



EUROPEAN COMMISSION  
Structural Reform Support Services  
MEETING OF EXPERTS

# The reform of corrective and compensatory mechanisms in Italy and the analysis of the fiscal gap as a tool to orientate local fiscal policy

**SOSE S.p.A**

29-30th of January 2018  
Office of the Government,  
Room 263, Gedimino av., 11 Vilnius

DATI CHE CREANO VALORE.

[www.rose.it](http://www.rose.it)



# BRIEF DESCRIPTION OF SOSE SPA

Sose is owned by the Italian Ministry of Economy and Finance  
and Banca d'Italia.

It is the methodology partner for the strategic analysis of data in Tax,  
Government and Corporate matters.



The Company develops statistical-economic-ICT solutions in order to promote **tax compliance**. It also works at determining the “**Standard Expenditure Needs**” in the implementation of fiscal federalism in order to guarantee a more efficient and equitable allocation of resources.

Through the know how and experience accumulated over the years, SOSE offers **ad hoc solutions** to several public and private organizations.



Headquarters  
in Rome

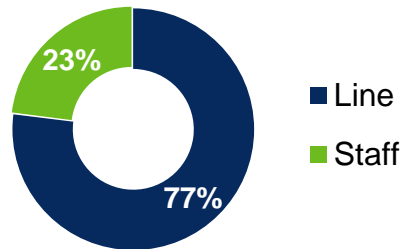


Since  
1999

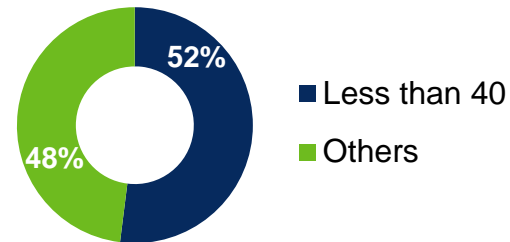


150  
Employees

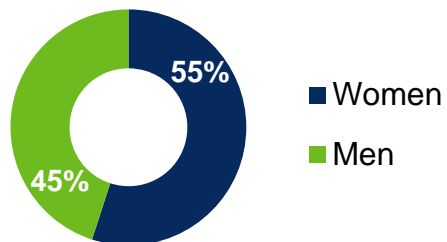
## TEAM



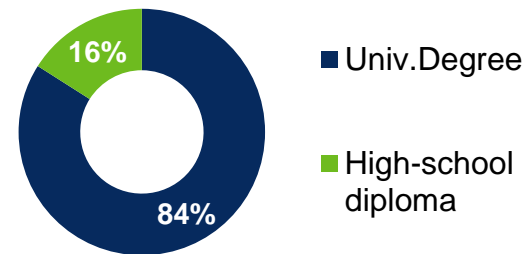
## AGE



## GENDER



## LEVEL OF EDUCATION



COMPLEX STATISTICAL  
ANALYSIS



MICRO-  
ECONOMIC ANALYSIS

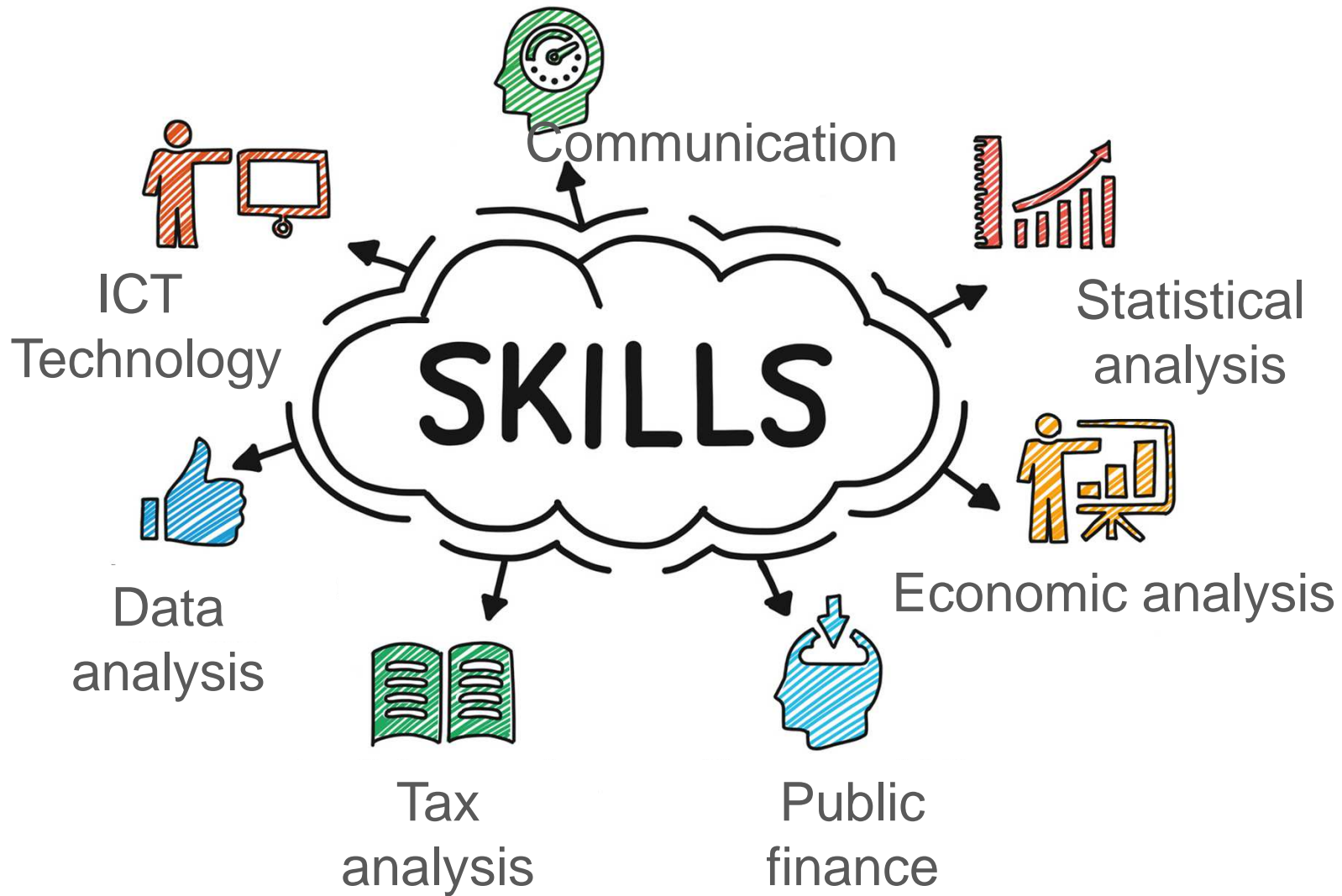


ICT



STRATEGIC  
DATA ANALYSIS





**WE PROVIDE SOLUTIONS FOR THE  
ECONOMIC SYSTEM**

**Tax  
Compliance  
Systems**

**Local  
Governments  
Expenditure  
Needs**

**Tax Studies**

**Economic  
Solutions**



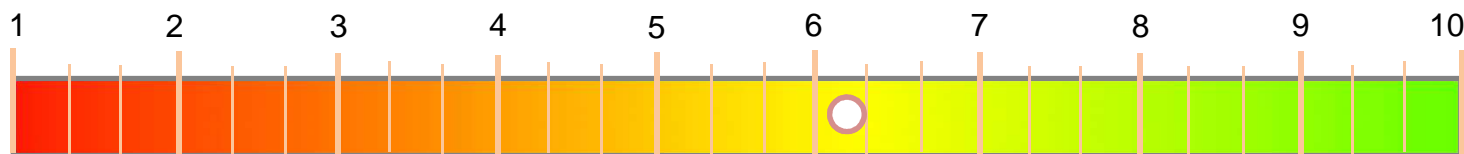
## SYNTHETIC INDEX OF RELIABILITY

An economic and statistical system to determine, based upon the data of the companies and their respective sectors of operation, acceptable levels of «tax reliability» in order to promote tax compliance

IT REPRESENTS EACH TAXPAYER'S POSITIONING RELATED TO HIS/HER TAX BEHAVIOR.

IT IS A SIMPLE AVERAGE OF ELEMENTARY INDICATORS.

