participation to work (ex. free health care, housing, child allowance, and free or subsidised health treatment tickets or holiday tickets) and unconditioned transfers targeted for ones in need based on means tests [10].

The welfare policy could have been characterized as a mix between universal social benefits and special benefits related either to employment either to the "advantages" of being hired within a particular economic area [10]. Sometimes comparable jobs implying similar skills and similar work environment were paid differently depending on the industrial area they belong to. As an illustrative example, miners were better paid then other workers [12]. So, more advantages social or family benefits were distributed for employees working in economic areas considered more favourable in terms of higher interest paid by the communist regime.

The mass media network (including communication such us tools newspapers, television, radio) but particularly education system were highly politicised. Everything could potentially represent a threat for promoting communist ideology by affiliation to international scientific exchange ideas outside the communist countries was eradicated. This had a direct impact in terms of closing several university departments in the social sciences, for instance anthropology, sociology, psychology and social work. Some of the direct consequences of these radical measures are: the current low number of Romanian experts in areas of social policy and social work and also discontinuities after the Second World War and in the communist period in terms of developing the sociological achievements of the Romanian Sociological School in Bucharest.

The configuration of social policy in Romania during the communist regime could be described as being focused on the followings: workfare policy in terms of the total use of the existing labour force; assuring a relatively homogenous collective welfare in terms of complete eradication of poverty, promotion of a relatively homogenous collective welfare, promotion of an active policy to compensate differences between needs and resources through social benefits (especially applicable in the case of families with many children), active policy for social housing support; wide coverage of social assurance scheme covering a broad set of risks related with income loss situations; lack of unemployment benefits and means-tested benefits system, work based universal social benefits (in money or in kind), large extent of generous social benefits focus on children, preferences for providing social services rather than direct transfers in money and a non-discriminatory ethnical policy [12].

The enterprises and trade unions were formally involved in managing distribution of social services or family allowances depending on political decisions but access to welfare was conditioned by access to labour market as the state was assuring jobs for all [12]. On the other hand, social policies ideologically promoted during the communist period were not sustainable in a long term perspective, due to the high costs involved [11] for supporting the social welfare provision to citizens.

As a general conclusion, the social security system in communist Romania was mainly based on socialist ideology and missed two important elements: unemployment and the means-tested benefits.

Social policy in Romania during transition towards a market economy

As overview of the main tendencies of social reform within the transition period in Romania, the starting point was marked by "a largely obsolete industrial base and a pattern of output unsuited to the country's needs" [13].

Social problems not officially faced during the communist period have exploded first years after the 1989 revolution exposing especially vulnerable groups to irreversible risks of social exclusion. In this respect, a special category was represented by unemployed people left without any legal protection years before 1989. Due to rapid economic changes their situation increased and forced the authorities to adopt official adequate measures. In this respect, Law 1/ 1991 on social protection and professional reinsertion of unemployed persons was adopted. This legal measure was initiated rather as a consequent of pressure then part of an integrated national vision of social policy. This explains why despite many problems confronted in implementing such legal provision, it took more than 10 years to properly adjusted by adopting the Law 76 / 2002 on unemployment insurances and employment stimulation including active measures to increase employment. It is to be mentioned that the negotiation process was initiated in the same period.

One element of change for the Romanian social policy during transition was the setting up of a non-contributive system in Romania. During the post-communist transition period, both contributive and non-contributive assistance systems in Romania kept the same pattern as in the communist regime and have only slowly progressed further [14]. Developments noticed in the 1990s in these two areas were not part of a coherent national social policy approach [15]. The contributory scheme during communist period was a comprehensive one but focused exclusively on employees. During the transition period, the social policy continued to remain concentrated mainly on wage class protection. The emergence and rapid increase of unemployment in Romania after 1989 has forced the authorities to officially recognise it and develop social strategies to cope with it. Moreover, social problems have increase in amplitude and affected a higher number of citizens exposed to a vicious circle of poverty. Despite this, the slow development of unemployment benefits and means – tested system in the '90s didn't offer the expected social protection to the ones concerned represented especially by highly vulnerable people. Immediately after 1989, the lack of social

measures targeted for people in need, exposed different vulnerable groups to poverty risk. The non-contributive assistance system slowly reacted to dangerous problems like children (especially adopted) and persons with disabilities. The activities of NGOs working in the field of child and youth protection are remarkable and more visible than in any other area [14]. Steps in this direction were done especially in 2004 with legislation for accreditation of social services providers.

In a nutshell, the social policy in post-communist Romania could be described as following three phases: reparatory stage (of injustice measures or lack of specific other social measures), the stage on building a legal and institutional social policy framework with crucial elements but done in an emergency and transition with a social policy rather reactive with strong minimalist tendencies [10]. Social policies implemented during the transition period could have been characterised as a **"**governmental culture of poverty*"* [16]. Malfunctions regarding diagnosing of various social problems, developing and implementing more appropriate social policies, evaluating the impacts of social policy show the low political interest, attention and understanding of social issues in Romania.

