

## **FISCAL DECENTRALIZATION IN MACEDONIA: RECENT DEVELOPMENTS AND CHALLENGES<sup>1</sup>**

By Marjan Nikolov, M.Sc.

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### **Abstract**

The public, donor community and the political subjects in Macedonia are occupied with the issues of decentralization. The bills package on territorial division, financing LSG and the status of the capital Skopje have passed the government/parliament procedure. In this paper some recent developments and challenges on the newly enacted law on financing LSG will be presented. We will use the main pillars of fiscal decentralization approach. Also, an attempt is made to estimate the fiscal capacity of LSG by using three techniques: the own revenue collection, GDP per LSG and the representative tax system with regression analyses. The deficiency here is the availability of data. Namely the revenue data are available for the NUTS 4 level that is the 34 LSG from the before 1996 territorial organization. Estimation is conducted for the unconditional horizontal equalization formula in accordance with the new law on financing LSG. In the end some administrative implication from the law are illustrated and some comments on the statistical information system in the country related to the LSG are illustrated.

**Key words:** Fiscal decentralization, fiscal capacity, equalization, economies of scale, expenditure assignment, own source revenues, intergovernmental transfers.

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## **Theoretical comments on fiscal decentralization**

Fiscal decentralization is assigning fiscal decision-making powers and management responsibilities to lower levels of government in a devolved government system (Boex [2001]). Devolution is a process of shifting responsibilities for government functions and expenditures from the central to the local governments in which the local governments are granted substantive decision-making authority. The main pillars of fiscal decentralization are:

1. Expenditure responsibilities (clear definition of what will be the responsibilities of the LSG)
2. Revenue assignment (each revenue stream must follow a function responsibility)
3. Intergovernmental fiscal transfers (ensure vertical and horizontal fiscal balance)
4. Subnational borrowing (require well suited regulation, strong financial institutions and good management of macroeconomic environment)

The expenditure responsibilities are what should we first start with when the decentralization is on the agenda. The experience of many economies in transition shows that without a specific expenditure assignment, it is revenue availability that dictates the responsibility of each government level and this situation leads to institutional instability and again to an inefficient provision of public services (Martinez-Vazquez [1998]). This stage will define and separate the functions and the responsibilities of each level of government. Interesting enough, even though this is the most important part of the fiscal decentralization, the public debate was much more on the revenue assignments that should match the responsibilities of the LSG in Macedonia. The stage of revenue assignments must give answer to the questions how much revenues must be devoted to

the assigned responsibilities, what will be fiscal source and what mechanism will assure those revenues stream. In addition to the assigning revenue sources, the central government may precede with additional revenues transfer to LSG through fiscal transfers or grants. Once the expenditure/revenue scheme is put on place the central government may decide on the possibility of LSG to finance their fiscal deficit with borrowing and/or issuing debt.

Fiscal decentralization is a pure economic problem and politics should be put aside. It is a simple principle of efficiency in providing certain service to the consumer with the lowest efficient level of government organization (the “subsidiarity” principle). Classical example is that the basic school service is more efficient to be provided by the municipality because the citizens of that municipality will send their children to study near the place they live and they best know how to organize it in terms of capacity, transportation, auxiliary services, school management decision making etc. It is not efficient for the central government to organize it because they do not know the day-to-day needs of the citizens, they do not take into account (or it is too costly) the difference in culture and education needs at local level. It is the monitoring and information gathering cost for the central government that prevents it to be more efficient than the local government in this example. On the other side the central government may provide a broad legal framework in order to set up a general standards. Now, take into account the classical example of military services. The protection of the state is more efficiently provided by the central government because of more efficient use of information to organize an army, less costly coordination, it is a public good and a general need for the whole state.

Some implementation rules for fiscal decentralization (Bahl [1999]) are that the finance should always follow function, there must be a strong ability to monitor and evaluate decentralization, one intergovernmental system doesn't fit the urban and the rural sector, the design of the intergovernmental transfer system should match the objectives of the decentralization reform, recognition that intergovernmental systems are always in transition and that must be taken into account and planned. In Macedonia a threat to the decentralization process is the modest public debate about all of these rules.

### **Basic facts about Macedonian LSG organization**

Macedonian administration system is a two-tier system with central government and 123 LSG-municipalities. The average model Macedonian municipality versus diversity is presented in the next table:

By the law on territorial division from 1996	Lowest	Average	Highest
Inhabitants	456	15821	118079
Area (in km <sup>2</sup> )	6	201	606
Local roads (km)	2	31	159

What is the optimal size of LSG? The philosopher Plato says that the ideal city should have a size sufficient to deliver all-important functions but be small enough to protect the unity of the city. Thus, even the great philosopher is admitting the dichotomy

and the trade off of this optimization problem. Of course that other factors should be taken into account like economic efficiency, urban/rural, developed/undeveloped, agriculture/industrial, near border municipalities, cultural, ethnical and other economic, social and political considerations. For illustrational purposes the average model municipalities in selected countries is presented in the next table (source Swianiewicz [2002]):

	% Municipalities below 1000 inhabitants	Average population	Average area (km <sup>2</sup> )
Serbia and Monte Negro	0	49500	487
Bulgaria	0	35000	432
Poland	0	16000	130
Macedonia (Law-1996; census 2002)	4	16443	209
Slovenia	3	10300	106
Hungary	54	3300	32
Czech Republic	80	1700	13

Can we say by the results from the table above that Macedonia is fragmented country? We can see it is in between the extremes of Bulgaria on one side and Czech Republic on the other side.