The value of the synthetic index of reliability ranges **between 1 and 10**





SOSE elaborated and implemented a system for the evaluation of Standard Expenditure Needs of Italian Local Governments, with the goal of distributing intergovernmental funds in an equitable and transparent way

**...in a shared process  
with**



## Institutions



MINISTRY OF ECONOMY AND FINANCE



IFEL REPRESENTING THE MUNICIPALITIES



UPI REPRESENTING THE PROVINCES



ITALIAN NATIONAL INSTITUTE OF  
STATISTICS





**QUICK SELECTION AND ANALYSIS,  
SIMPLE UTILIZATION OF CONTROL  
TOOLS, EFFICIENCY, EFFECTIVENESS**

Analysis tools

Control indicators, efficiency  
parameters, risk measurement,  
profile selection

Standardization of the analysis  
process, report of support

B.I. innovative technologies

## MAIN PROJECTS



Impact analysis of tax incentives on Italian companies (Presentation to COMPIE conference 2014)



The incidence of VAT on the dynamics of private consumption: evaluation of the elasticity and of the effects on tax collection



Base Erosion and Profit Shifting - BEPS



Revision of amortization rates: analysis on tax collection of possible measures



SOSE provides solutions to companies and consultants in order to reach a deeper knowledge of their respective market segments



It is a tool helping to measure business performance and to get information to compete on the market.  
The objective of the analysis is to improve the management of the companies and orient their strategy by acting on different business models, levers of competition and marketing channels.



The Report provides a snapshot of the main economic sectors through a synthetic description of their structure and dynamics.  
A number of aspects are analyzed in order to assess the positioning and performance of the micro, small and medium-sized companies and of the main industries. Particular attention is also given to the various Business Models and to the competitive factors that can outline the possible evolutions of each industry.

## ECONOMIC AND STATISTICAL STUDIES

- ✓ Risk analysis
- ✓ Rating models (turnover, region, economic sector, organizational model, qualitative evaluation of ratios and flows, time trend...)
- ✓ Reports on economic sectors, regions, etc.
- ✓ Impact analysis of laws and regulatory actions

## MODERNIZATION AND REFORM OF TAX ADMINISTRATIONS AND LOCAL GOVERNMENTS

- ✓ Benchmarking systems to analyze and evaluate the performance of local and national Governments
- ✓ IT systems to facilitate the relation between tax administrations and taxpayers

## TAX COMPLIANCE

- ✓ Strategies and tools to promote tax compliance
- ✓ Definition of models for tax fraud risk

# OVERVIEW OF THE ITALIAN SYSTEM OF LOCAL PUBLIC FINANCE

## BACKGROUND INFORMATION ON ITALY: TIERS OF GOVERNMENT

**Regions (20 of which 5 with special statutes)**, 19% of total current public expenditure (143 billion euros);

### **Main expenditure responsibilities**

*Protection of health; Public transport; Complementary social welfare; Higher education and vocational training.*

**Provinces (93 of which 17 in special regions) and Metropolitan districts (14 of which 4 in special regions)**, 0,8% of total current public expenditure (6 billion euros);

### **Main expenditure responsibilities**

*Management of provincial road network; Management of public high school buildings; Environmental protection; Delegated functions by regions in local public transport and vocational training.*

**Municipalities (7.978 of which 1.351 in special regions)**, 6,8% of total current public expenditure (52,2 billion euros);

### **Main expenditure responsibilities**

*Environment protection and waste management; Social services, childcare and nursery schools; School-related services; Local police; Local transport and maintenance of local roads; Registry, Town planning and Central administration, Culture and recreation, Economic development.*



# BACKGROUND INFORMATION ON ITALY: INTERGOV. FISCAL RELATIONS

## Regions

- Protection of health is fully financed by formula grants and local taxes/fees
  - *fiscal equalization system is based on the difference between standard expenditure needs and fiscal capacity, health expenditure is standardized by the State General Accounting Department (Representative expenditure system based on the population structure by age), Regional fiscal capacity is computed by the Department of Finance*
- Other current expenditure items of regions (only those with normal statute) will be standardized by SOSE, the methodology is under construction

## Provinces and Metropolitan districts *(the whole system is under reform)*

- No equalization system in place, current expenditure is financed completely by local taxes
  - *current expenditure is standardized by SOSE, only for 86 local authorities in normal regions, using a Regression Cost Base Approach, this parameter has been used in the spending review program*

## Municipalities *(comuni) (6.627 local authorities in normal regions)*

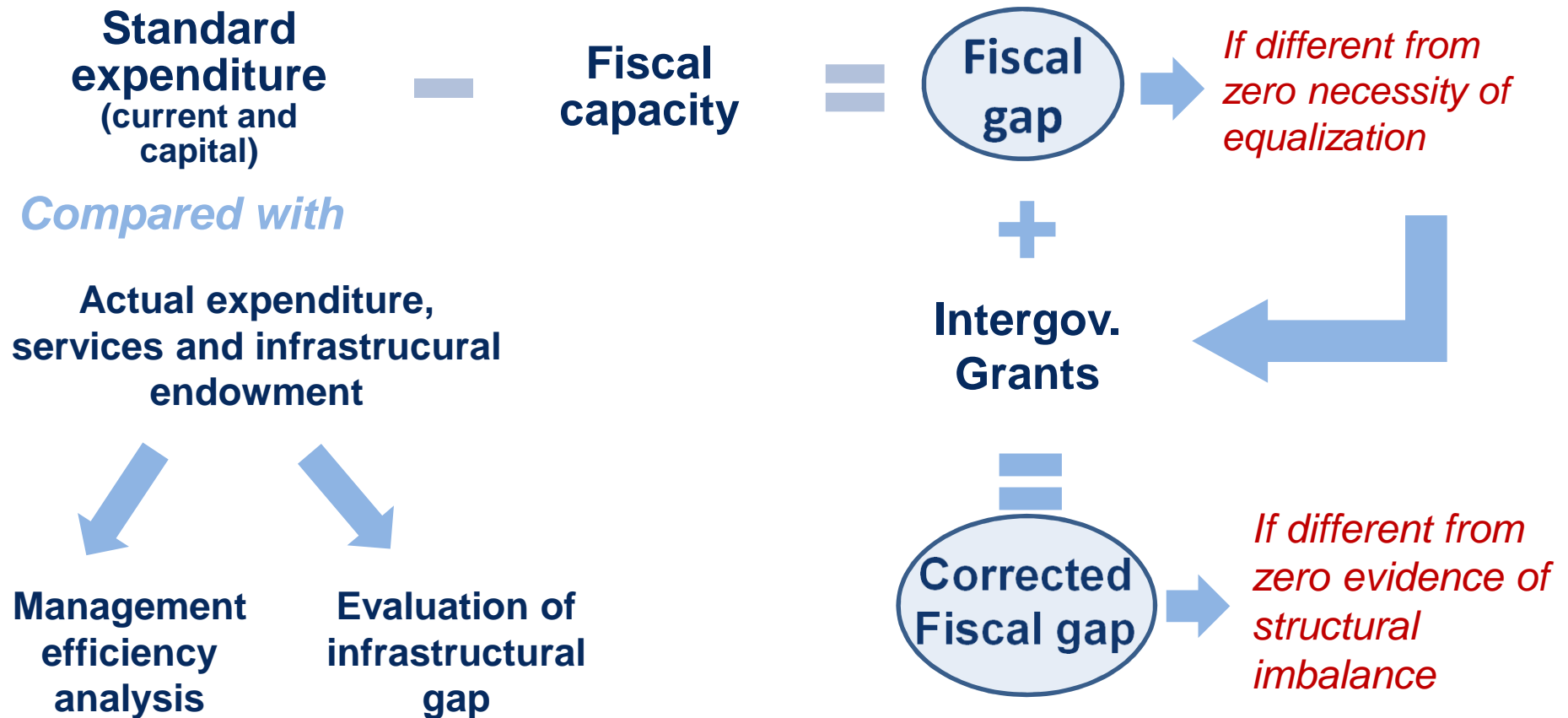
- Current expenditure is fully financed by local taxes/fees and formula grants (the transitional period from an equalization system based on actual expenditure will end in 2021)
  - *fiscal equalization system is based on the difference between standard expenditure needs and fiscal capacity, current expenditure is standardized by SOSE using a Regression Cost Base Approach, Municipal fiscal capacity is computed by the Department of Finance in cooperation with SOSE*

