

MEASUREMENT OF FISCAL CAPACITY FOR CROATIAN LRGUs

**Dubravka Jurlina Alibegović
The Institute of Economics, Zagreb**

**Fiscal Capacity Measurement of the Units of Local
Self-Government in Macedonia**

Skopje, Macedonia, 24-25 February 2005

Structure of the Paper

- Introduction
- General background
- Definition of fiscal capacity for LRGUs
- Measures of fiscal capacity for LRGUs
- Measures of fiscal capacity for Croatian LRGUs
- Measures of fiscal capacity for selected transition countries
- Difficulties in developing measures of the fiscal capacity for LRGUs
- Summary of the strengths and weaknesses and possible reform efforts

Introduction

- The concept of fiscal capacity and fiscal effort should be important factors in developing the system of intergovernmental transfers and grants
- Two major reasons for existence of transfers and grants:
 - additional revenue sources for financing L/R public goods and services
 - equalisation of resources between regions and local areas

Structure of the Paper

- Introduction
- General background
- Definition of fiscal capacity for LRGUs
- Measures of fiscal capacity for LRGUs
- Measures of fiscal capacity for Croatian LRGUs
- Measures of fiscal capacity for selected transition countries
- Difficulties in developing measures of the fiscal capacity for LRGUs
- Summary of the strengths and weaknesses and possible reform efforts

Local and regional self-government in Croatia

- Local self-government units
 - 426 municipalities
 - 124 towns (including the City of Zagreb)
- Regional self-government units
 - 20 counties
 - the City of Zagreb (local and regional)