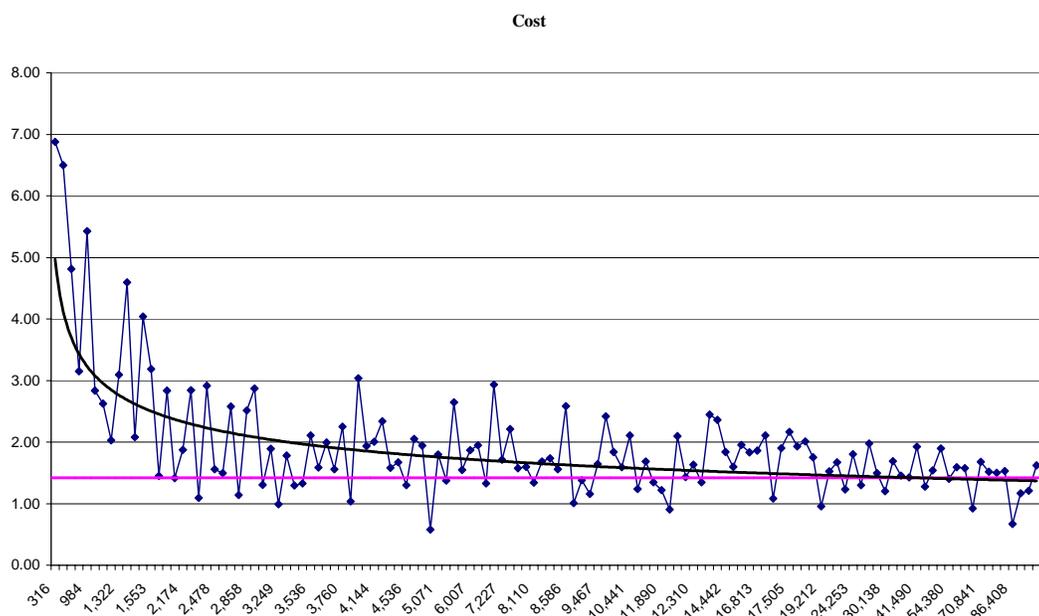
Here we will present analysis of the economies of scale of the administrative costs in the context of the LSG size in Macedonia.

The administrative costs composite index is calculated from three variables:

1. Number of employees in the LSG administration per capita;
2. Salaries over total expenditures at the LSG;
3. Total municipality budget expenditure in the LSG per capita.

This index will help in this microeconomic efficiency analysis. The inputs are the employees and their salaries in the municipalities' administration and the municipality administration budget. The output measure is the number of citizens served in the relevant municipality.

The administrative cost composite index for each of the 123 LSG in Macedonia is



illustrated in the next figure.

From the figure we can see that by increasing the number of inhabitants in the LSG in Macedonia the administrative cost composite index is diminishing. The black line is a quadrate regression of the population behavior and the red line is the average composite index for Macedonia.

What the figure illustrates is the increasing economies of scale of up to 6000 inhabitants in the Macedonian municipalities (by doubling the inputs we get more than double citizens served). The increasing economies of scale are diminishing significantly from 316 up to 6000 inhabitants and latter we can say that there are constant economies of scale in serving citizens depending on the size of municipality. In Macedonia with the census 2002 and territorial division from 1996 there are 52 municipalities with less than 6,000 inhabitants with some 150,000 total population.

From the figure one can see that the optimal minimal size of LSG in Macedonia is around 6000 inhabitants if the criteria is the cost for municipality administration in rendering administrative services. This is close to the threshold of 5000 in the Slovenian territorial model and the 6000 in the Bulgarian model.

### **Expenditure assignments**

In this section first part is devoted to the envisaged expenditure responsibility assignment as from the new law on financing LSG and the second part some quantitative analysis will be conducted.

#### **Assignment of the new expenditure responsibilities**

Interesting enough for the case of Macedonia is that first the bill on financing the LSG was set for government procedure and than the law on territorial division. Usually it

is more logical first to know how many municipalities there will be so that certain simulations and analyses regarding the financing can be done. Nevertheless, the assignment of expenditures will be based on gradual shifting of responsibilities to municipalities through a phased approach.

The monitoring of the overall development of the financing system will be a responsibility of a commission set up by the government (article 15 from the law).

The commission will be responsible in front of the government for:

1. Monitoring implementation of the criteria for the central government transfers,
2. Will give recommendations for improving the system and overcome the deviations identified,
3. Will take care about the transparency,
4. Gives opinion about the formula for transferring the unconditional grant from the VAT and about the methodology for distribution of block grants.

The commission have representatives from: Ministry of LSG, finance, science and education and labor and social policy each assigning one representative and five representatives from ZELS. However, this commission will have no decision making power. For each phase of the decentralization process there will be separate commissions that will appraise if the conditions are met for the respectful phase (article 45 and 46).

Thus, one should differentiate among three commissions:

1. Commission for the overall monitoring of the system
2. Commission responsible for the first phase conditions
3. Commission responsible for the second phase conditions

The two step phased approach of assigning responsibility is illustrated in the next table:

Phase	Starting date	Assignment of responsibility	Conditional on
1. Phase	January 1 <sup>st</sup> 2005	<ol style="list-style-type: none"> <li>1. Transferring own revenues from tax sources (the PIT sharing) to municipalities (GOV)</li> <li>2. Developing a methodology for transferring the capital and earmarked (GOV)</li> <li>3. The LSG will start with the plan implementation of solving the liabilities and arrears up to 31<sup>st</sup> of January 2001 (LSG)</li> </ol>	<p>If 90 % of the total municipalities comprising 90 % of the total population will provide:</p> <ol style="list-style-type: none"> <li>1. At least 2 financial officers</li> <li>2. At least 3 tax experts</li> </ol>
2. Phase	Conditional	<p>Assignment of the responsibilities (for the block transfers):</p> <ol style="list-style-type: none"> <li>1. Culture</li> <li>2. Social welfare and child protection (kindergartens and homes for elderly)</li> <li>3. Education (primary and secondary school)</li> </ol>	<ol style="list-style-type: none"> <li>1. All the conditions from phase 1 are satisfied</li> <li>2. A proper capacity of the financial officers (this is already stated in the previous phase)</li> <li>3. Viable results of 24 months for on time and regular reporting confirmed by the ministry of finance</li> </ol>

		<p>4. Healthcare (public health organizations and primary care)</p>	<p>4. There are no accounts payable than usual ones (what usual ones means?)</p> <p>5. The phase commission will evaluate if all the conditions are satisfied</p> <p>6. There is a written request from the municipalities to the proper ministry and the ministry of finance for block transfers after all the conditions are satisfied.</p>

The municipalities have full responsibility for those assignments in terms of current (wages, maintenance etc) expenditures, capital (investment) expenditures, management issues, hiring and firing teachers, school management organization and management as regulated in separate laws for the appropriate areas.