Social costs of transition were represented by: the increased rate of unemployment; decreasing number of paid jobs; decreased level of medium incomes, especially small incomes; explosion of the informal economy as an alternative; decreased value of social benefits; increased social polarization and social segregation [17]. Major social problems during transition from planned to market economy were: explosive rates of poverty, social exclusion, increasing informal economy, unemployment, lack of access to social service, low education. Highly vulnerable groups were represented: children, young people, elderly, long-term unemployed, homeless, and part of Roma minority. Despite the fact that some of these vulnerable groups were mention in the Governmental Programs as target groups [18] follow up social measures were partially satisfied. Assessment of development of social benefits in Romania emphasised a rather reactive than pro-active approach [19].

From the legislative perspective, negotiations towards EU accession in the social area shaped the adoption of various regulations due to standard bureaucratic procedure. It is to be noticed that in this particular context the first law regulating the national social assistance system was adopted in 2001 as law 705 and revised twice (2006, 2011). A revised version of this law was adopted in 2006 as law 47. Romania engaged itself in setting up new institutions due to need to harmonisation in the social field especially the implementation of the council regulation 1408 / 1971 on the application of the social security schemes to employed persons, to self-employed persons and to members of their families moving within the Community. The Memorandum on the institutional reform in the field of social assistance mentioned the establishment of a College for coordination of policies for social assistance, the Social Inspection, the National Agency for Social Benefits, and the Social Observatory. Technical assistance was provided for the last three. In what regards the College it works following the Memorandum as composed by state secretaries from the Ministry of Labour. The College is coordinated by the minister of labour and it is composed by state secretary of the Social Assistance and Family

Policies department, the president of the National Authority for Protection of Child's Rights, the president of the National Authority for People with Handicap, the president of the National Agency for Family Protection, the president of the National Agency for Gender Equality.

A law regulating functions, tasks and related aspects it is expected to be adopted. Even the Memorandum offers references to concrete data line the only institution completely established is the Social Inspection. Even if the College works on a regular basis there is no legislative act on its activity. It was expected that the Social Inspection will be functional starting with 2006, the National Agency for Social Benefits would function starting with 2007, and the Social Observatory would work starting with 2006. No date line is mentioned for the College of Social Assistance.

Negotiation framework EU – candidate country

The accession of a candidate country to European Union represents a major challenge for adjusting the national social policy to EU requirements. During the negotiation process between European Union and a candidate country, three main elements are to be taken into consideration: the accomplishment of Copenhagen criteria (established during the European Council in June 1993), adoption of *acquis communautaire* and the European status by geographical, economical and cultural affiliation.

According with Copenhagen criteria, besides the political and economic conditions the candidate country must proof and ensure the capacity to assume the obligations of a member state. This consequently involves the adherence to political, economical and monetary goals of the EU. Pursuing the goals set up in Copenhagen, European Council of Madrid (1995) has added a supplementary condition: that a candidate country must assure the "conditions for a harmonious integration by adapting the administrative structures" [20]. Madrid Council has represented an important step in the enlargement process as a demand for financial framework analyse was launched as well as the assessment of the impact on EU policies [6].

The second element, *acquis communautaire* is frequently considered to be synonym with common legislation at EU legislation. The *acquis* includes "the primary and secondary EU legislation adopted by EU institutions and included in the jurisprudence of the Justice Court of the European Union, in documents adopted in the framework of the external and Common Security Policy and Justice and Internal Affaires, in international agreements in which EU is involved and the ones signed between EU member states and referring to its activity" [21] In the negotiation phase of Romanian accession, the *acquis communautaire* was organised in 31 chapters corresponding to main field of common interest for member states. Every candidate country submits to the European Commission documents referring to the way of adopting each chapter of *acquis communautaire*. Under the framework of negotiations between EU and a candidate country, the *acquis communautaire* is incorporated in the domestic legislation and implemented through various measures and action plans regulating the priorities for adopting the

acquis communautaire and financial tools available for each country as pre-accession funds (PHARE, ISPA and SAPARD) [22] or post-accession funds (European Social Fund).

Conclusions

Romania is one of the East European post-communist countries confronting the transition from planned to market economy. Deacon characterised the welfare regime in Romania during the transition period as "post-communist conservative corporatist" in terms of low economic development, high working class mobilisation, little influence of catholic church on policy, high absolutist authoritarian legacy, mass character of revolutionary process and low trans-national impact (larger if in debt to the West) [23].

The development of a specific common applicable pattern concerning social reforms in East European countries is a quite difficult research task. Anyhow, the analyses of post-communist societies have emphasised one common goal: (re)building of capitalist societies on West inspiration and two visible components: "political democratization" and "marketisation of economy" [11]. Despite initial economic, political and social similarities registered in the beginning of the '90s mainly due to the departure from communist regime, the former satellites states of former Soviet Union approached the social, economic and political changes and consequently progressed in their own way [9].