Basic competences of LRGUs

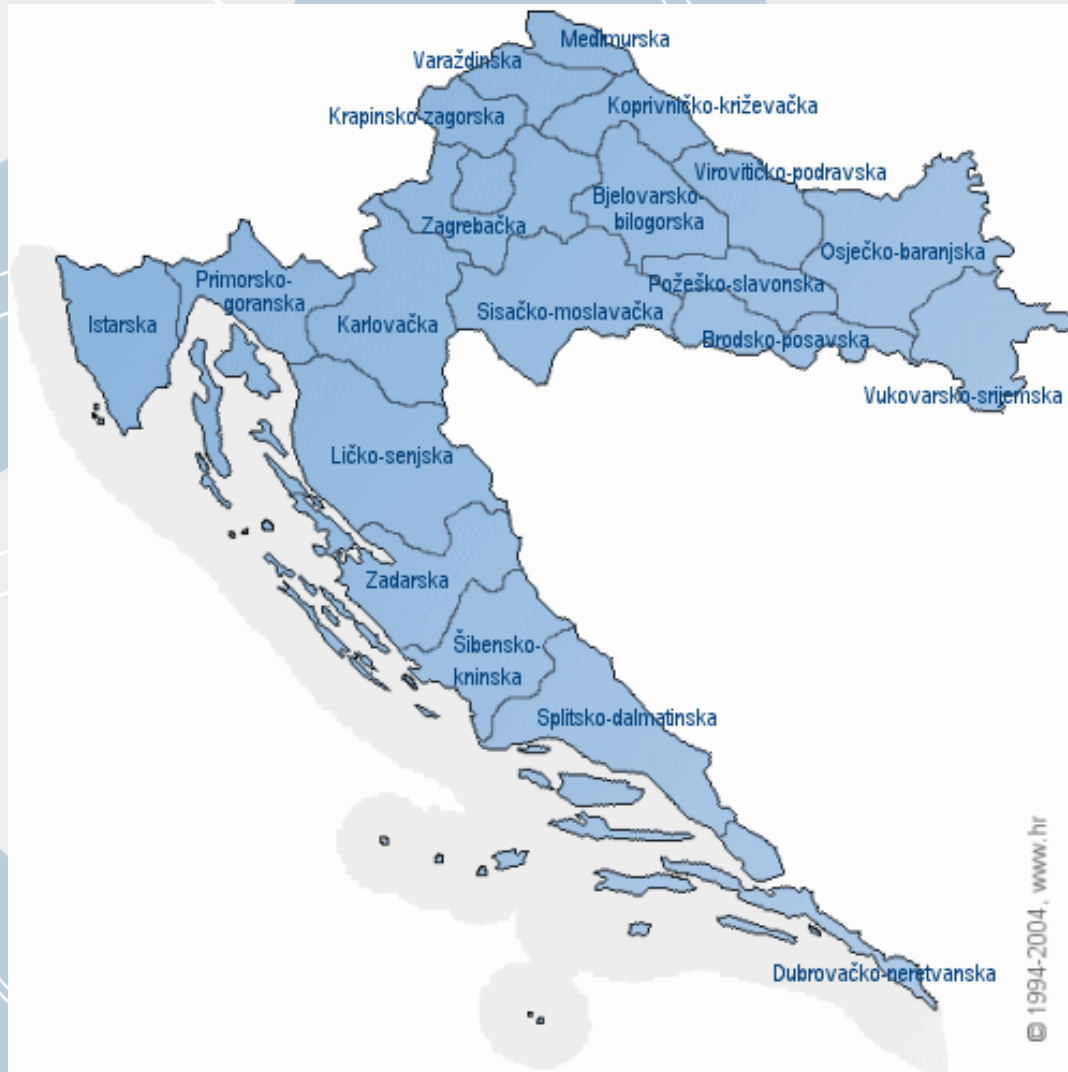
• **LGUs**

- community and housing planning
- physical planning and zoning
- utility services
- child-care
- social welfare
- primary health care
- primary and secondary education
- culture, physical culture, sports
- consumer protection
- environmental protection
- fire protection and civil defense

• **RGUs**

- education
- health care
- physical planning and zoning
- economic development
- traffic and transport infrastructure
- planning and development of the network of educational, medical, social and cultural institutions

Counties in Croatia



Revenue sources for LRGUs:

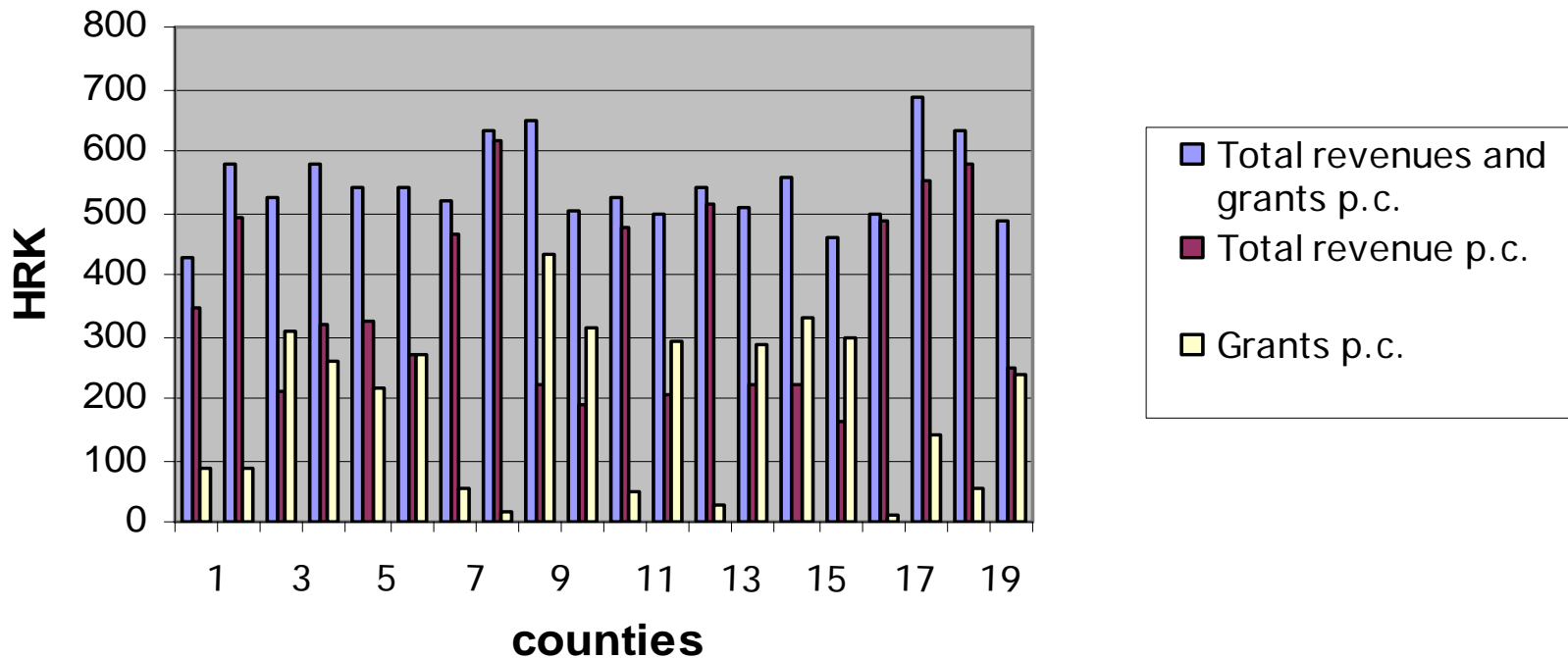
- own sources
 - income from own property
 - municipal and county taxes
 - fees and charges
- shared taxes
 - income tax
 - CG 25.6% + 21% equalization fund
 - RG 10% + share for decentralized functions 9.4%
 - LG 34% + share for decent. functions
 - profit tax
 - CG 70%, RG 10%, LG 20%
 - tax on real estate transactions
 - CG 40%, LG 60%