### Quantitative analysis of the expenditure responsibilities

The vertical fiscal balance illustrated as expenditures by different levels of government is illustrated in the next table (as % of 2003 GDP):

General Government	34.19 %
Central Government	21.27%
Extra-budgetary funds	19.8 %
Local Governments	1.7 % (only 0.9 % in 2001)

The only 1.7 % of GDP expenditures from the LSG in Macedonia compared with the 21.27 % of GDP expenditures from the central government lists Macedonia in one of the most centralized countries in the world. The new proposed law will change the situation as presented in the next table:

Local Governments sharing type tax (3 % from PIT, 100 % artisans PIT) equalizing transfer (3 % VAT)	2.1 %
Block grants included (9 billion education, 30 million health, 1 billion social protection and 500 million culture)	6.1 %

Block grants as % of 2003 GDP are:

	LSG transfer in MKD	Central budget 2003 in MKD
Education	3.4 % (around 9 billion)	3 % (around 9 billion)
Health	0.01 % (around 30 million)	0.1 % (around 350 million)
Social protection	0.4 % (around 1 billion)	6 % (around 17 billion)

Culture	0.2 % (around 500 million)	0.6 % (around 1.5 billion)
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Comparative data for some selected countries are presented in the next table (Levitas [2003]; Oplotnik and Brezovnik [2003]; Ivanov [2003]).

Country	Share of local expenditures in GDP	Year
Serbia and Monte Negro	5.6	2003
Bulgaria	7.33	2002
Poland	12	1999
Macedonia (Law 1996)	0.9	2001
Macedonia (Law 1996)	1.7	2003
Macedonia (Law 2003)	6.1	2003 <sup>3</sup>
Slovenia	5.31	2001
Hungary	11.1	1999
Czech Republic	8.6	1999

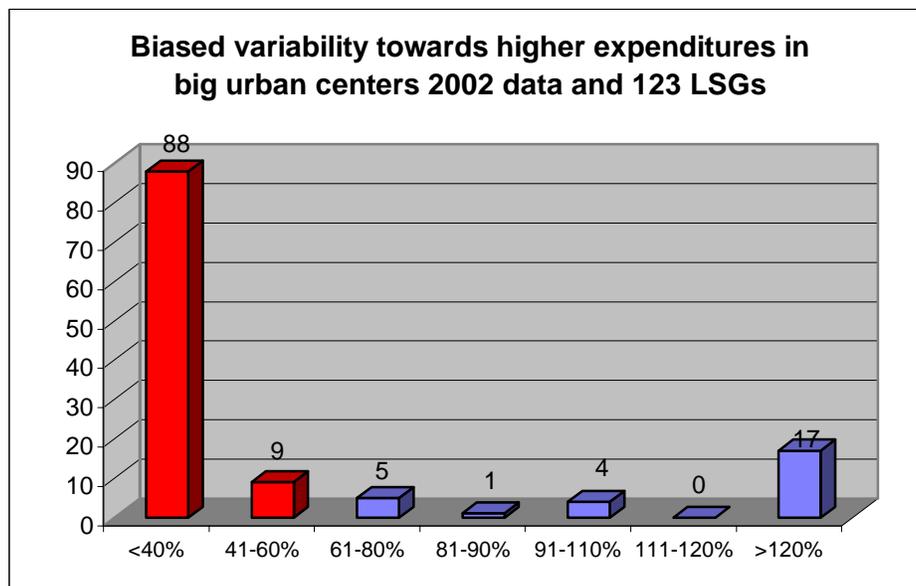
The actual LSG expenditures for 2002 in Macedonia are:

	Lowest	Average	Highest
Current (as % of total)	22	84	100
Wage bill (as % of current)	7	45	100
Investment (as % of total)	0	16	78

<sup>3</sup> CEA estimate.

In per capita term			
Current (in \$ US)	3	12	102
Wage bill (in \$ US)	1	5	27
Investment (in \$ US)	0	3	38

The variability among municipalities related to the expenditure responsibilities are presented in the next figure.



From the figure above we can see that 72 % (88 municipalities) are realizing less than 40 % of the average expenditures from the total. This is unacceptable diversity of unbalanced development and an argument to maybe induce a discussion of as two tier system by introducing a regions just for purpose of more balanced development. The high LSG disparity was confirmed also with other studies (for example see Nikolov, Stojkov, Bogov 2004).

## The revenue assignment

Before the new law on financing the following sources of financing and their amount for 2001 were available to the LSG<sup>4</sup>.

**SOURCES OF MUNICIPAL REVENUES IN 2001 in MKD**

Source	Actual 2001
<b>Revenues from taxes:</b>	
Property tax	
Tax on specific services	
Fees on utilization and licenses for carrying out activities	
<b>Non-Tax revenues:</b>	
Enterprenuership profit and profit from property	
Administrative tax and allowances	
Other non-tax revenues	
<b>TOTAL:</b>	<b>847,617,410</b>
<b>Special purposes Grants from the State Budget</b>	
From the Road Fund	595,831,269
From the Water Found	22,000,000
Agency for the Underdeveloped regions	571,376,343
Program for water supply	179,488,667
Program for physical and detailed urban plans	27,734,439
Program for village revitalization	24,496,121
Program for electrification	10,425,717
Program for mass media in cities	16,000,000
<b>TOTAL:</b>	<b>1,447,352,556</b>
<b>Block Grants</b>	
<b>TOTAL:</b>	<b>0</b>
<b>General fiscal assistance</b>	
From " surplus revenues"	258,718,000
<b>TOTAL:</b>	<b>258,718,000</b>
<b>Reimbursements for costs of delegated functions</b>	
Reimbursements for costs incurred for local elections	0
<b>TOTAL:</b>	<b>0</b>
<b>TOTAL:</b>	<b>2,553,687,966</b>

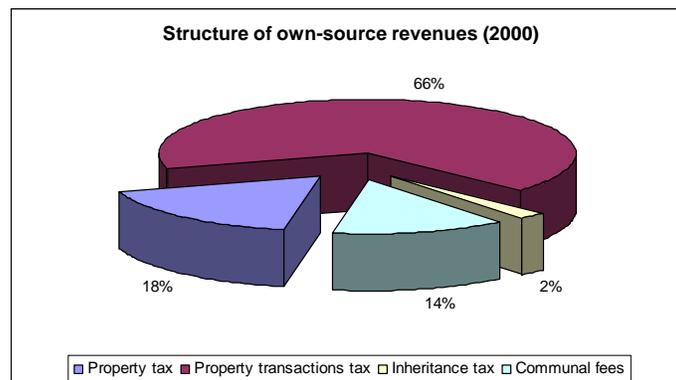
We can note a high fiscal dependency of LSG on the central government in 2001 (67 % of municipal revenues derived directly from the national government; the comparable “dependency ratio” for local governments in the average EU country is 45 %).

