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# FINANCING OF LOCAL DEVELOPMENT IN ROMANIA

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## ABSTRACT

*This paper is trying to establish, in Romania, at macroeconomic level, quantitative and qualitative, relations between gross domestic product and governmental and local revenues.*

*Keywords: financing, local autonomy, evolution, econometric analysis*

## **1. INTRODUCTION**

Administrative decentralization is related to the financial component, i.e. financial decentralization or *local financial autonomy*, since administrative decentralization cannot exist in absence of financial autonomy. Financial decentralization is considered the "spine" of any local autonomy; financial elements are those that connect the needs of local population with the means provided for it.

In the same way, art. 9 of "The European Charta for Local Autonomy" of October 1995, referring to financial resources, shows that within national economical politics „the authorities of local public administration are entitled to sufficient own resources, which they can use freely for exercising their power”<sup>2</sup>. Financial decentralization can also be defined as "transmitting by the central government of some specific functions and fiscal revenues to the local public authorities”<sup>3</sup>.

## **2. THEORETICAL FOUNDATION**

The objectives of financial decentralization are the efficient allocation of financial resources, equitable provision of public goods in different geographical areas, providing macroeconomic stability and economic growth increase.

The basic instrument to perform financial autonomy is the local budget of the territorial-administrative unit or sub-unit, and the distinct organization of public finances on the basis of financial decentralization allows:

- relieving central finances of a series of expenses;
- reducing the number of financial flows between central and local authorities;
- creation of a clearer picture of the management of national public finances.

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<sup>2</sup> Carta europeană a autonomiei locale, Tratatul European Nr.122, Strasborug, 15 octombrie 1995, art.9, alin.1.

<sup>3</sup> Kee James Edwin, Fiscal decentralization: theory as reform, Working Paper, The George Washington University, Washington, 2001, pag.3.

Financial decentralization differs from a country to another, according to the concentration of the state administration and the subordination level of the local authorities to the central government and begins to function beyond the limit where the area of using centrally provided public goods begins to decrease and the comparative cost of decision-making at central level becomes to high. The concept of financial decentralization is very similar to that of fiscal federalism, but applicability is somehow distinct (unitary countries versus federal countries); because of that these two topics have been discussed separately.

To the extent in which public finances originate in autonomy of public entities at territorial level there are strong arguments in favor of financial autonomy, especially because of the fact that these organisms know much better their own needs and possibilities of financing them. This way a release of the expenditures in the central budget is performed, by reducing the number and complexity of financial transfers between system components.

Lately, with the increase of regional and local attributions, needs of financial resources of these have increased, and the respective jurisdiction received the right of borrowing from the capital market and to enlarge its prerogatives in legal and budget control. Since the demand of public goods and the possibilities of providing the public goods are different from one jurisdiction to another, a certain degree of financial autonomy is only natural.

There are however a series of factors creating difficulties in an optimal and uniform providing of goods and public services offered at lower levels, which often lead to differentiations from one are to another. The most important of these factors are determined by:

- the multitude of forms and the different extent of demands of local public utilities from one collectivity to another;
- different geographical benefits between territories;
- existence of vital social services financed by central authorities;
- different contribution levels between territories;
- involuntary transfers of income from one area to another according to economical differences;
- the existence in many situations of differentiations between needs of resources and fiscal capacity of various territories to cover them, which generates an unequal access to public financial resources.

All these difficulties require the existence of additional forms of providing financial resources to local collectivities, according to pre-established schemes, capable to provide public goods at global level, with the same intensity and uniformity, without any kind of territorial discrepancies.

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

This study is trying to quantify and analyze the impact of the central and local public revenues over the economic growth in Romania. The main limitations of this scientific approach refer to a delay in taking measures for decentralization in case of our country; drastic measures in this respect have only been taken in 2004 within the perspective of our country joining the European Union, which makes it impossible to quantify the results of enforcing this reform because of lack of data. For this reason, we shall take into account the

first regulation in financial decentralization area, measures which have been taken beginning from 1994 by adopting The Law of Local Taxes.

The analysis performed takes into consideration two econometric models; the first one analyses the impact of the politics of central revenues and of the politics referring to the revenue of local collectivities over the economic growth in Romania, in the timeframe 1985-1994 and the second one includes the same type of analysis for the timeframe 1995-2005. Although the political regime in Romania changed beginning from 1990, the steps toward decentralization have been small and have allowed the analysis in the same econometric model of the information before and after 1989, without negatively affecting the chosen model.

This separation of the series of data intends to compare the evolution of the gross domestic product, as indicator of economic growth of a country, before and after 1994, moment in which the first legal actions regarding financial decentralization were undertaken in Romania. The series of data at the basis of this analysis target the timeframe 1985-2005.

The analysis of the impact of central, respectively local, revenues politics over economic growth in Romania has been performed by the method of econometric modeling, using the EViews 5 software package<sup>4</sup>.