The paper has analyzed the development of a new social policy paradigm in Romania. The social policy during the communist period was very much oriented of the full protection of workers and it lacked two main elements: means tested benefits and unemployment benefits. Slow developments registered early '90s in the field of social protection in Romania exposed vulnerable groups to various social problems and social exclusion. Late attention paid to a coherent vision on promoting social inclusion among poor people came very late as well as a proper vision on social protection. The shift registered during the transition was clearly an effect the negotiation with European Union. In this respect, first law regarding the national system of social assistance was voted in 2001 as an effect of the negotiation of the *acquis communautaire* in the social field.

The development of a social policy paradigm in Romania is shaped both by failures in adopting efficient social policy reform early '90s and by national political answers to the EU accession pressure.

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UNDERGROUND ECONOMY AND THE TAX EVASION IN ROMANIA

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Abstract

The paper present the features of the underground economy in Romania and the factors' contribution to its formation: undeclared labour of the formal sector (enterprises), value added tax evasion, and the under-reported incomes of the small entrepreneurs' sector (family associations and self-employed). The tax evasion for the main budget revenues is estimated starting from the NIS - based valuations of the underground economy. Annual reduction of the undeclared labour with 10% - 15% could provide the necessary budget revenue for the implementation of fiscal relaxation measures, such as reducing the flat tax or the employers' security contribution.

Keywords: underground economy, undeclared labour, tax evasion, degree of compliance

JEL Classification: E01, E26, H26

In recent years, Romania has significantly improved its macroeconomic financial indicators. We notice a reduction of the deficit in public administration from 9% of GDP in 2009 to 2.3% in 2013, followed by a strong adjustment of the current account deficit at 1.1% of GDP in 2013. The interest of foreign investors in the Romanian capital market has increased. However, foreign inflows in the past two years have not been traced in the stimulation of the real economy, but only in ensuring macroeconomic stability. Fiscal consolidation process has put pressure on limiting government spending, ultimately affecting domestic demand in 2013.

Economic growth (+3.5%) in 2013 placed Romania on the 2nd place at EU level, but agriculture was an important factor in accelerating growth. If we exclude agriculture, the GDP growth level is limited, starting from 1.6% in 2011 to 2.5% in 2013. Stimulating domestic supply (GDP without agriculture) in order to help the budget revenue collection, could be possible by implementing fiscal relaxation measures. Currently, the Government has planned to reduce social security contribution (SSC) incurred by employer, by 5 percentage points, but this measure will generate a significant gap in budget revenues. In these circumstances,

compensatory measures should be identified in order to increase the collection level, of which the most important one is reducing the size of the underground economy.

In order to estimate the potential reserve of the budget revenues, it is necessary to analyse the profile and dimension of the underground economy. The underground economy represents the productive legal activities but deliberately concealed from public authorities for such reasons as: to avoid the payment of income tax, value added tax, social security contributions or other taxes, and to avoid complying with certain administrative procedures, such as completing statistical questionnaires or other administrative forms. The underground economy can be regarded as consisting of two sectors: formal and informal.

The formal sector includes enterprises and public institutions. They are the productive units recognized as legal entities and established according to the law and various government decisions for the public institutions. All the units from the formal sector are registered in the Fiscal Register (maintained by Ministry of Finance), and Statistical Register (maintained by National Institute of Statistics).

The informal sector covers individual entrepreneurs (self-employed) and family associations which activity is settled through the specific law (they lay annual income declarations to the Ministry of Finance). These units are registered in the Fiscal Register and in the Statistical Register.

The undeclared labour represents the most important part of the underground economy of the formal sector. The method used for the estimation is based on the comparison between the labour force supply and demand by branch of activity in order to identify the persons who carry out a legal activity but are not declared to authorities.

The evaluation of labour force supply is made using data from the AMIGO household survey. These survey offers information about the number of persons who declared they have a paid activity in the reference period of time, the number of persons who worked full or part time, who has a second job, by activities or by professions, and also the persons who occasionally worked. Unfortunately, self employed, family associations and collaborators workers are together register in AMIGO. In this condition, is done the assumption that 75% of the total represents the collaborators. The valuation of labour force demand is base on the enterprise annual survey (EAS). The difference between the number of people who declared to work in an enterprise (by AMIGO survey) and the number of people declared by the enterprises as occupied (by EAS survey), represents the undeclared labour. This is evaluated with the same components of legal situation (average gross wages, social security contributions).