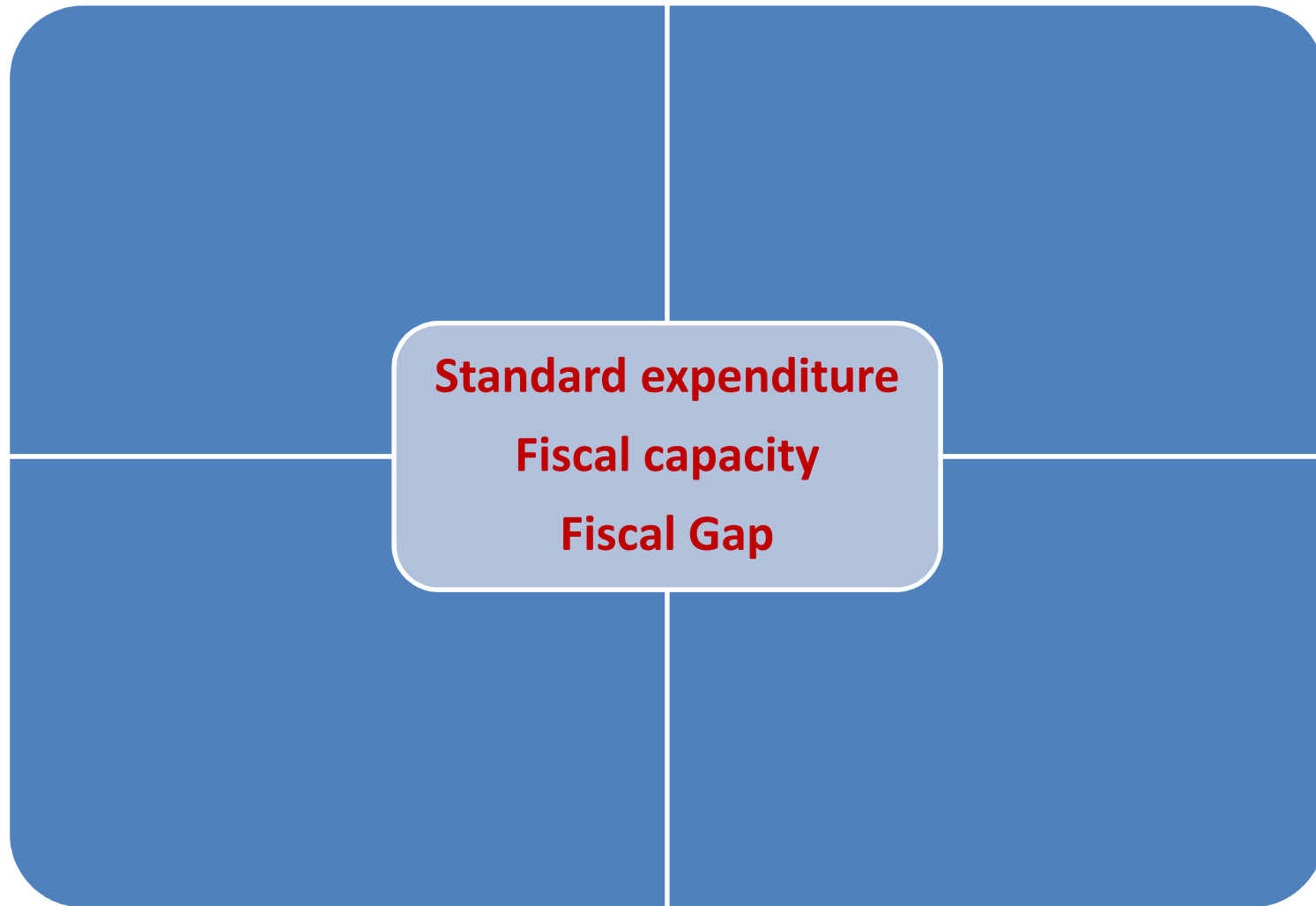
**EVALUATION OF STANDARD  
EXPENDITURE NEEDS AND FISCAL  
CAPACITY**



# THE POWER OF STANDARDIZATION - 1

*For each local government and in aggregate at macro level*





## Equalization system

(Corrective and compensatory mechanisms)

Standard expenditure  
Fiscal capacity  
Fiscal Gap



## Equalization system

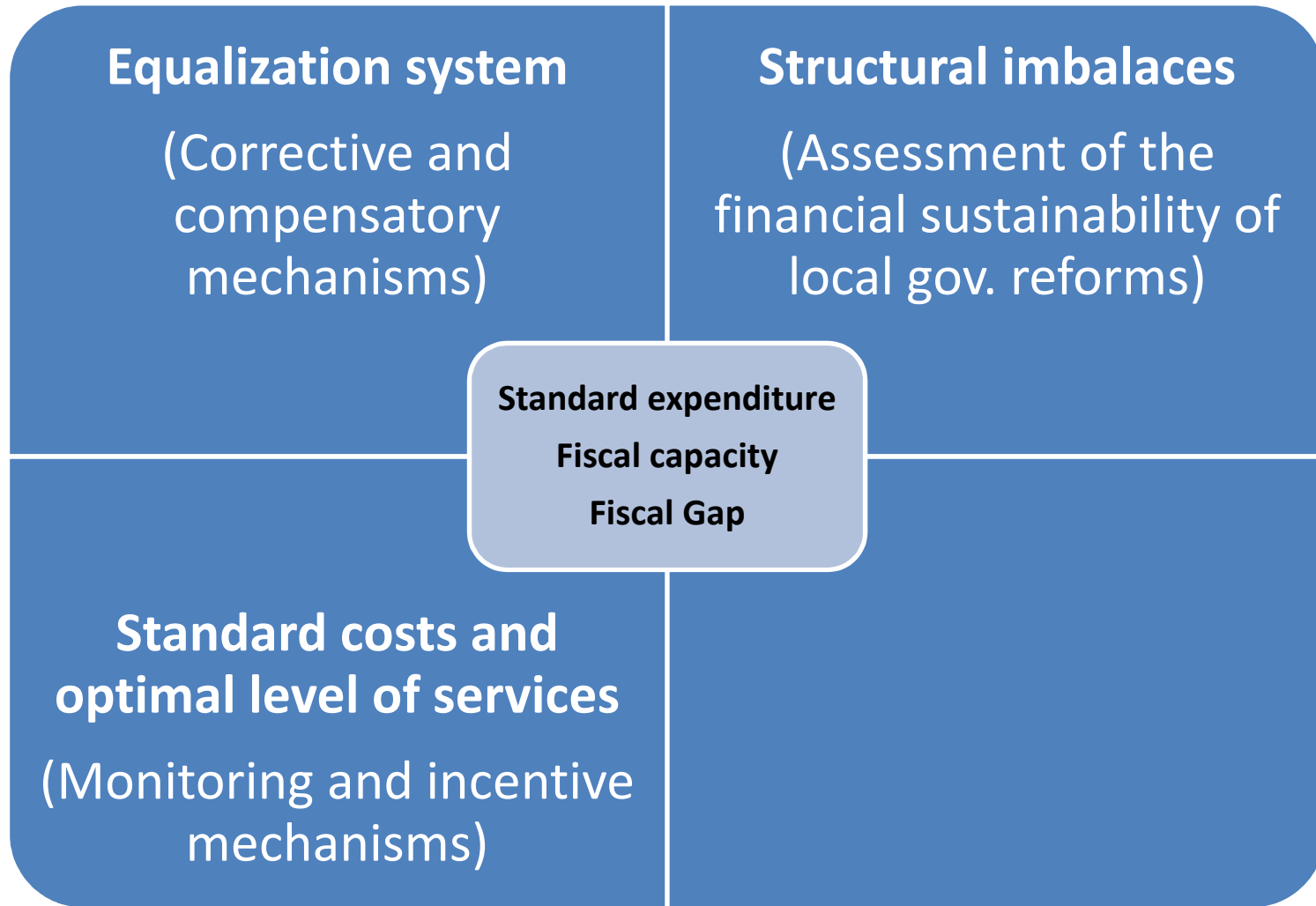
(Corrective and compensatory mechanisms)