Therefore, two regressive, multifactor models have been created, in the form of:

$$Y = \alpha + \sum \beta_i * X_i + \varepsilon \quad (1)$$

where:

- Y = dependent variable;
- $\alpha$  = free term coefficient;
- $\beta_i$  = independent variables coefficients;
- $X_i$  = independent variables;
- $\varepsilon$  = random variable;
- i = number of variables for which regression is done.

Precisely, we are studying the quantification of the relation between the way in which centralization existing before 1994 in Romania required a decentralized administrative regime on the one side, and the extent in which financial decentralization had an determinant role in the increase of the gross domestic product or not, in order to conclude whether such a measure was necessary or not.

**1. Modeling the impact of the policy of central revenues and local revenues over the economic growth during the timeframe 1985-1994** is based on a multifactor regressive model in the form:

$$Y = \alpha + \beta_1 * X_{VC} + \beta_2 * X_{VL} + \varepsilon \quad (2)$$

where:

- Y is the dependent variable, the gross domestic product (GDP);
- $\alpha$  free term coefficient;
- $\beta_{1,2}$  independent variables coefficients
- $X_{VC}$  and  $X_{VL}$  ( $VC$  means central revenues and  $VL$  local revenues);

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-  $\varepsilon$  = random variable;  
The model will be:

$$\text{GDP} = \alpha + \beta_1 \cdot \text{VC} + \beta_2 \cdot \text{VL} + \varepsilon \quad (3)$$

The results obtained after modeling the three statistical series are those presented in Table 1:

Table 1

Statistical tests for modeling the impact of central and local revenues over the GDP in Romania (timeframe 1985-1994)

Dependent Variable: GDP				
Method: Least Squares				
Date: 06/14/07 Time: 12:17				
Sample: 1985 1994				
Included observations: 10				
GDP= $\alpha$ + $\beta_1$ *VC+ $\beta_2$ *VL				
	Coefficient	Std. Error	t-Statistic	Prob.
$\alpha$	-387.3164	129.4429	-2.992179	0.0202
$\beta_1$	21.45195	4.915892	4.363796	0.0033
$\beta_2$	-106.1626	24.14946	-4.396065	0.0032
R-squared	0.749402	Mean dependent var		132.8380
Adjusted R-squared	0.677802	S.D. dependent var		175.1090
S.E. of regression	99.39618	Akaike info criterion		12.27943
Sum squared resid	69157.20	Schwarz criterion		12.37021
Log likelihood	-58.39715	Durbin-Watson stat		2.138462

Analyzing the data in Table 1 we can draw the following conclusions:

- the values of standard errors of the coefficients of the regression function are inferior to the values of the coefficients, taken as a module, which strengthens the validity of their estimation, sustained also by small value of probability;
- the correlation coefficient, with a value of 74.94% show that the statistical relation between the dependent variable – GDP and the endogen variables VC and VL is relatively strong; the changes of the central and local revenues are included in a high proportion in the changes of the gross domestic product;
- the Durbin-Watson test, with a value slightly above the critical threshold 2, indicates that the residual variables are not auto-correlated.

Therefore, we can consider that the model is representative to describe, at a macro economical level, the relation between state central revenues and local collectivities revenues, on the one hand and the gross domestic product on the other hand.

After establishing the coefficients, the model can be:

$$\text{GDP} = - 387.3163782 + 21.45195097 \cdot \text{VC} - 106.1625854 \cdot \text{VL} \quad (4)$$

From relation (4) we can conclude that in the timeframe 1985-1994 in Romania the growth of central revenues had a positive impact over the gross domestic product, whereas local revenues have a negative influence. The change of central revenues with one unit triggers the change of the gross internal product with 21.45195096 units in the same way, whereas the change with one unit of the local revenues triggers an opposite change of the GDP with 106.1625854 monetary units.

**2. Modeling the impact of the policy of central revenues and local revenues over the economic growth during the timeframe 1995-2005** is based on a multifactor regressive model in the form:

$$Y = \alpha + \beta_1 * X_{VC} + \beta_2 * X_{VL} + \varepsilon \quad (5)$$

where:

- Y is the dependent variable, GDP (the gross domestic product);
- $\alpha$  = free term coefficient;
- $\beta_{1,2}$  independent variables coefficients -  $X_{VC}$  și  $X_{VL}$  (VC means central revenues and VL local revenues);
- $\varepsilon$  = random variable;

The model will be:

$$GDP = \alpha + \beta_1 * VC + \beta_2 * VL + \varepsilon \quad (6)$$

The results obtained after modeling the three statistical series are those presented in Table 2:

Table 2

Statistical tests for modeling the impact of central and local revenues over the GDP in Romania (timeframe 1995-2005)