<sup>4</sup> It is worth to note that the 2003 municipal sources of revenues amounted 4.5 billion MKD.

The road fund transfers are in accordance with 5 criteria: number of vehicles, fuel consumption, road network size, population and LSG area.

Another source of earmarked equalization is the Agency for Underdeveloped Regions. These financial assets should be earmarked with accepted by the Agency investment and similar programs but the practice is heavily politically driven.

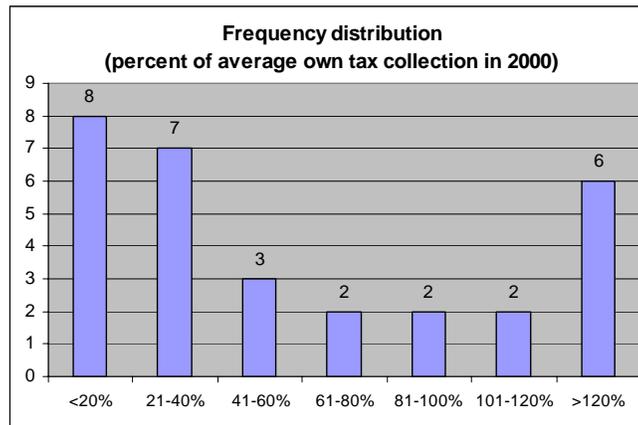
The breakdown of own source revenues is illustrated in the next graph.



Before the new law on financing, the law on budget was defining the local finances and the budget process. With the law on limiting public consumption the cap system was defined for Macedonian LSG. The assessed and collected own tax revenues and fees are transferred into the treasury system of Macedonia. These revenues are distributed once again to the LSG in accordance with the formula: 80 % criteria population, 10 % criteria the LSG area and 10 % the number of settlements. The special status of the city of Skopje requires the city to receive around 38.5 % and the consisting LSG within Skopje the remained 61.5 %. The revenues above the cap are distributed in the second half of the year as general grants in accordance with government decisions.

The next figure shows the own tax collection distribution. Twenty out of 30 local units of the PRO are collecting less then the average collection. The uneven distribution

is due to low incentives for collection, the cap system deficiencies and because the LSG do not have the authority to collect their own revenues. That is why the pilot project for four LSG to collect their revenues was launched last year and it proved success so far.



The new law on financing LSG is identifying the following sources of financing:

***Own source revenues:***

1. Own sources of revenues
  - a. Local taxes (property tax, transfer of property tax, inheritance tax and gift tax)
  - b. Local fees (communal fees, administrative fees)
  - c. Local charges (construction land charges, communal activity charges, spatial planning charges)
  - d. Revenues from property (rents, interests, capital revenues from property sale)
  - e. Donations
  - f. Fines
  - g. Self contributions

2. Donations (a contract between the donator and the mayor after approval from the LSG council)
3. Self contributions (LSG council decision defines all related variables)

***Sharing type revenues:***

4. Personal income tax revenues (sharing tax distributed in at least 12 transfers.)
  - a. 3 % from the PIT of the salaries collected from the LSG on which territory the employee lives. The 2002 census can help a lot in identifying these data, since in Macedonia the employer is responsible for paying the PIT on behalf of the employee. (Around 250 million MKD per year)
  - b. 100 % PIT collected from artisan activities. (Around 5 million MKD per year).

***Transfers from the central government:***

5. VAT revenues (3 % from the total collection in the last year before the new fiscal year. Equalization fund with criteria for redistribution in dependence of at least 50 % from the population in the LSG and 50 % dependence on other criteria stipulated by the methodology defined by the government. The proposal for the methodology is on the minister of finance in agreement with the commission for monitoring of the development of the financing system. The proposal deadline is 30<sup>th</sup> of June in the current year for the next fiscal year. The methodology will have separate provisions for the city of Skopje. Around 700 million MKD).
6. Earmarked transfers-categorical grants (depending on projects and programs. The appropriate funds and ministries are monitoring the earmarked funds usage. Any

- notified irregularities would trigger the funds and the ministries to stop the execution of transfers).
7. Capital transfers. (In accordance with programs specified by the government. The appropriate funds and ministries are monitoring the earmarked funds usage. Any notified irregularities would trigger the funds and the ministries to stop the execution of transfers).
  8. Block transfers. (In accordance with article 22 paragraphs 5, 7, 8 and 9 from the law on LSG. The appropriate funds and ministries are responsible for defining methodology and criteria based on formula for transfer. Distributed in at least 12 transfers. There is no specific date stipulated when the methodology could be available).
  9. Delegated competency. The mayor and the appropriate ministry responsible for the competency are signing contract.

The following table illustrates the revenue sources with the new law for the LSG.

Total budget revenues around 2.6 billion MKD		Block transfers 10.530 billion MKD (as per 2003 central budget)				Transfers with the new law 955 million MKD		
Total revenues administrative budget 2001	Total other funds 2001	Education	Health	Social protection	Culture	3% transfers from PIT (2003 base)	100 % transfers from PIT on artisans	3 % VAT transfer (2003 base)
1,000 million	1,600 million	9 billion	30 million	1 billion MKD	500 million	250 million	5 million	700 million

## Measuring fiscal capacity

Fiscal capacity can be defined as ability of the LSG to raise revenues from its own sources in order to be able to cover standardized set of public goods and services. It is a challenge to measure the fiscal capacity of the Macedonian LSG.

Here we will present three measurements of fiscal capacity for Macedonia and illustrate in the table below their comparison.