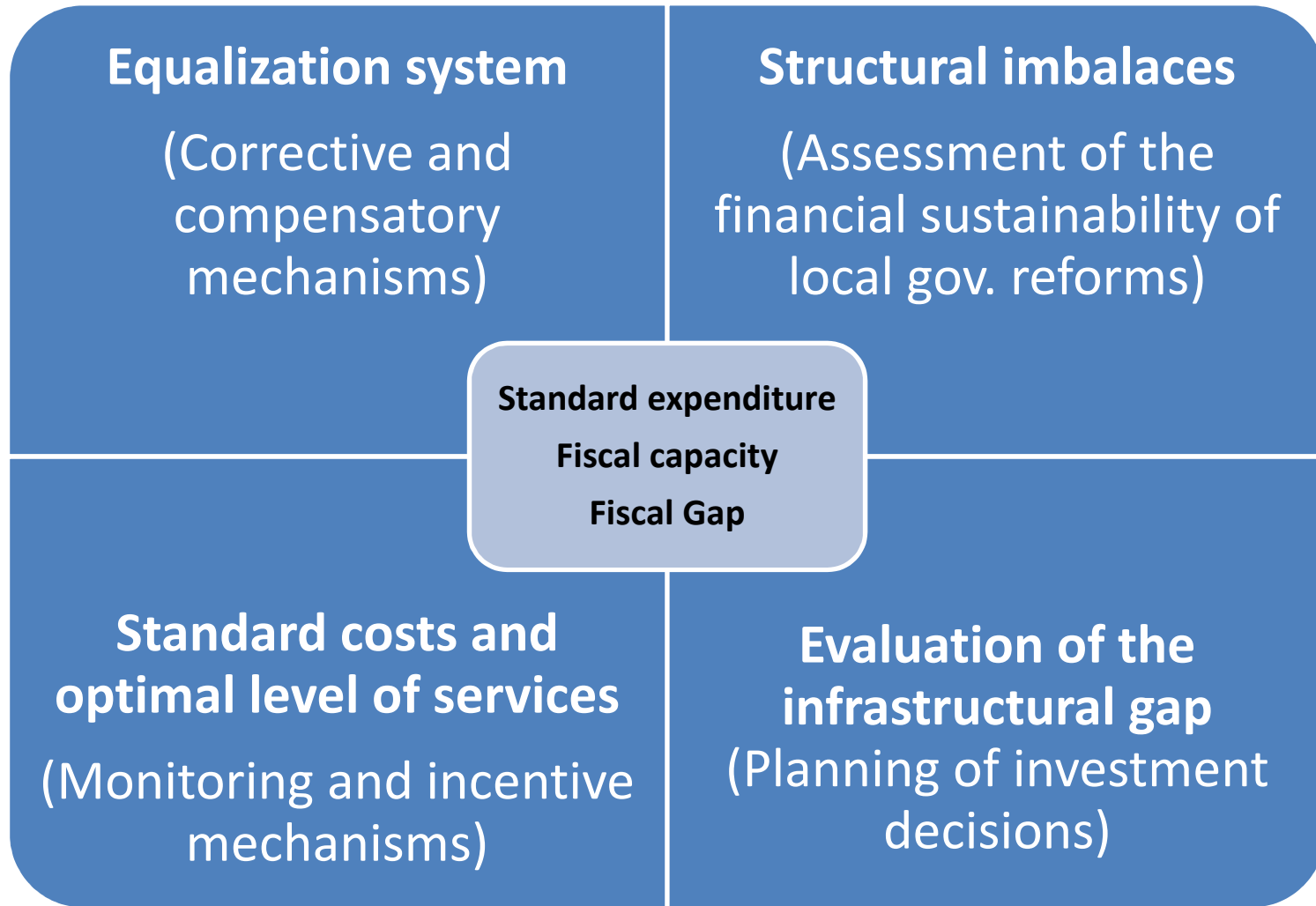
## Structural imbalances

(Assessment of the financial sustainability of local gov. reforms)

**Standard expenditure**  
**Fiscal capacity**  
**Fiscal Gap**







**SOSE METHODOLOGY RELIES ON FOUR MAIN PILLARS:**



**In Italy the same methodology is adopted for different local government tiers**

- **Municipalities (6627 units)**      => 8 functions using 85 variables
- **Provinces (86 units)**              => 5 functions using 12 variables
- **Regions (15 units)**                  => under construction

## Italy condominium



... resource management is handled through a system of coefficients and not to the negotiations of the different members

## Navigational compass



.... possibility to measure the level and the quality of local expenditures (benchmarking)



# THE THEORETICAL FRAMEWORK (REGRESSION COST BASE APPROACH)



## SUPPLY SIDE

### COST FUNCTION

$$y = s(g_s, g_e, p, A)$$

$y$  = total service cost

$g_s$  = exogenous load factors

$g_e$  = endogenous output

$p$  = input prices

$A$  = supply control variables (total factor productivity)

### Expenditure function

(reduced form of the cost function)

$$y = f(Q, R, p, A, g_s)$$



## DEMAND SIDE

### DEMAND FUNCTION

$$g_e = d(Q, R, y)$$

$g_e$  = endogenous output

$Q$  = demand control variables (preferences)

$R$  = income

$y$  = service cost

# THE THEORETICAL FRAMEWORK (REGRESSION COST BASE APPROACH)



## SUPPLY SIDE

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## DEMAND SIDE

### DEMAND FUNCTION

$$g_e = d(Q, R, y)$$

- $g_e$  = endogenous output
- $Q$  = demand control variables (preferences)
- $R$  = income
- $y$  = service cost

### Output function

(reduced form of the demand function)

$$g_e = h(Q, R, p, A, g_s)$$



## SUPPLY SIDE

## COST FUNCTION

$$y = s(g_s, g_e, p, A)$$

$y$  = total service cost

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$g_e$  = endogenous output

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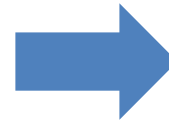
## Expenditure function

(reduced form of the cost function)

$$y = f(Q, R, p, A, g_s)$$

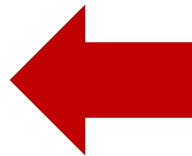
## Benchmark of expenditure

- Main pillar of the **new equalization system of municipalities** (with the fiscal capacity)
- Main variable to assess the sustainability of the **spending review program of provinces** (with fiscal capacity)



## Benchmark of output

- Evaluation of the **standard level of services**
- Main component of the **performance evaluation**
- Main component of a future **incentive system**



## DEMAND SIDE

### DEMAND FUNCTION

$$g_e = d(Q, R, y)$$

$g_e$  = endogenous output

$Q$  = demand control variables  
(preferences)

$R$  = income

$g_s$  = exogenous load factors

$y$  = service cost

### Output function

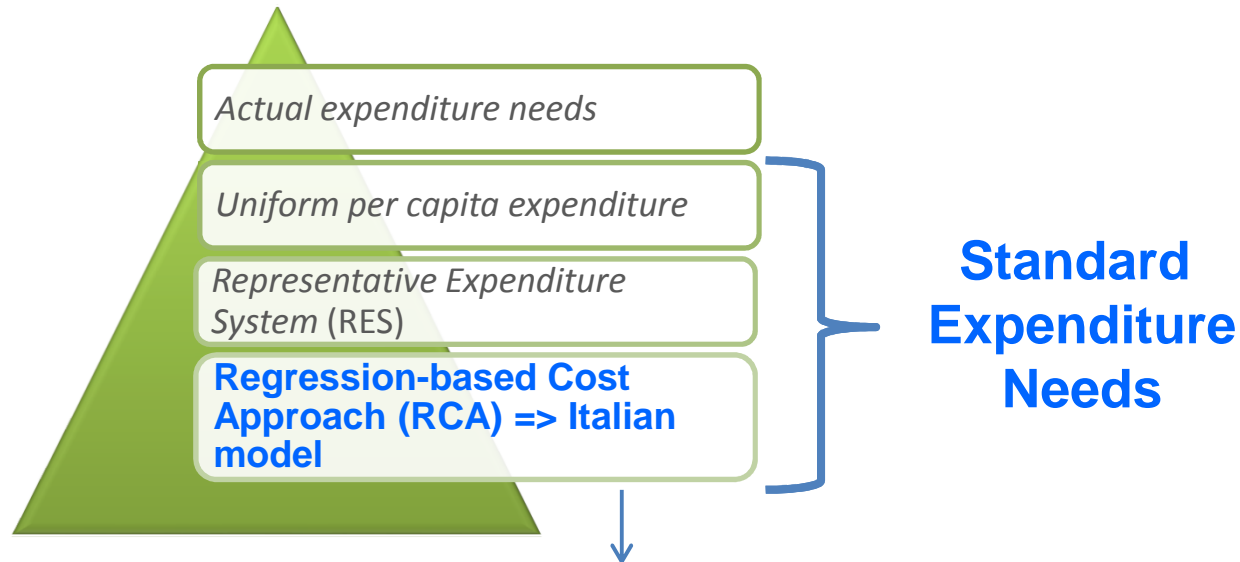
(reduced form of the demand function)

$$g_e = h(Q, R, p, A, g_s)$$

$p$  = input

$A$  = supply side control variables

## The main techniques and the Italian choices



$$\text{Standard expenditure (y)} = \alpha_1 X_1 + \alpha_2 X_2 \dots + \alpha_i X_i \dots + \alpha_n X_n$$