Dependent Variable: GDP				
Method: Least Squares				
Date: 06/14/07 Time: 12:29				
Sample: 1995 2005				
Included observations: 11				
GDP= $\alpha$ + $\beta_1$ *VC+ $\beta_2$ *VL				
	Coefficient	Std. Error	t-Statistic	Prob.
$\alpha$	-12.96915	5.501606	-2.357339	0.0461
$\beta_1$	8.140320	0.262857	30.96864	0.0000
$\beta_2$	0.021456	0.018755	1.144014	0.2857
R-squared	0.993515	Mean dependent var		108.9485
Adjusted R-squared	0.991893	S.D. dependent var		96.88203
S.E. of regression	8.722922	Akaike info criterion		7.396786
Sum squared resid	608.7149	Schwarz criterion		7.505303
Log likelihood	-37.68233	Durbin-Watson stat		2.186037

Analyzing the data in Table 2 we can draw the following conclusions:

- the values of standard errors of the coefficients of the regression function are inferior to the absolute values of the coefficients, taken as a module, which strengthens the validity of their estimation, sustained also by small value of probability;
- the correlation coefficient, with a value of 99.35% show that the statistical relation between the dependent variable – GDP and the endogen variables VC and VL is very strong; the changes of the central and local revenues are included in a high proportion in the changes of the gross domestic product;
- the Durbin-Watson test, with a value around the critical threshold 2, indicates that the residual variables are not auto-correlated.

Therefore, we can consider that the model is representative to describe, at a macro economical level, the relation between state central revenues and local collectivities revenues, on the one hand and the gross domestic product on the other hand.

After establishing the coefficients, the model can be:

$$\text{GDP} = - 12.96914755 + 8.140320412*VC + 0.02145591897*VL \quad (7)$$

From relation (7) we can conclude that in the timeframe 199—2005 both the growth of central revenues, as well as that of the local ones has a positive impact over the economic growth. The change of central revenues with one unit triggers the change of the gross internal product with 8.140320412 units in the same way, whereas the change with one unit of the local revenues triggers a of the GDP with 0.02145591897 monetary units in the same way.

#### **4. DISCUSSION**

The financial decentralization process in Romania has began rather late, compared to other countries and has been accelerated with the perspective of joining the European Union. The implementation of a decentralization frame-law has represented an important step for accomplishing the objectives in this respect. Although the decentralization process is still not finished yet, some beneficial effects and results are already visible, which is also observed from the analysis performed.

#### **5. CONCLUSIONS**

The conclusions drawn from the two econometric models can be synthesized as follows:

- During 1985-1994 only central revenues influence the gross domestic product positively, whereas local revenues have a highly negative influence. This confirms the state option in the respective period for a centralized administrative regime. The measures that needed to be taken then were targeted to increasing the efficiency of local collectivities to determine a positive influence of local revenues over economic growth. We can say that accomplishing this objective can be done in a financial decentralization model, because this regime triggers a competition between different local collectivities, which can lead to an increase of their efficiency;

- In the timeframe 1995-2005 the problematic changes because some regulations in the field of financial decentralization lead to a positive effect of local revenues over economical growth. The influence of central revenues over GDP tends to be reduced, showing a gradual growth of the local collectivities importance;
- Although local revenues influence changes, the extent to which gross domestic product is determined by these revenues is quite small. However, taking into consideration the fact that the first decentralization frame-law has been adopted in 2004, it is to be expected that this influence increases along with the fulfillment of the decentralization objectives;
- From what we observed by analyzing the econometric models we can ascertain that, in Romania's case, financial decentralization has beneficial effects over economy, which will be seen more intensely in the period to come.

## REFERENCES

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## FINANSIRANJE LOKALNOG RAZVIJANJA U RUMUNIJI

### Rezime:

*U zadnje vreme, specijalisti, mnogobrojni političari i faktori odluke razumeli su potrebu razvojnisti na dugi period, koja može utvrditi rekonstrukciju ekonomskog razvoja, tražeci lokalna i globalna rešenja, ekonomska, tehnička ili politička rešenja, što se tiče revnopravne isporuke i podvlačenje pravih vrednosti.*

*Finansiska descentralizacija razlikuje se u svakoj državi u odnosu na sabranost državnog rukovodstva i stepen zavisnosti lokalnih vlasti koji podlegnu centralnih jurisdikcija i počinje funkcionisati iza granice gde korišćenje opstih materijalnih dobra počinje se skupljati, a komparativna cena rešenja na centralni nivo postaje povišena.*

*Ciljevi finansiske descentralizacije imaju u vidu efikasna deljenja finansiskih sredstava, pravica snabdevanja opstih sredstava na različite geografske površine, osiguranje makroekonomske stabilnosti i promovisanje ekonomskog razvoja.*

*Ovo delo predlaže isticanje da u Rumuniji na makroekonomski nivo, toliko kantitativno koliko kalitativno, odnosi između unutrašnjeg proizvoda bruto (PIB) i nivo opstih prihoda na lokalni i centralni nivo.*

*ključne reci:*

*finansiranje, lokalna samostalnost, razvitak (razvijanje), ekonometrička analiza, lokalni razvoj*