	PROS	CONS
Revenue collection	<ol style="list-style-type: none"> <li>1. Data readily available (at least for 30 LSG in accordance with the PRO organization)</li> <li>2. Easily to understand and transparent</li> <li>3. Easy manipulation with the data</li> </ol>	<ol style="list-style-type: none"> <li>1. Different level of enforcement</li> <li>2. Different level of compliance</li> <li>3. Different tax rates</li> <li>4. Low level of incentives</li> </ol>
Gross Domestic Product	<ol style="list-style-type: none"> <li>1. Total value of goods and services produced in the LSG</li> </ol>	<ol style="list-style-type: none"> <li>1. Data availability (last time 1995 Gross Social Product from the State Statistical Office; this year for the first time GDP for 1998 and 2002 UNDP project)</li> </ol>
Representative Tax System with regression analyses	<ol style="list-style-type: none"> <li>1. When insufficient data are available for conventional RTS system</li> </ol>	<ol style="list-style-type: none"> <li>1. Fiscal data requirements</li> <li>2. Less transparent and difficult to understand</li> </ol>
Total Taxable Resources (not used in this paper)	<ol style="list-style-type: none"> <li>1. Improves the GDP based approach</li> </ol>	<ol style="list-style-type: none"> <li>1. Data requirements</li> <li>2. Complex data manipulation</li> </ol>

### *1. Revenue collection*

For the purpose of estimating the fiscal capacity we can use the own tax revenues (property tax, transfer of property, gift and inheritance tax and communal tax) and their

actual collection or their assessment. The advantage is that we can get readily and timely data from the PRO (at least for the 30 LSG). The disadvantage is the reduced incentives for LSG to collect the revenues. Other disadvantage is the variability of enforcement and compliance within different local units of PRO. At the moment one disadvantage of the property tax system is the self-assessment and lack of audit.

The methodology usually requires adjusting the actual revenue collection with the population and the price levels among LSG. Since Macedonia is a small country, the price level is similar across LSG and we will only use the per capita revenue collection.

### ***2. Gross Domestic Product per capita***

Data for GDP are available for 1998 and 2002 based on the UNDP project on improving statistical information system for the LSG. It is a good measure because it is irrespective of the residence of the worker and/or the company.

### ***3. Representative tax system with regression analyses***

With this technique we will estimate the effect of the size of LSG tax base on revenue collections by using the OLS regression technique. We will use the total own revenue collection among the 30 PRO local units as dependent variable. The independent variable will be the GDP per capita for 2002. The algebraic representation of the OLS estimation is:

$$\text{Revenue collection} = \alpha + \beta \cdot \text{GMP} + \varepsilon$$

the term  $\varepsilon$  can be interpreted as the result of the different levels of fiscal effort among the LSG.

The results from the estimation are presented in the next table<sup>5</sup>:

Dependent Variable: REV				
Method: Least Squares				
Date: 10/14/04 Time: 19:34				
Sample: 1 30				
Included observations: 30				
REV=C(1)+C(2)*GMP				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	141.8806	73.38554	1.933359	0.0634
C(2)	0.000531	0.000205	2.587962	0.0151
R-squared	0.193027	Mean dependent var	313.8667	
Adjusted R-squared	0.164206	S.D. dependent var	186.4987	
S.E. of regression	170.5004	Akaike info criterion	13.17969	
Sum squared resid	813971.1	Schwarz criterion	13.27311	
Log likelihood	-195.6954	Durbin-Watson stat	1.925028	

The coefficient of determination is very low. The estimated parameter however is statistically significant. The fiscal capacity will be defined as the proxies from the prediction of the above equation on the basis of the tax base (GDP).

<sup>5</sup> E-Views software package estimation.

**Alternative measures for the fiscal capacity of the Macedonian LSG  
(PRO Nomenclature of organization)  
(Ranking: 1 is the lowest performance and 30 is the best performance)**

LSG	Own Revenue collection per capita (available for 30 PRO units)		GMP per capita PPP based (available for 123 LSG 2002)		Representative tax system with regression analysis	
	Level	Rank	Level	Rank	Level	Rank
Kicevo	239	12	172,562	1	233	1
Gostivar	303	20	184,745	2	240	2
TETOVO	388	25	190,836	3	243	3
Debar	251	15	195,761	4	246	4
K.Palanka	251	14	207,101	5	252	5
Probistip	225	10	213,257	6	255	6
Struga	436	26	219,283	7	258	7
Kumanovo	324	23	219,413	8	258	8
Valandovo	280	18	222,134	9	260	9
Kocani	199	8	248,638	10	274	10
Kratovo	173	4	251,683	11	275	11
Delcevo	186	7	253,044	12	276	12
M.Brod	162	3	267,041	13	284	13
Vinica	173	5	271,382	14	286	14
Krusevo	161	2	305,662	15	304	15
Kavadarci	352	24	318,816	16	311	16
Berovo	235	11	324,000	17	314	17
PRILEP	158	1	330,156	18	317	18
Ohrid	1,015	30	333,655	19	319	19
Negotino	253	16	342,662	20	324	20
Resen	495	27	343,505	21	324	21
Veles	219	9	352,318	22	329	22
STRUMICA	321	22	362,426	23	334	23
STIP	317	21	377,914	24	342	24
Gevgelija	249	13	415,174	25	362	25
Radovis	264	17	435,197	26	373	26
BITOLA	561	28	448,092	27	380	27
D.Hisar	185	6	457,423	28	385	28
Sv.Nikole	285	19	461,052	29	387	29
SKOPJE 01	756	29	999,151	30	672	30
Min	158		172,562		233	
Max	1,015		999,151		672	
Average	314		324,136		314	
Coefficient of variation	59		48		26	

The correlation coefficients for the alternative measures of fiscal capacity for the Macedonian LSG are presented in the next table.

	RA	GMP	RTS
Correlation			
RA	1		
GMP	0.44	1	
RTS	0.44	1.00	1

We can conclude relative consistency with one another of the three measures of fiscal capacity. The correlation for the RTS and the GMP is understandable because it is a regression of these two variables and the predicted scores we are using.

Recommendation is strong statistical unit within the state statistical office and separate departments for LSG within the ministry of finance and the ministry of LSG in order to achieve quality in the statistical information system.

At the moment we can benefit the favorable circumstance for fiscal capacity estimation by using TTR system because the GDP PPP data are available for 2002 and the census data are for 2002. But this is separate complex research that requires additional precise and exact data (the problem of origin based and HQ based businesses and personal income tax payment and all the subsidies and transfers adjustment for social and pension and other contributions) but it is achievable. On the other side the RTS with the regression analyses is less transparent and understandable for policy makers.