Expenditure function →  $\alpha$  are weights in euros and  $X$  are context variables (e.g. population by age)

Cost function →  $\alpha$  are standard costs and  $X$  are service variables (e.g. tons of waste disposed and recycled, school meals, elderly people assisted in residential care etc..)

In all cases  $\alpha$  are parameters to be estimated using a linear regression model

# DATABASE CONSTRUCTION

## INFORMATION FLOW

Questionnaire



Standard expenditure needs web portal project  
[opendata.sose.it/fabbisognistandard/](http://opendata.sose.it/fabbisognistandard/)



Local authorities:  
**6.700** Municipalities  
**220** Unions  
**86** Provinces

SOSE also verifies accurately the quality of data



Official sources



Budget sheets



# QUESTIONNAIRE STRUCTURE

Questionnaire for Municipalities, Association of Municipalities and Mountain Communities





# QUESTIONNAIRE STRUCTURE

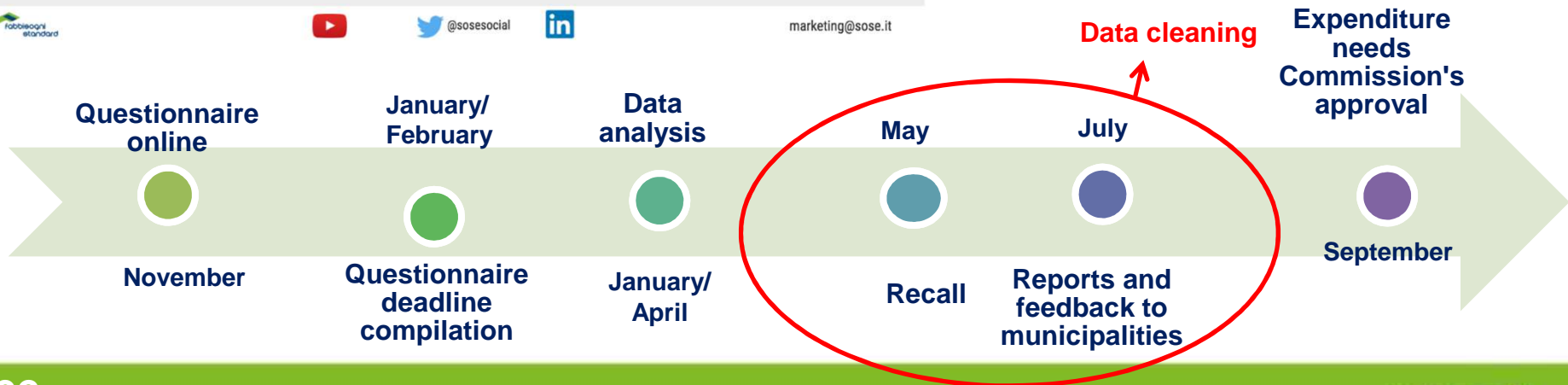
Questionnaire for Municipalities, Association of Municipalities and Mountain Communities



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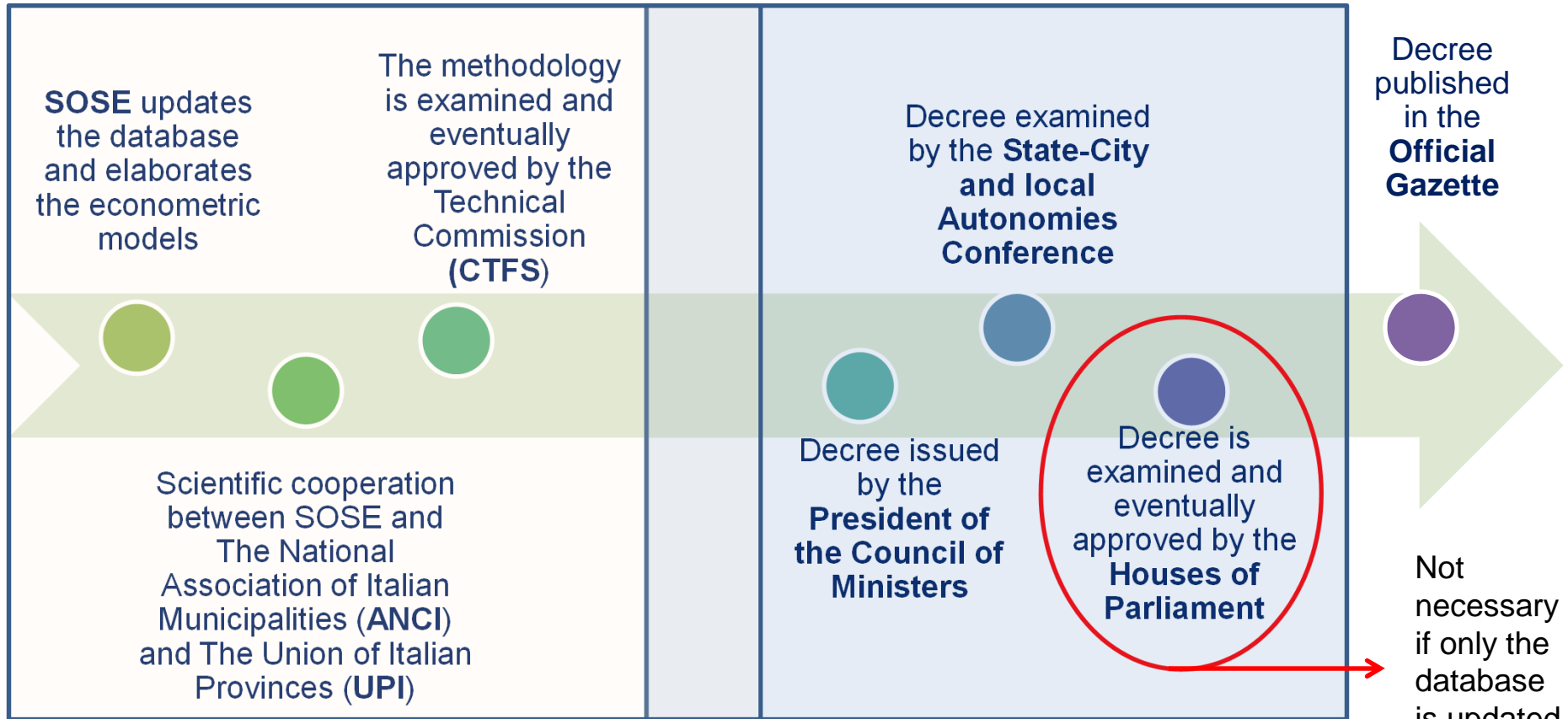




# THE INSTITUTIONAL PROCESS FOR STANDARD EXPENDITURE NEEDS

**Technical steps**  
*usually from April to September*

**Political steps**  
*usually from September to December*



*Technical and political steps tend to overlap*



- On line publication of municipal data on expenditures and performances in the provision of public services
- Open access to all citizens
- Open data
- More information for local administrations
- Stimulate higher electoral accountability and citizens' participation