Table 1. Number of employees working in underground economy

thousand persons	2008	2009	2010	2011	2012	2013
Employees -AMIGO	6.316,9	6.213,0	6.061,5	6.153,3	6.229,4	6.270,6
Civil Employees	5.046,3	4.774,3	4.376,0	4.348,7	4.442,9	4.520,0
Employees in underground economy	1.270,6	1.438,7	1.685,5	1.804,6	1.786,5	1.750,6
% Employees AMIGO	20.1%	23.2%	27.8%	29.3%	28.7%	27.9%

Source: National Institute of Statistics

In the case of Romanian economy, we notice an increase in the number of employees in the underground economy during the crisis of 2009-2011 (Table1). The share of undeclared labour in the total employee workforce reached 28% in 2013, which means that there is a revenue reserve coming from social security contribution (CAS) and income tax of approx. 38%, due to undeclared labour.

The VAT evasion represents the other important component of the formal underground economy. One part of the VAT evasion represent the VAT for underground economy already estimated and the other part represent the VAT evasion of reported turnover. For the whole VAT, the tax evasion is calculated by the difference between the theoretical VAT and the effective VAT collected by State Budget. Theoretical VAT is calculated for intermediate consumption, final consumption of households, final consumption of general government and gross fix capital formation based on rates of VAT by products defined by the legal quotas.

In order to evaluate the tax evasion of registered individuals in the informal sector, the number of persons (family associations and self-employed) is estimated from the AMIGO labour survey. The evaluation of the value added is based on principle according to which the incomes realized by non-wage workers cannot be less that the average wages earned by employees in the same activity in small units. The income declarations from Ministry of Finance of registered individual entrepreneurs are comparing with the value of these calculations. As a result, the incomes are adjusted, and the tax evasion corresponding to the under-reported value added by the registered units in the informal sector is estimate.

Another important type of non-observed economy in the informal sector is represented by the activities carried on in units non-registered. In this category are included: dressmakers, tailors, workers who repair the cars, workers in construction and restaurants, teachers who teach private lessons, people who rent the house in holiday time. For such activities a distinct valuation is done using specific assumptions and available data sources from the statistical system. These data sources are specific to each kind of activity.

According to NIS and own estimations, the underground economy in Romania (expressed in value-added terms) increased from 18.1% of GDP in 2000 to 23.8% of GDP in 2012 (Table 2).

The estimations indicated that in 2009-2011 the contribution of the undeclared labour in the formal sector to the total underground economy increased to the higher levels (over 65 percent in the total underground economy) because of

the impact of the financial crisis. Significant is the fact that this component reduced its amplitude to 13.7% of GDP in 2012 (from 15.6% in the previous year).

The other important component corresponds to the VAT evasion in the formal sector. The share of VAT evasion in GDP (6.3%) almost doubled in 2012 compared to the previous three years. It is worth noticing that in 2010, when the legal VAT rate was increased from 19% to 24%, TVA evasion continued to decrease to the minimum of 3.4% which corresponds to the 14.7% of the total underground economy. The impact of this measure was felt during the next year, but its effect was however moderate.

The underground economy corresponding to the informal sector (family associations and self-employed) developed by a decreasing trend after 2008, and was set at a share of 3.8% of GDP (16.0% of the total underground economy) in 2011-2012. Small entrepreneurs' sector has experienced an accelerated growth in 2005-2008 due to favourable conditions on lending and growing demand of the population, but this has also led to the development of the underground economy component. Since 2009, the activity of small entrepreneurs continuously decreased below GDP rate, as well as the activity of those in the underground economy.

Table 2. Underground economy in Romania by causes

Percentage of GDP	2008	2009	2010	2011	2012
Underground economy	**19.6%**	**20.9%**	**23.3%**	**22.8%**	**23.8%**
Formal sector	13.7%	16.7%	19.9%	19.1%	20.0%
Evasion from labour taxation	9.9%	12.9%	16.5%	15.5%	13.7%
Evasion from VAT	3.8%	3.8%	3.4%	3.6%	6.3%
Informal sector	5.9%	4.2%	3.4%	3.7%	3.8%

Source: Own estimations and National Institute for Statistics (NIS)

Based on the information provided by the Ministry of Finance on the legal collection rates, tax evasion was estimated for the main budget revenues, corresponding to the NIS-based estimations of the underground economy.

Income tax and social security contribution were estimated starting from the value added of the underground labour, by applying the legal rates (16.5% - Employees' security contributions, 27.9% - Employers' security contributions, and 16.0% - Income tax) to the corresponding gross salaries amount. As regards the tax evasion in the informal sector, we considered that small entrepreneurs must pay, to the state budget, income tax and employees' security contributions. Evasion in the informal sector appears to be significant in trade, construction, hotels and restaurants. The results of the estimation on tax evasion by components are presented in the Table below:

Table 3. Evasion by types of tax revenues

Percentage of GDP	2008	2009	2010	2011	2012
Tax evasion	**10.0%**	**10.9%**	**11.9%**	**11.7%**	**13.6%**
Taxes on income	1.8%	1.9%	2.2%	2.1%	1.9%

Social security contribution	4.3%	5.1%	6.3%	6.0%	5.4%
VAT	3.8%	3.8%	3.4%	3.6%	6.3%

Source: Own estimations based on underground economy

Tax evasion in Romania is widely spread, only in the case of social security contributions, VAT and income tax, representing 13.6% of GDP in 2012. Tax evasion has developed differently, depending on the type of taxes. Thus, in the case of social security contributions and income tax, namely the taxes corresponding to undeclared labour, we notice an increase of tax evasion in 2008-2011. This is due to the impact of economic crisis that has particularly affected sectors with a high share of underground economy, such as trade and construction. Tax evasion for undeclared labour has reduced its share in GDP in 2011-2012, corresponding to the relaunch of the economic growth. The results show a slow trend of reducing the size of tax evasion for undeclared labour, in the context of low economic growth rates.