Thus, Macedonia can in the beginning start with the RA system adjusted for the information from the pilot projects and to build capacity in the state statistical office for regular GDP calculation per LSG and other necessarily data for the TTR system to be in use. Still, it is up to the government to set up clear objectives on what they want to

achieve because the different measure of fiscal capacity can give different ranks for the LSG relative one on another. Consider the LSG Demir Hisar from above table. Demir Hisar ranks very good as per GDP (28 rank) but experience very bad ranking as per revenue collection (only 6). The situation is ambiguous and it comes from the natural resources this LSG has in forestry and that influence a high GDP per capita but low tax base for revenue collection and that is why it ranks very bad. Maybe a solution could be for the concessions on natural resources to be transferred to the LSG and/or maybe to use a variable on natural resources in the equalization formula. It is arguable but it depends on what the government wants to achieve.

Interesting enough is the program that started this year on pilot project for devolving the administration of property tax to LSG for 2005 taxation. The four pilot projects comprise the LSG: Veles, Gostivar, Sveti Nikole and Struga (four LSG from the before 1996 organization but 19 LSG from the 123 LSG). The last information about the improvement of efficiency in the collection is illustrated in the next table<sup>6</sup>:

Increase of the collection by taxes for the period Jan-Sep 2004 after devolution of administration			
Property tax	Transfer of property tax	Inheritance and gift tax	Communal tax
41.9 %	195 %	106.4 %	16.6 %
Forecast of the collection for the end of the 2004 (CEA forecast)			
56 %	260 %	142 %	22 %

<sup>6</sup> I would like to thank Mr. Ace Kocovski, the mayor of Veles, for the data provided.

## **Equalization issues**

With the new law the unconditional equalization fund (from the VAT transfers) will depend at least 50 % from the population. The formula will be defined within the ministry of finance and approved by the commission responsible for the monitoring of the development of the financing system. With the new law the cap system will be abolished as a source for equalization and it is my opinion that the agency for underdeveloped regions should be abolished and transformed into capital investment agency that will deal with the capital grants.

In the next table and figure we are estimating and simulating the unconditional equalization transfers to the LSG as if it depends 100 % from the population. Also, we are using the data on increased revenue collection from the pilot project's LSG and map the appropriate increase to all LSG.

MUNICIPAL UNCONDITIONAL EQUALIZATION FUND

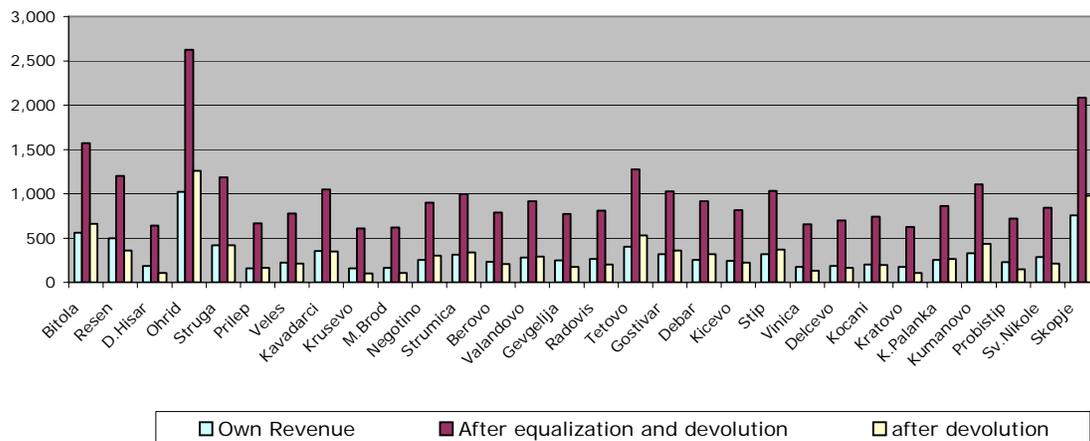
From central budget 2002 data

3 % from the VAT collection from the last year: 700,000 in 000 MKD

100 % population based	Population		Revenue current and forecast with devolution				Revenue per capita		
	Number of persons		in 1,000 denars				Own Revenue	Additional own after administration devolution	After equalization and devolution
	Original	Grant calculator-VAT	Own Revenue	Additional own after administration devolution	Total				
1 Bitola	105,644	36,563	59,399	69,940	165,902	562	662	1,570	
2 Resen	16,825	5,823	8,356	6,012	20,191	497	357	1,200	
3 D.Hisar	9,497	3,287	1,782	1,029	6,098	188	108	642	
4 Ohrid	61,256	21,201	62,403	77,117	160,720	1,019	1,259	2,624	
5 Struga	65,809	22,776	27,653	27,575	78,004	420	419	1,185	
6 Prilep	94,358	32,657	15,016	15,243	62,916	159	162	667	
7 Veles	66,541	23,030	14,612	14,140	51,782	220	213	778	
8 Kavadarci	42,882	14,841	15,152	14,907	44,900	353	348	1,047	
9 Krusevo	11,812	4,088	1,906	1,162	7,156	161	98	606	
10 M.Brod	11,686	4,045	1,943	1,252	7,239	166	107	619	
11 Negotino	23,757	8,222	5,980	7,128	21,330	252	300	898	
12 Strumica	92,625	32,057	28,832	31,417	92,306	311	339	997	
13 Berovo	19,458	6,734	4,579	4,023	15,336	235	207	788	
14 Valandovo	11,890	4,115	3,343	3,433	10,892	281	289	916	
15 Gevgelija	35,121	12,155	8,791	6,196	27,142	250	176	773	
16 Radovis	31,780	10,999	8,398	6,312	25,709	264	199	809	
17 Tetovo	189,066	65,435	75,542	99,831	240,808	400	528	1,274	
18 Gostivar	116,864	40,446	37,264	42,349	120,060	319	362	1,027	
19 Debar	24,251	8,393	6,147	7,707	22,247	253	318	917	
20 Kicevo	56,739	19,637	13,898	12,669	46,204	245	223	814	
21 Stip	51,808	17,931	16,461	19,174	53,565	318	370	1,034	
22 Vinica	19,938	6,901	3,462	2,673	13,036	174	134	654	
23 Delcevo	25,615	8,865	4,788	4,182	17,836	187	163	696	
24 Kocani	48,846	16,906	9,761	9,625	36,292	200	197	743	
25 Kratovo	10,441	3,614	1,812	1,093	6,519	174	105	624	
26 K.Palanka	24,964	8,640	6,299	6,634	21,573	252	266	864	
27 Kumanovo	137,382	47,548	45,213	59,303	152,063	329	432	1,107	
28 Probstip	16,193	5,604	3,657	2,412	11,673	226	149	721	
29 Sv.Nikole	21,355	7,391	6,094	4,471	17,956	285	209	841	
30 Skopje	578,144	200,095	438,455	565,777	1,204,327	758	979	2,083	
	2,022,547	700,000	936,998	1,124,787	2,761,785	463	556	1,365	