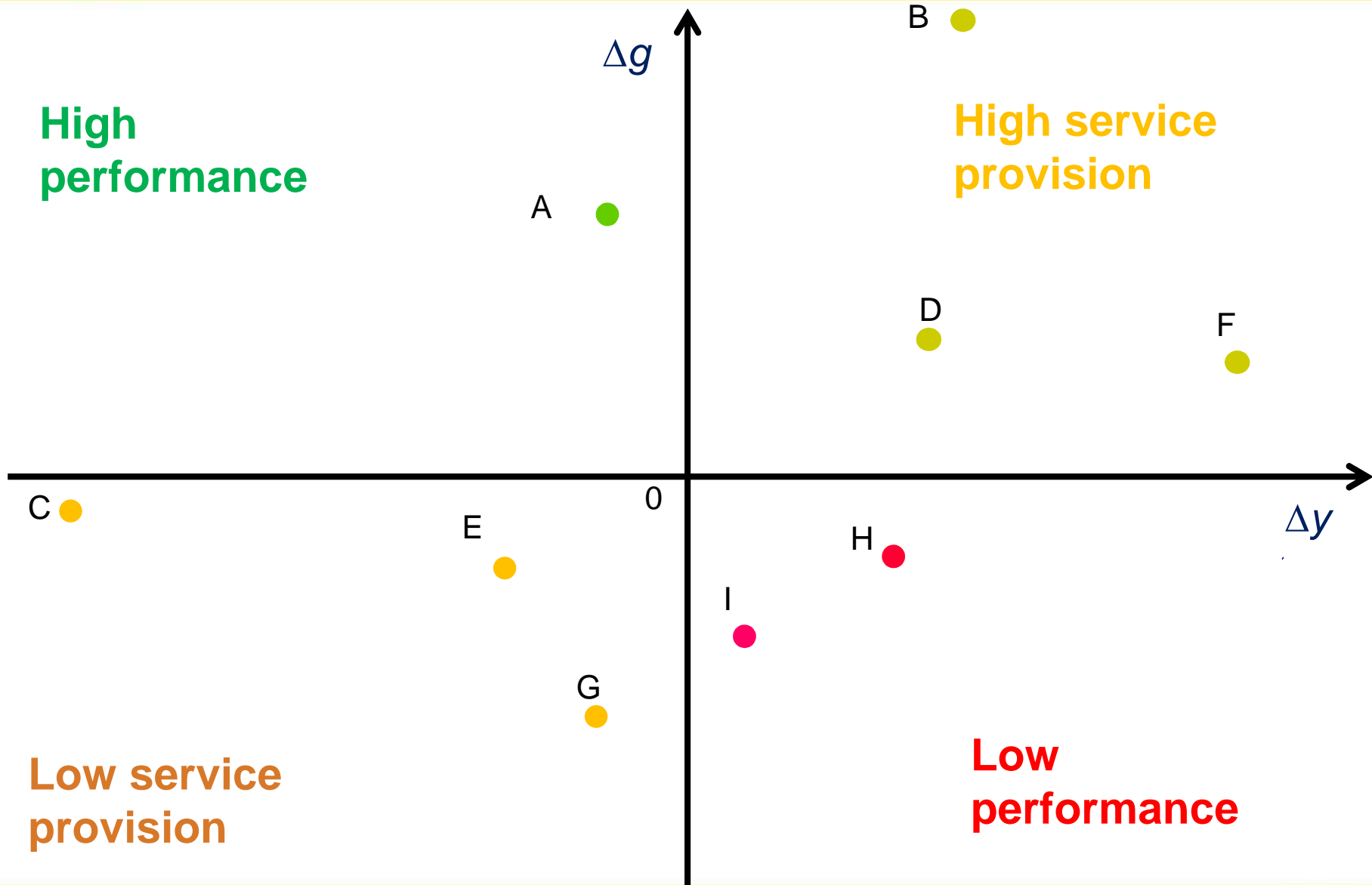
**For each main function**

	Historic (a)	Standard (b)	Difference (a-b)
Expenditure	$y$	$\hat{y}$	$\Delta y$
<b>Level of Service</b>	<b><math>g</math></b>	<b><math>\hat{g}</math></b>	<b><math>\Delta g</math></b>

*Performance evaluation*

- *Output score* =  $\Delta g$
- *Expenditure score* =  $-\Delta y$
- *QLS score* =  $(\Delta g - \Delta y)$

# PERFORMANCE EVALUATION: GRAPHICAL ANALYSIS



## Historical revenue approach

FC is measured by the actual amount of own source tax revenue recorded in the budget sheet

- generates incentives for the local authorities to reduce fiscal effort.

## Macroeconomic indicators methodology

FC is approximated by some measure of local wealth (per capita GNP or GDP or personal income etc.)

- Measures based on GNP or personal income could underestimate FC in regions where significant taxable economic activities involve non-residents
- macro indicators may not be available at micro-level or may be subject to huge approximations

## The representative tax system (RTS)

FC is based on the evaluation of tax revenues that different jurisdictions could collect by imposing taxes at the standard rate on the actual value of the tax bases

- overcomes most of the drawbacks of the other two methods

## REPRESENTATIVE EXPENDITURE SYSTEM (RTS)

$$\text{Standard tax rate} \times \text{Actual tax base} = \text{Standard tax revenue}$$

Although RTS does not disincentive the tax effort but presents some drawbacks:

- Local governments do not have the right incentive to implement policies against the tax evasion
- RTS cannot be properly used when the tax legislation does not establish a standard rate
- A further major problem of RTS is that, in some cases, the tax base may not exist or it may be impossible to evaluate it properly
- Possible solutions:
  - Evaluation potential tax base
  - Evaluation of the tax gap
  - **Regression-based Fiscal Capacity Approach**

# REGRESSION BASED FISCAL CAPACITY APPROACH (RFCA)

$$T = \beta_1 R + \beta_2 S + \beta_3 N + \beta_4 A + \varepsilon$$

Actual tax revenue (T)	Fees and tariffs (nurseries, cemetery services, local transport, issuance of certificates, etc.)
Proxy of the tax base (R)	Local income, real estate values
Fiscal effort (S)	Average effective tax rates
Non residents (N)	Number of tourists and commuters
Control variables (A)	Socio-demographic variables that captures local preferences
Stochastic component ( $\varepsilon$ )	Extraordinary events