Regarding VAT evasion, the situation is opposite, its development from a low level as a share of GDP in 2008-2010 and accelerated growth in 2011-2012. This development was influenced by the reduced rate of VAT (19%) in 2008-2009, on the one hand, and the increase of the average VAT rate from 21.5% in 2010 and 24% in 2011.

The table below illustrates the development of the degree of compliance with the main taxes, as a ratio between the revenue actually collected to the budget and the theoretical income (including tax evasion and revenue actually collected). In 2012, the total average degree of compliance was 60.7%, a decrease compared to the previous year, due to the impact of VAT evasion, which has increased significantly in 2012.

Table 4. Degree of compliance for the main taxes

Percentage of GDP	2008	2009	2010	2011	2012
Tax evasion	**67.9%**	**64.9%**	**62.3%**	**64.4%**	**60.7%**
Taxes on income	66.3%	66.0%	61.2%	61.8%	64.8%
Social security contribution	68.7%	65.1%	58.1%	60.2%	62.1%
VAT	67.6%	64.0%	68.6%	70.8%	57.9%

Source: Own estimations based on underground economy

The degree of compliance for taxes on labour decreased very fast until 2010 then it gradually improved during the next years. The lowest level is registered in the case of VAT, of only 57.9% in 2012, the same as in the 2000-2002 period.

If Romania collected half of the taxes existing in the underground economy, then it would hold budgetary revenues, as a percentage of GDP, at the level of EU average. Annual reduction in the size of the undeclared labour with 10% -15% could provide the necessary revenue (an extra of £ 3.5-5.5 billion lei) for the

implementation of fiscal relaxation measures, such as reducing the employers' security contribution with 5 percentage points.

Conclusion

Romania is among the last countries in the EU in terms of collecting budget revenues. Fiscal consolidation measures, implemented in recent years, have ensured the financial stability of the country but they put pressure on reducing budget spending. In these circumstances, any measure of fiscal relaxation is difficult to sustain because it leads to a budget revenue gap, which cannot be covered from other sources.

One possibility would be to reduce the size of the underground economy, particularly with respect to undeclared labour. According to NIS estimations, the underground economy in Romania (expressed in value-added terms) increased from 18.1% of GDP in 2000 to 23.8% of GDP in 2012, being among the highest in Europe. Evasion on the undeclared labour has reached 36 billion lei in 2012 (6.2% of GDP) decreasing by 2.9 billion lei in 2012, compared to 2011. Consequently, extra resources for the budget revenues are available, of at least 3 billion per year, by reducing the share of the underground economy, which will ensure the implementation of fiscal relaxation measures, necessary to relaunch economic growth.

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THE RISK OF THE EMPLOYER REGARDING THE NARCOTICS TESTS ON THE EMPLOYEE

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Abstract
The employer is under the risk to violate the privacy of the employees when he/she requests narcotics test for them; the employee can legally defend the right to privacy under the new Romanian Criminal Code, in effect since February 1st, 2014.

Keywords: employer, narcotics, test, privacy, risk

The labor law rules the relationship between the employer - the beneficiary of the labor- and the employee - the performer of the labor.

According to the Labor Law, the employer is the individual that hires another individual to perform a certain activity as the employee. The employer can be either an individual or a juridical entity, private or public.

The employee is the individual, obligated by profession or charge, based on the individual labor contract to perform a certain activity for the employer, during a certain time frame.

The individual that requests to be employed must present at the moment of the closure of the labor contract certain documents that vouch the fulfillment of the legal requirements.

Article 63 line 2 of the Labor Code states that *"the future employee must summit to a medical exam in order to be established if the health is suited for the future duties"*.

According to the Labor Protection Law no.319/2006, "the leaders of the judicial person and the individual must employee only persons that have passed the medical and psycho-professional tests and is fitted for the future assignment"[1].

Also, art 33 of the National Labor Contract states that the employer must organize for the initial moment of employment and later, at least once a year, a medical exam of the employees for the purpose of learning if they are fitted for the future assignment or for the job they perform, or to prevent labor accidents. [2]

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[1] Published in Official Gazette no. 646/26.07.2006
[2] Sanda Ghimpu, Alexandru Ticlea, *"Dreptul muncii, curs universitar",* Ed. AII Beck, Bucureşti, 2000, pag. 5.