Revenue sources for LRGUs:

- grants and transfers from state and county budget
 - **grants from state budget** towards county budget and directly to LG in areas of special state concern
 - **grants from county budget** towards LG (directly or co-financing the capital expenditure)
- equalization grants for decentralized functions from state budget towards RG and LG to cover public expenditures in major services (education, health, social welfare, fire protection)
- shared revenues
 - from annual concession fees for pumping mineral and thermal water and for the use of water for the public water supply

Per Capita Revenue Differences

Per Capita Revenues, by Counties



Structure of the Paper

- Introduction
- General background
- Definition of fiscal capacity for LRGUs
- Measures of fiscal capacity for LRGUs
- Measures of fiscal capacity for Croatian LRGUs
- Measures of fiscal capacity for selected transition countries
- Difficulties in developing measures of the fiscal capacity for LRGUs
- Summary of the strengths and weaknesses and possible reform efforts

Definition of fiscal capacity for LRGUs

- the potential ability of the LRGUs to raise revenues from their own resources in order to pay for a standardised basket of public goods and services (Snah, 1997; Martinez-Vasquez and Jameson Boex, 1997)
- the ability of governmental jurisdiction to translate economic activity within its geographic borders into public spending (Chernick, 1998)
- a measurement of FC should be an important factor in determining the allocation of intergovernmental grants in order to equalise the amount of resources available to each of the regions or cities

Structure of the Paper

- Introduction
- General background
- Definition of fiscal capacity for LRGUs
- Measures of fiscal capacity for LRGUs
- Measures of fiscal capacity for Croatian LRGUs
- Measures of fiscal capacity for selected transition countries
- Difficulties in developing measures of the fiscal capacity for LRGUs
- Summary of the strengths and weaknesses and possible reform efforts

Measures of fiscal capacity for LRGUs

- the representative tax system (RTS)
- the representative tax system (RTS) using regression analysis
- the income with exporting
- the maximum amount of revenue
- per capita personal income
- gross regional product (GRP)
- the level of total taxable resources (TTR)

The representative tax system (RTS)

- fiscal capacity is defined as weighted sum of the major tax bases potentially available to the jurisdictions being compared
- $RTS_i = t_{PROP}B_{PROP,i} + t_{SALES}B_{SALES,i} + t_{INCOME}B_{INCOME,i} + t_{PROFIT}B_{PROFIT,i} + t_{OTHER}B_{OTHER,i}$
- *PROP* = property tax, *SALES* = general and selective sales taxes, *INCOME* = individual income tax, *PROFIT* = business income tax or profit tax, and *OTHER* = other small taxes
- the weight on each tax base is the average tax rate on that base