Standard variation	187	256	440
Coefficient of variation	40.3%	46.1%	32.2%

Municipal revenue per capita  
own revenue distribution and distribution  
after allocating the unconditional grant



We can see from the coefficient of variation that the formula is successful in equalizing. However there are three outliers: City of Skopje, Ohrid and Bitola. Additional improvements can be made in the formula but this will require additional research. One step could be to exclude the outliers by taking zero population for those LSG.

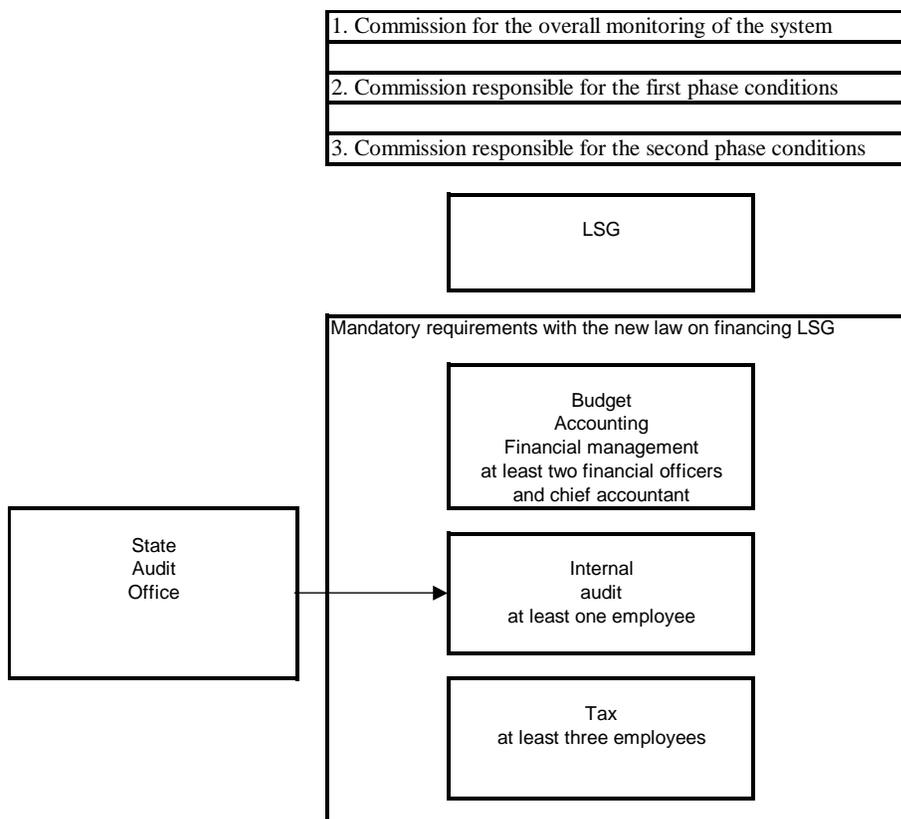
### **Administration and organization**

For the LSG administration the new law on financing the LSG will have the following mandatory requirements:

1. At least two financial officers responsible for financial management, budget preparation and execution and accounting.
2. Need for chief accountant (assigned by the mayor and with economic faculty and 5 years experience in finances).
3. Procedures and system for internal audit. (Internal auditors assigned by the LSG council on proposal from the Mayor). The internal auditor should have economic or faculty of law and two year experience in finances. The auditor is independent and responsible in front of the mayor and the LSG council (we would like to mention that the auditor is responsible in front of the laws and regulations and that his/her independence is guaranteed only with transparent mechanisms and instruments and not by declaring in the law. Internal audit can be conducted by other LSG in accordance with a contract. The state audit agency is also responsible for the audit of the LSG.
4. At least three employees responsible for tax assessment and collection. The Public Revenue Office (PRO) is organized in 6 regional centers with total of 30 local units. The information system is such that it is difficult to get data disaggregated

to all LSG. We hope that when the tax administration became a LSG administration the need for statistics on local level will be more appreciated. The employees of the ministry of finance and the PRO are deconcentrated in the 30 local units (financial and accounting department) and will become LSG employees as well as the premises, buildings and archives will be transferred to LSG. The LSG can sign contracts among themselves for administering own revenues.

The next figure illustrates the mandatory employment requirements stipulated with the new law on financing LSG.



## Statistical information system

The process of decentralization is complex and requires a lot of coordination and engagement of each sector of the government. For one to manage the process one will require data and information. In this part we will list institutions that can provide data and information related to the process of decentralization (at least for those we were using for our research):

1. State Statistical Office (SSO). This institution has conducted the census in 2002. Data are available on the 1994 census as well. The SSO was calculating up to 1995 the gross social product by municipality but with the new law on territorial division from 1996 they stopped the practice. The level of desegregation was following the NUTS 4 organization of the before 1996 territorial organization. Recommendation is for the SSO to continue the calculation of GDP per LSG. Another recommendation is for the SSO to organize separate department for LSG in their organization.
2. Many other government institutions are capable of providing data on NUTS 4 level (all ministries and PRO).
3. Financial statements per LSG on NUTS 5 (123 LSG) are available from the ministry of finance starting 2000 until 2003. Recommendation for the government is to organize a separate department within the ministry of finance that will deal with LSG issues.