For certain professional categories is required also a particular health requirement for employment. For magistrates, the candidate must fulfill the medical requirements in order to perform his/her duties, mandatory requirement also for medics and pharmacists

Labor medicine rules, approved by the Minister of Health order no.1957/1995[1] refers to two medical exams categories, one during employment and one periodically.

The results of the medical exams shall be logged onto a medical form and the final conclusions are the medical notice of approval, issued by the competent medical institution and communicate to the beneficiary.

The absence of such medical notice will void the individual labor contract since art. 63 line 2 of the Labor Code states that the medical exam for employment is an obligation that should be fulfilled by the employer and by the employee.

It's consider a contravention hiring an individual, for any assignment, without passing previously a successful medical examination suited for the features of the future assignment and that he/she doesn't represent a dangerous for the public health or the absence of the employees of any company or individual for the regular medical exams, stated by the regulations of the Ministry of Health and scheduled by the medical authority accordingly to the working environment, as stated by art. 29, letter b and art. 30 letter of Law no. 98/1994 regarding the contraventions and penalties related to public hygiene and health regulations[2].

The regular medical exam should be performed yearly, in respect of the assignment particulars and carried out during the performance of duties.

Can an employer ask for a mandatory drug test for hiring of periodically?

The issue raises some controversy since more and more employers require such test as mandatory for employment and the final decision will be based on the outcome of such exam[3] .

The controversy consists in the conflict of interests between the employer and the employee.

Future employees can be worried that such information obtained after a urine exam, such as the presence a certain disease, for example epilepsy.

Another worry could be a medical error, disfavourable to the employee. They could be listed as narcotics users, meaning disgrace in the working community and even dismissal from employment.

Such incidents can prove a violation to the private life, in particular if the individual had no involvement in a work related accident caused by drug abuse.

On the other hand, the employee motivates that such medical information are necessary, most drug abusers steal from work to support their addiction, and so the employer will have the opportunity to prevent and wrong doing of the employee.

The issue is not the information disclose after the medical exam, but the

future interference with the working relationship of the employee.

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[1] Published in Official Gazette no. 60 bis of march 26th, 1996
[2] Published in Official Gazette no. 317 of October 16th, 1994.
[3] Eliodor Tanislav, *"Dreptul vietii intime",* Ed. Semne, Bucuresti, 1999, pag. 167.

The reasons why an employee uses narcotics off-duty should not concern in anyway the employer as long as this action doesn't produce dependence and affect his/her professional performance.

At the moment, the Romanian legislation doesn't incriminate as a crime the consumption of narcotics, but it can be sanctioned as a contravention, along with a complementary measure of forced medical cure or medical supervision[1].

The Law 143/2000 regarding the fight against narcotics trafficking and consumption doesn't incriminate the drug abuse, but states in art. 27 line 1 that the consumption of controlled substances, without a medical prescription is illegal in Romanian teritory[2].

So, since the illegal consumption of narcotics is not directly incriminated as a felony and is not listed in the 11 crimes stated in the above mentioned legislation, its only a contravention according to the Counsel of Ministers Decision no.899/1970, still in use. This regulation states that the self-administration of narcotics without prescription is contravention[3].

We conclude that the employee should have his/her right of privacy protected, without any repercussion, except in the case a public employee, whom dependency on narcotics can seriously effect of the performance and his/her official position must require such narcotics test, such as the case of firemen, policemen, paramedics, pilots, aviation safety personnel, locomotive driver, nuclear plants employee etc.
For these assignments is required a high degree of psychic and physical dependency, otherwise the results could be catastrophic.

In respect of the error medical results or irrelevant medical information about illnesses, it should be thoroughly analyzed the dangerous potential of a drug dependency.

In order to avoid the disclosure of an embarrassing or irrelevant medical information, the employer should take all measures to guaranty that only the information related to that drug test shall be logged in the medical chart of the employee[4], and a second test is required in order to rule out any medical mall praxis.

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[3] Traian Dima, idem., pag. 40.

[4] EliodorTanislav, idem., pag. 168

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INSOLVENCY OF ADMINISTRATIVE-TERRITORIAL UNITS

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Abstract
This paper aims to carry out an analysis of the regulation of insolvency procedures applicable to the administrative-territorial units. It addresses, in terms of content, three major issues. The first is related to the current constitutional status regarding the manner of administrative-territorial organization of Romania, and the organization and functioning of public administration in the administrative-territorial units.

The second issue concerns the analysis of the legal regulations regarding the local public administration, and the last deals with, by reference to the constitutional and legal rules, the constitutionality of the regulation, by emergency ordinance of the procedure of insolvency of administrative-territorial units.

The conclusion is that such a procedure established by the Government Emergency Ordinance N⁰.46/2013 is contrary to the letter and spirit of the fundamental law.