$$\textit{Fiscal capacity} = \beta_1 R + \beta_2 S(\textit{avg}) + \beta_3 N$$

**THE CASE OF ITALIAN  
MUNICIPALITIES  
(AN EXAMPLE OF FISCAL  
EQUALIZATION SYSTEM)**



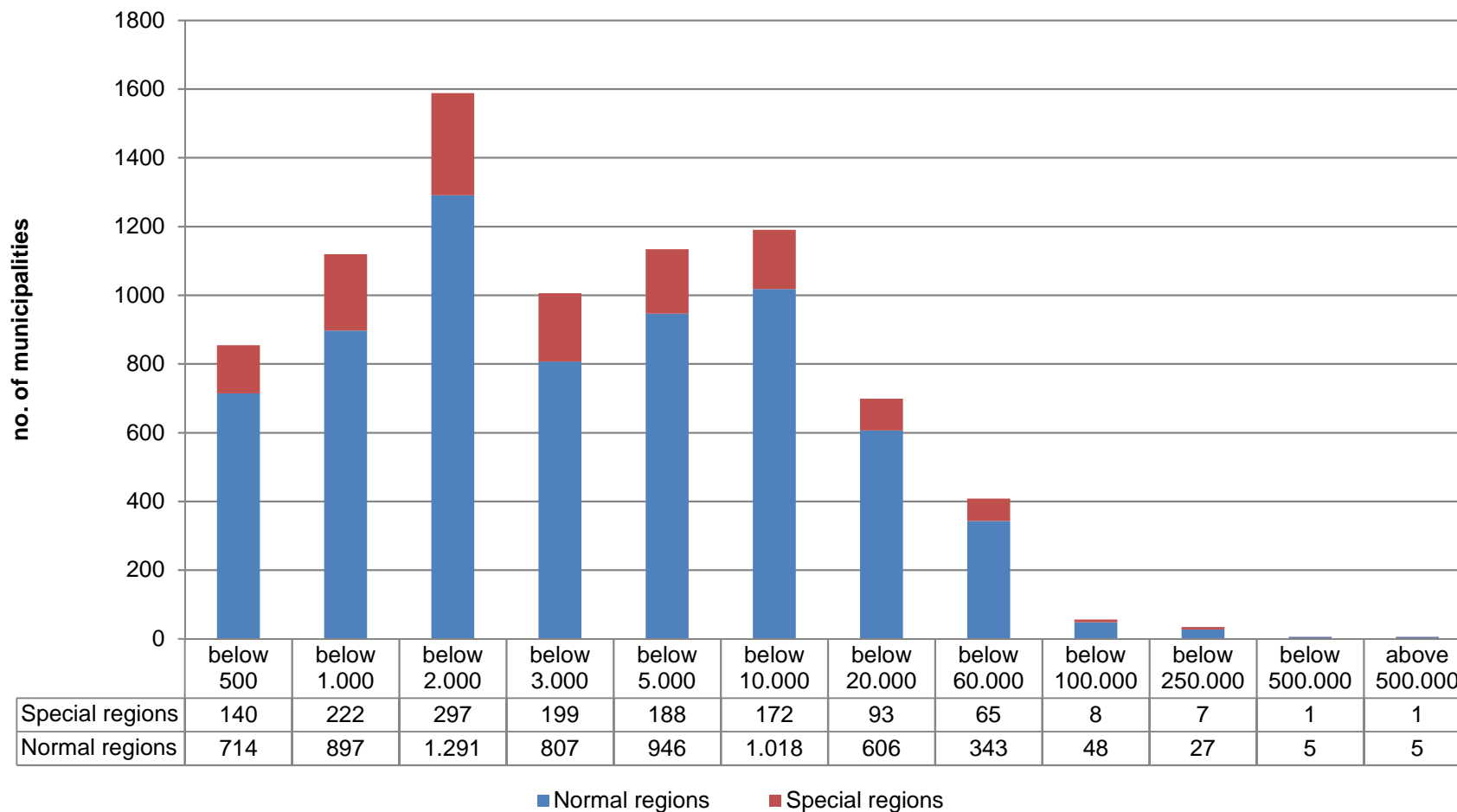
## ITALIAN MUNICIPALITIES (COMUNI) GOVERNANCE AND ELECTORAL SYSTEM

**Comuni** are ruled by a city council and an executive committee headed by an elected mayor (*sindaco*).

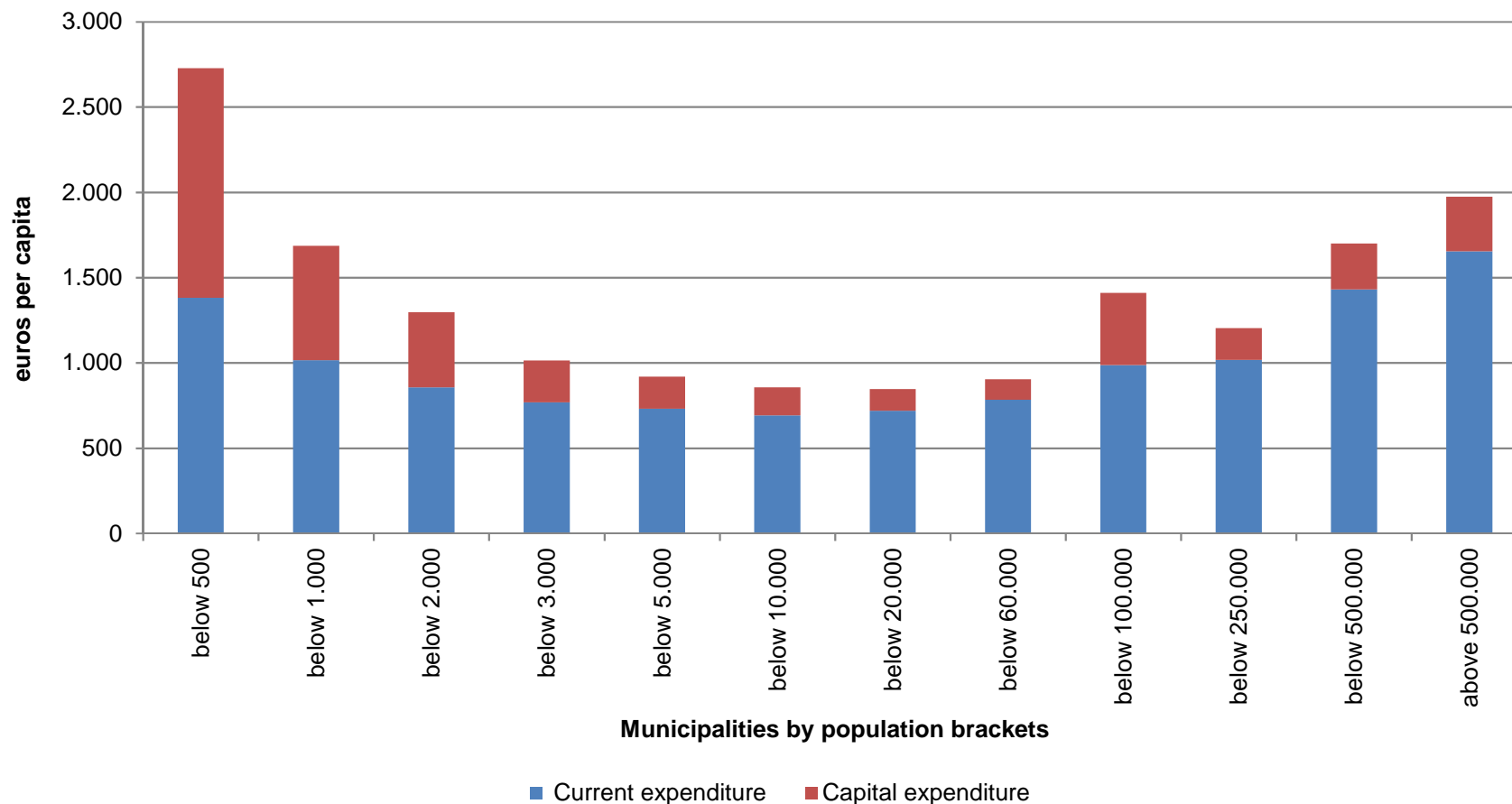
- Mayors are directly elected for five-year terms and are subject to a two-term limit
- in small municipalities (below 15000 inhab.) by first-past-the-post
- in large municipalities (above 15000 inhab.) by run-off