## Conclusion

1. The process of decentralization was backed up by two important documents. First, the government program from 1999 and second, the strategy for reforming the public administration from May 1999. As a result the working team within the Ministry of LSG was established in March 1999. Macedonia signed the European charter in 1997. The process was on right track up to the 2001 crises and now is under additional pressure and risk after the Ohrid framework agreement was set up in 2001.
2. The process of decentralization in Macedonia started first with the revenue assignment of the LSG and the expenditure assignments were loosely assumed. No information on the LSG boundaries was available up to the last moment for parliament procedure. There were no analyses done on the efficiency of the newly enacted boundaries since it was heavily political driven process. There were no discussions on the administrative capacity and the fiscal capacity of the LSG. The proposed by the law territorial organization is challenged by the referendum that should happen in the early November 2004. The question of the referendum is whether we like the territorial organization from 1996 with 123 LSG or the new law on territorial organization with the proposed 84 LSG. The best description of the opponent's attitude about the new territorial organization is described by the Helsinki committee for human rights in Macedonia public announcement<sup>7</sup>:

*“The new law on territorial organization is (in its contents and the procedure for its enactment):*

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<sup>7</sup> All these statements are based on analyses of the law, which you can find in a compressed version at: [www.helkom.org.mk](http://www.helkom.org.mk).

- *Against the constitution of the Republic of Macedonia*
  - *Is overruling the law*
  - *Internally inconsistent*
  - *Against the Ohrid framework agreement.*
3. The process of decentralization is now on wrong track. It is wrong to assume the process of decentralization as only a tool for success of the Ohrid agreement. These problems occurred because of lack of risk assessment during this early stage of the decentralization process from the government. Also, it was mistake to connect the process of decentralization with the Ohrid framework agreement since the will and the process actually started in 1999 and now it is additionally complicated with the ethnic dimension. The government failed to sell the process to the citizens.
4. The territorial organization from 1996 shows increasing economies of scale for LSG up to 6000 inhabitants. With the census from 2002 and the territorial organization from 1996 there are 52 municipalities (150,000 population) with less than 6000 inhabitants out of 123.
5. The expenditure assignments in Macedonia will be conducted in a two stage process monitored by a government commission.
6. Macedonia is highly centralized country and high vertical imbalance with LSG expenditure of 1.7 % from the GDP compared with the central government expenditure of 21.27 % from GDP. With the new law the LSG will have expenditures in amount of 2.1 % from the GDP (from the PIT sharing and VAT

- unconditional grant) and in amount of 6.1 % from the GDP with the block grants included.
7. There is biased variability toward higher expenditures in the big urban centers and 88 LSG (72 % from 123) are realizing less than 40 % of the average expenditures from the total. This could be a good argument for a two tier LSG system for the purpose of more balanced regional development. But, this could be politically unacceptable.
  8. At the moment there are two equalization schemes. First is the cap system, which proved inefficient with no incentives for the LSG to comply (20 out of 30 LSG – NUTS 4 organization, are collecting less than the average collection from the total). The second is through the Agency for underdeveloped regions, which is highly politically influenced in their transfer decision process. With the new law there will be only one equalization scheme with the unconditional grant from the VAT. We suggest for the agency for underdeveloped regions to become agency for capital investment.
  9. Three techniques for measuring fiscal capacity are introduced. At the moment it seems reasonable to use the revenue collection approach (easily to understand and to get data) internalizing the experiences from the pilot projects for devolving the administration of property tax. In longer term the total taxable resources could be used since the state statistical office is capable of estimating the GDP by LSG and it can provide the other required data as well.
  10. We recommend for the horizontal equalization scheme a 100 % use of number of population, for the first year, since it is simple and is equalizing (lower coefficient

- of variation). Within one year the government should conduct additional research and simulations.
11. What needs to be additionally done is to investigate and produce the efficiency of the organizational structure of the municipalities, job descriptions, procedures, supervision, tax administration, citizen participation and information at the moment and the assessment of the training and financial needs for the status after the assignment of expenditure responsibilities during each stage of the decentralization.
12. We also recommend more focus on the statistical information system. The state statistical office is ready to assume some responsibility from capacity point of view. There is a need for new systematization in the ministry of finance and the need for LSG department is more than a needed. Only two persons working within the budget department (responsible for LSG) when the process is in the very beginning and with high priority is unacceptable and not serious.

## Literature

- [1] Boex Jameson; “An introduction overview of intergovernmental fiscal relations”, [2001]; Fiscal policy summer training courses at GSU-Atlanta
- [2] Bahl Roy; “Implementation rules for decentralization”, [1999]; Fiscal policy summer training courses at GSU-Atlanta
- [3] Martinez-Vazquez Jorge; “The assignment of expenditure responsibilities”, [1998]; Andrew Young School of Policy Studies at GSU-Atlanta
- [4] Swianiewicz Pawel edited by; “Consolidation or fragmentation”, [2002]; Local government and public service reform initiative -OSI
- [5] Plato; “Laws” and “Republic”, [360 BC]
- [6] Levitas Toni; “Reforming Serbia’s local government finance system”, [2003]; Serbian LGRP technical workshop on intergovernmental finance reform in Serbia – Belgrade 2003.
- [7] Ivanov Stefan; “Local finance and intergovernmental finance system in Bulgaria”, [2003]; Serbian LGRP technical workshop on intergovernmental finance reform in Serbia Belgrade 2003.
- [8] Oplotnik Zan and Brezovnik Bostjan; “Local self government in Slovenia”, [2003]; Serbian LGRP technical workshop on intergovernmental finance reform in Serbia Belgrade 2003.
- [9] Policy research center, School of public studies; “An analysis of alternative measures of fiscal capacity for regions of the Russian federation”. GSU 1997

[10] Jorge Martinez Vazquez and Jameson Boex; “Fiscal capacity: an overview of concepts and measurement issues and their applicability in the Russian Federation”, GSU 1997.

[11] Serdar Yilmaz and Sraps Bindebir, “Intergovernmental transfers: Concepts and Policy Issues”, Urban Finance Course at JVI April 2004.

[12] Marjan Nikolov, Aleksandar Stojkov, Dimitar Bogov; “Design and development of the regional and municipal profiling in the Republic of Macedonia”, Community Development Project – World Bank sponsored.

[11] Laws and regulations in the Republic of Macedonia.