Keywords: administrative-territorial organization, administrative-territorial units, communes, cities, counties; insolvency, deliberative bodies; executive bodies; principles of organization and functioning of local public administration;

I. General considerations

The administrative-territorial organization of the Romanian state is governed by article 3, paragraph (3)[1] of the Constitution of Romania, revised and republished[2], methods by which we identify the **communes** and the **cities as**

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[1] Article 3 paragraph (3) of the Constitution has the following content "the territory is organized, administratively, into communes, cities and counties. Under the law, certain cities are declared towns/municipalities".

[2] Constitution of Romania was revised by the Law N⁰.429/2003 published in the Official Gazette N⁰.669 of 22 September 2003 and republished in the Official Gazette N⁰. 767 din 31 octombrie 2003

administrative units of intermediate level, mentioning that, under the law, certain cities may be declared towns/ municipalities.

The notion of "*organization of the territory*" represents the delimitation of the territory in administrative-territorial units[1] and it is evoked, in the doctrine of other countries, as "*territorial cutting*"[2]

The constitutional text refers, through the expression "under the law" to a law meant to regulate the administrative organization of the territory of the Romanian state, currently represented by the Law N°.2/1968[3]. Through its manner of administrative and territorial organization, Romania falls in the category of countries having a single intermediate level represented by **counties, between the basic level** (communes, cities) and the **central level[4]**.

The manner of organization of the public administration in the administrative-territorial units and the principles governing it can be found regulated in the Chapter V of the Title III of the Constitution, called "*local public administration*".

According to the article 120 of the fundamental law, at the basis of the organization and functioning of the public administration in the administrative-territorial units are **four principles**, respectively **decentralization**, **local autonomy, devolution of public services** and **the right of national minorities** to use their native language in written and oral, in the relationships with local public authorities and with the de-concentrated public services of ministries and of other bodies of the specialized central public administration.

These principles of constitutional rank are supplemented by the principles of **equality of the authorities of the local public administration**, **legality** and **consultation of citizens in solving issues of local interests**, as provided for by the Law N°.215/2001 of the local public administration, as subsequently amended and supplemented, republished[5].

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[1] Dana Apostol Tofan – "*European Administrative Institutions*" - CH. Beck Publishing House, Bucharest, 2006, p.129
[2] Corneliu Liviu Popescu – *Local Autonomy and European Integration*, CH. Beck Publishing House, Bucharest, 1999
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[4] Extensively on these issues, Verginia Vedinas in I. Muraru, E.S. Tanasescu – "*Constitution of Romania – comments on articles*", CH Beck Publishing House, Bucharest, 2008, pages 34-37
[5] Republishing was made in the Official Gazette N°.123 of 20.02.2007

In our opinion, the following provisions of the organic[1] Law N°.215/2001 are relevant for the addressed topic, respectively the insolvency of the administrative-territorial units:

The rule sanctioned by the article 2, paragraph (2) according to which "*the application of the principles of local autonomy cannot affect Romania's character of national, unitary and indivisible state*".

From this rule it results, on the one hand, the conclusion according to which the **administrative-territorial units are components of the Romanian state** and, on the other hand, the local autonomy, **together will all other principles, cannot affect Romania's character of national, unitary and indivisible state**.

2. Granting by the legislator[2] of **legal personality of public law**, with all the attributes deriving from it, respectively **full legal capacity**; **own patrimony; the quality of subject of fiscal law, holder of a tax registration code** and **of the accounts** opened with the territorial units of the Treasury and of the banks.

3. Recognition[3] for the administrative-territorial units of the right to own financial resources, managed and used by the authorities of the local public administration, according to the duties incumbent on them, under the law. Granting of such financial resources is not random; it must be correlated with the duties that the law provides to the authorities of the local public administration. In the content of the article 9 we find the wording, objectionable in our opinion, "competences and duties" given that **the duties are the content of the competence** or **the competence is a sum of duties**.

According to the opinions of the academic literature[4], in order to exist an authentic autonomy, guaranteed or "*self-government*", as we find in other states, it is necessary "*the existence of an economic and financial basis managed by the local governments*". Hence, the conclusion we adhere to, that "*if a local community lacks the resources required to implement the decisions of its governing*

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[1] According to the article 73, paragraph (3) letter a) among the matters reserved to the organic laws it is also the "organization of the local public administration, and the regime of the local autonomy"

[2] Through the article 21, paragraph (1) of the Law N°.215/2001, having the following content: "*The authorities of the public administration through which it is realized the local autonomy in communes and cities are the local councils, communal and municipal, as deliberative authorities, and town halls, as executive authorities. Local councils and town halls are elected under the conditions provided for by the law on local elections*"

[3] Through the article 9 of the Law N°.215/2001, having the following content "*within the national economic policy, the communes, the cities and the counties are entitled to own resources, that the authorities of the local public administration manage according to the duties incumbent on them under the law. Financial resources of local public authorities must be pro rata with the competences and responsibilities provided for by law*"