The representative tax system (RTS) using regression analysis

- the RTS regression method only requires information on the total amount of revenues collected for each region plus data on a series of proxies for the tax bases for each region

The income with exporting

- Resident income is augmented by a jurisdiction's ability to export a portion of the taxes to non-residents. Fiscal capacity is defined as:
- $FC = K^*Y(1 + e)$
- K^* = a standardised tax burden (the average resident tax burden for all jurisdictions); Y = per capita income; e = the average export ratio (*exported taxes/local taxes*, measures the revenue that comes from non-residents per money unit (EUR, USD, HRK) of tax paid by residents)

The maximum amount of revenue

- the maximum amount of revenue a jurisdiction could raise with its existing tax structure is concept of the fiscal capacity, which shows the existence of a revenue hill for LGUs

Per capita personal income

- the most common measure of fiscal capacity is the per capita level of personal income
- the main advantage of using per capita personal income as a measure of fiscal capacity is that its wide availability and its simplicity
- the problem with per capita income as measure of fiscal capacity is that it does not necessarily measure the tax bases available to each region well (sales taxes, tourist taxes, etc.)

Gross regional product (GRP)

- GRP is defined as the total value of goods and services produced by the region's economic resources (land, labour, and capital) over a given period of time
- GRP includes income generated within a region irrespective of the location of residence of the worker or producer

The level of total taxable resources (TTR)

- total taxable resources (TTR) are a measure of fiscal capacity that is closely related to gross regional product (GRP) plus the effect of certain federal taxes and transfers on the fiscal capacity of subnational regions

Required data and information

- number of population by jurisdiction
- number of families by jurisdiction
- data on market value of residential and commercial properties
- gross income
- individual income tax revenues
- property tax revenues
- local sales tax revenues
- business income tax or profit tax revenues
- other small tax revenues, and
- tax rates for every tax bases

Structure of the Paper

- Introduction
- General background
- Definition of fiscal capacity for LRGUs
- Measures of fiscal capacity for LRGUs
- Measures of fiscal capacity for Croatian LRGUs
- Measures of fiscal capacity for selected transition countries
- Difficulties in developing measures of the fiscal capacity for LRGUs
- Summary of the strengths and weaknesses and possible reform efforts

Measures of fiscal capacity for Croatian LRGUs

- FC = the real measure of the capability of revenue collection and expenditure finance
- FC = per capita income and the required sources for the public services finance by the local and regional governmental levels
- FC = the basis for the determination of the intergovernmental transfers and grants policy towards LRGUs, with the aim of balancing the development of all localities in the country
- two basic types of grants and transfers:
 - grants and transfers from the state and county budget to regional and local self-government units
 - equalisation grants for decentralised functions from the state budget to regional and local government to cover public expenditures in major public services (education, health care, social welfare and fire-protection)

FC and grants towards RG and LG in Area of Special State Concern

- **the primary aim** of the grant system is uniform provision of the public services
- grants are used as funds supporting LG with **poor fiscal capacity** and LG and RG in areas of special government concern
- **the basic criteria** for the calculation of grants for RG and LG in areas of special government concern are defined in the Budget Act
- LG and RG may use grants for financing the **obligatory expenditures**

FC and grants towards RG and LG in Area of Special State Concern - *cont.*

- **the criteria for the calculation of the grants for counties** in the areas of special state concern:
 - the number of inhabitants
 - the average revenues of the county budget
 - the average expenditure on capital programs, financed by the county budget

FC and grants towards RG and LG in Area of Special State Concern - *cont.*

- **the criteria for the calculation of the grants for municipalities and cities** in the areas of special state concern:
 - the number of inhabitants
 - the average revenues of the municipality and city budget
 - the average revenues in the area of special state concern
 - the share of expenditure for capital programs in the total expenditures
 - economically of the execution of the expenditures for the functions of the city
 - the correction variable for the gradual transition to

FC and equalization grants for decentralized functions

- **specific legislature** defines **the public functions transferred** from state level to county and city level
- **Decision** of the Government of Croatia defines **the criteria and coefficients for provision of the minimum financial standard of public needs for public services** (education, health, social welfare, fire protection)
- **Decree** of the Government of Croatia defines **the manner of calculating the amounts of equalization grants** for decentralized functions of LG and RG