[4] Madalina Voican – Framework principles of the local public administration, Universul Juridic Publishing House, Bucharest, 2008, page 63

bodies, we cannot speak of an authentic local autonomy, because the existence of material resources at local level limits the right to decide what is in favor of the community[1]*"*

II. Legal framework of insolvency in case of administrative-territorial units

The situation created by the economic and financial problems faced by the countries of the world, in general, and by Romania in particular, have determined the Government of Romania to **territorial**, in the global context of the financial crisis. In the reasoning of the urgency of this normative act, required by the article 115 (paragraph 4) of the Constitution, it is invoked on the one hand the significant volume of assets recorded by the administrative units, subdivisions, towards the suppliers of goods, services and works", which attracts the "necessity to unblock the activities of such suppliers, and on the other hand the provisions of the Stand By Agreement between Romania and the International Monetary Fund on reducing arrears of administrative-territorial units".

Beyond these reasons, the conclusion it results is that it was necessary the regulation of this procedure, irrespective of the fact that we share or not, in principle, its existence. As a professor of public law it is difficult to understand and accept that an administrative-territorial unit, part of the Romanian State, can enter into insolvency. From here to accept that slowly the State itself can enter into insolvency, or more exactly, enter partially into insolvency, is no more than a step. That it is difficult for us to make, in the context in which the fundamental law of Romania provides, on the one hand, the local, administrative and financial autonomy, under the law, decentralization and de-concentration of public services, and on the other hand that[2] "*the authorities of the public administration through which it is achieved the local autonomy in communes and cities are the local councils and the mayors elected under the law*."

Or, according to the Article 14 of the Government Emergency Ordinance N°.46/2013, the subjects of law applying the insolvency procedure are the **main credit release authority, namely the mayor, or the president of the county council, the deliberative authorities, including local or county councils, Courts, syndic judge, creditors' meeting, creditors' committee and the official receiver**.

Putting face to face the article 14 of the Government Emergency Ordinance N°.46/2013 and the articles 120, 121 of the Constitution, we can ascertain that through the Emergency Ordinance other public authorities are added, or subjects of

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[1] In the article 121 of the Constitution, op.cit. page 63

[2] The article 121 of the Constitution has the following content: "(1) "the authorities of the public administration through which it is achieved the local autonomy in communes and cities are the local councils and the mayors elected under the law. (2) Local Councils and Mayors operate, under the law, as autonomous administrative authorities and they solve public issues in communes and cities. (3) the authorities provided for by the paragraph (1) can be also established in the administrative-territorial subdivisions of municipalities.

law in general, which are competent in managing the interests of an administrative-territorial unit, ultimately in exercising the local autonomy.

Therefore, in our opinion, the procedure of entry into insolvency, as it is regulated by the Government Emergency Ordinance N°.46/2013, lacks of constitutional legitimacy.

This normative act regulates the entire procedure of performing the insolvency as subjects of law involved, with their correlative rights and duties, that we do not intend to analyze in this paper.

However, we want to draw attention to the consequences that the recognition of this procedure could have. Thus a commune in the county of Tulcea has entered into a contract for the exploration and exploitation of an area of land which had the destination of lawn/grassland, for the purpose of identifying any existing marble deposits and operation thereof, in case in which they exist. Due to certain legal issues related to the legal regime of the land which turned out to belong to the public domain of the State, and not to the public domain of the commune, the contract could not be performed. In such case, the statutory undertaker, a private company, sued the concession provider, respectively the administrative-territorial unit, and the Courts, by final and irrevocable judgments, have granted to the company **damages** consisting in the **budget of the commune for a period of 11 years**. In such a situation, it is obvious that it was started the insolvency procedure of such commune. Note that in order to pronounce this damage in an amount so large, it was taken into account an expertise in which it was also included the **equivalent value of the works of art which would have been made from the marble which had to be exploited if ascertained that it existed**.

CONCLUSIONS

We ascertain that a legal situation, settled in a manner that could make the object of a doctrinal analysis, has triggered the entry into insolvency of that administrative-territorial unit.

In our opinion, the current regulation of the insolvency procedure is unlawful in relation to the provisions of the fundamental law and to the constitutional legal status.

It is unlawful even in relation to the alleged necessity which determined the adoption of the emergency ordinance as it results from the reasoning.
"*the necessity to unlock the activities of the suppliers of goods, services and works which have to recover from the authorities of the local public authorities amounts representing arrears.*"

First, the arrears are of the **administrative-territorial units**.

Second, we do not believe that the "unblocking of the activity of such supplier" justifies the blocking of the activity of a local community and of the authorities of the autonomous public administration.

And last but not least, the institutions themselves, the financial crisis, and insolvency of the administrative-territorial units are important, complex issues, and it was necessary their regulation thorough a law, and not through an emergency ordinance.

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