FC and equalization grants for decentralized functions - *cont.*

- the financing of the **decentralized functions** has been taken-over by **counties, the City of Zagreb and 32 cities**
- the financing is secured by **the additional share of the income tax** for the decentralized functions
- in case of insufficient funds within the additional share of the income tax, they are entitled to **equalization grants**
- the financial resources allocated to each of the decentralized functions are decided on the basis of real expenditure and the minimal standards

The Formula for the Calculation of the Equalization Grant - Primary Education

- **$P_{O2001j} = MS_{O2001j} - [0,029 \times D_{2001j}] - S_{O2001j}$**
- P_{O2001j} = Grant for primary education in 2001 Lj
- MS_{O2001j} = The minimal financial standard, according to the decision of the Croatian government
- D_{2001j} = The realized income from the income tax (excluding local taxation) in the Lj area, minus the part of the local self-government units financing the primary education and the part of the local self-government units financing the decentralized functions
- $S_{O2001j} = [s_i + s_{pli}]$
- s_i = Executed expenditure from the state budget
- s_{pli} = contractual, unfulfilled obligations for the maintenance and equipment

Structure of the Paper

- Introduction
- General background
- Definition of fiscal capacity for LRGUs
- Measures of fiscal capacity for LRGUs
- Measures of fiscal capacity for Croatian LRGUs
- Measures of fiscal capacity for selected transition countries
- Difficulties in developing measures of the fiscal capacity for LRGUs
- Summary of the strengths and weaknesses and possible reform efforts

Measures of FC for selected transition countries

- have not been seen as the basis for equalisation system
- the reason: insufficient local government revenues and opportunities for transfers from the central budget
- the state treats equalisation transfers as an element of its influence over local governments
- the system of distribution of equalisation transfers involves more negotiation instead of the application of a concrete formula
- the result of the application of such equalisation transfers: not improvement situation in less developed local governments

Measures of FC for selected transition countries and equalisation grants and transfers

- the main measures of the FC are:
 - the amount of income tax revenues collected and minimum expenditures for public services
 - per capita income and expenditure needs
 - per capita revenues and expenditures
 - per capita shared expenditure and normative revenue
- equalisation procedure
 - no clear defined procedure
 - formula
 - differentiation of tax-sharing rates
 - combination of sharing rates and formula based equalisation

Structure of the Paper

- Introduction
- General background
- Definition of fiscal capacity for LRGUs
- Measures of fiscal capacity for LRGUs
- Measures of fiscal capacity for Croatian LRGUs
- Measures of fiscal capacity for selected transition countries
- Difficulties in developing measures of the fiscal capacity for LRGUs
- Summary of the strengths and weaknesses and possible reform efforts

Difficulties in developing measures of the fiscal capacity for LRGUs

- the problems to implement theoretical approaches in measurement FC:
 - the lack of reliable statistical data on the fiscal performance of LRGUs,
 - insignificance of local and regional own revenues for financing LRGUs,
 - insufficient fiscal discretion in expenditure policy and
 - failure to find appropriate measures, especially for expenditure needs
- insufficient database on the local and regional level, particularly concerning the number of inhabitants, the demographic structure, up to the economic indicators

Structure of the Paper

- Introduction
- General background
- Definition of fiscal capacity for LRGUs
- Measures of fiscal capacity for LRGUs
- Measures of fiscal capacity for Croatian LRGUs
- Measures of fiscal capacity for selected transition countries
- Difficulties in developing measures of the fiscal capacity for LRGUs
- Summary of the strengths and weaknesses and possible reform efforts

Summary of the strengths and weaknesses and possible reform efforts

- strengths
 - introducing criteria in grant and transfer system
- weaknesses
 - frequent changes in number and size of LGUs
 - frequent changes of criteria for fiscal equalisation and grant allocation
 - non existence of transparent data base
- reform efforts
 - continuous monitoring of L/R expenditures
 - allocation of the grants on the basis of FC and expenditure calculation