# MUNICIPALITIES BY POPULATION



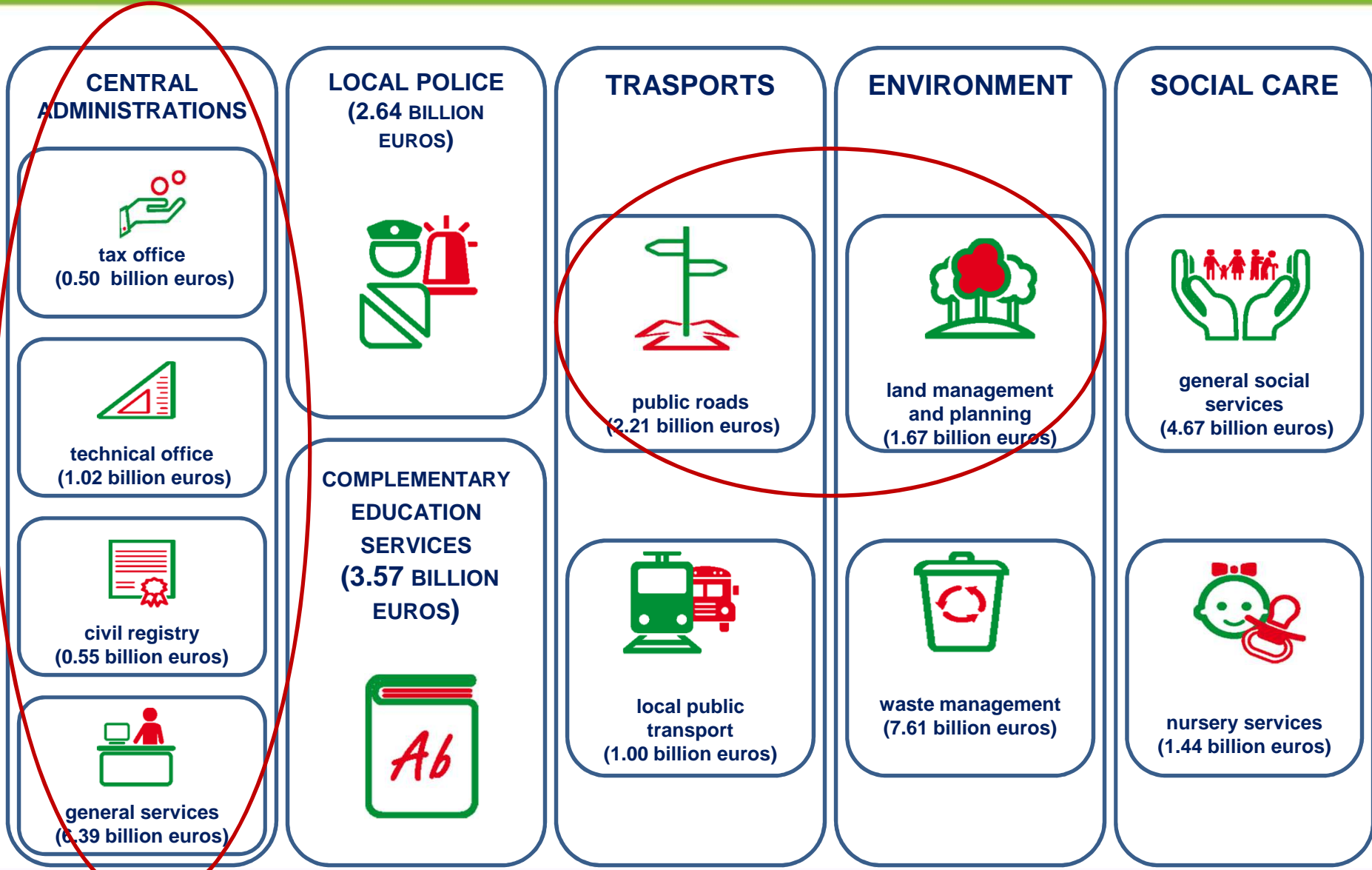
# MUNICIPALITIES EXPENDITURE



Only current expenditure of essential functions (34 billion euros) is considered for the evaluation of standard expenditure needs

# ESSENTIAL FUNCTIONS

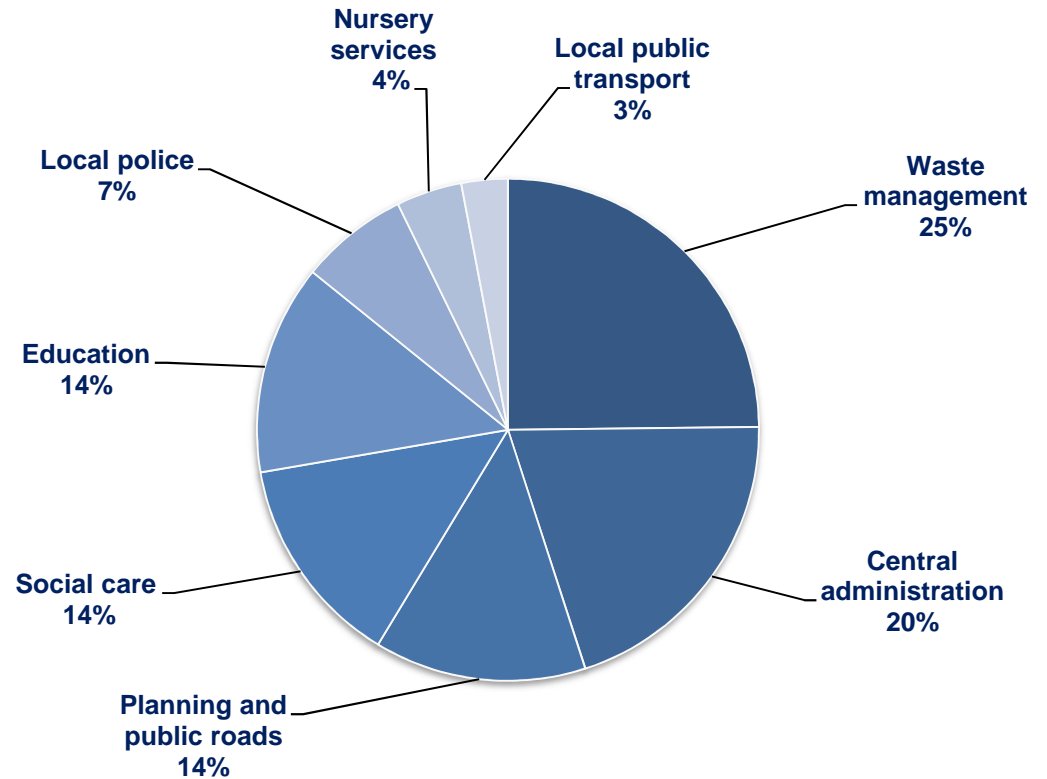
(34 BLN EUROS 80% OF TOTAL CURRENT EXPENDITURE)



# THE ESTIMATION OF STANDARD EXPENDITURE NEEDS – THE ALLOTMENT COEFFICIENT

## Expenditure needs

Functions	Billion euros
Waste management	8,66
Central administration	7,04
Planning and public roads	4,76
Social care	4,75
Education	4,72
Local police	2,43
Nursery services	1,48
Local public transport	1,04
<b>Total</b>	<b>34,88</b>



Standard expenditure needs are converted in an allotment coefficient according to the weight of each function in terms of standard expenditure

# AN EXAMPLE WASTE MANAGEMENT SERVICES

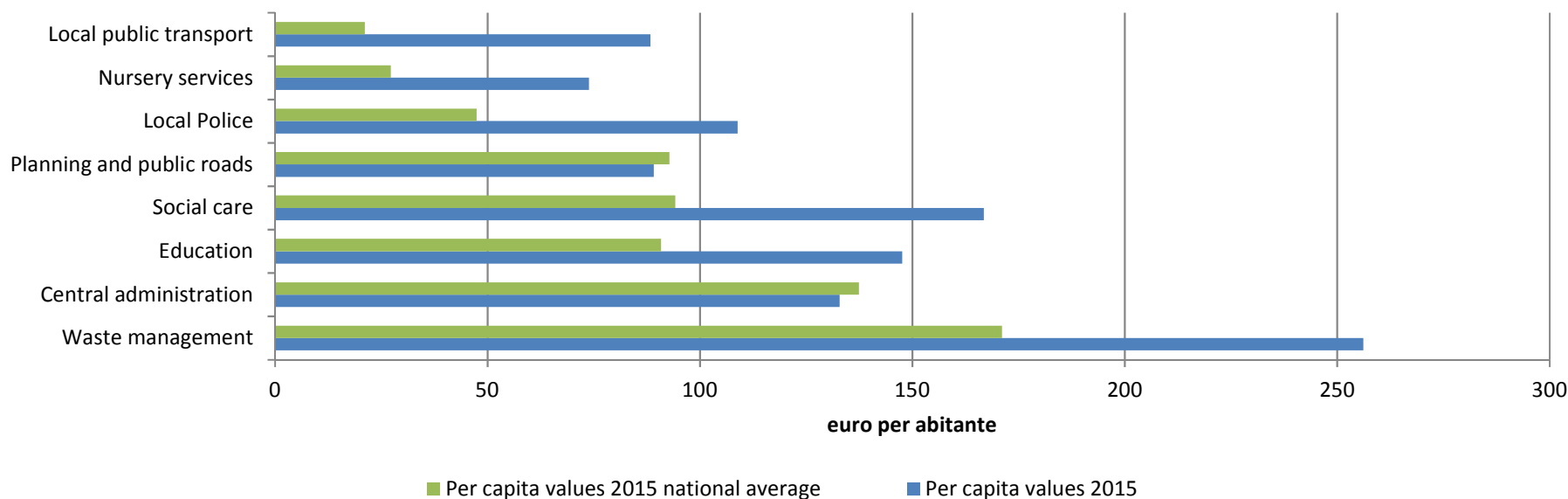
	Standard costs in euros (A)	PEDESINA (39 inhab.)		ROMA (2.864.731 inhab.)			
		Variable value (B)	Standard expenditure (C = A * B)	Variable value (D)	Standard expenditure (E = A * D)		
<i>Basic standard cost per tonne of waste disposed (differentiated by cluster and region)</i>			233,60	+	377,80	+	
<i>% of Recycled waste</i>	<b>1,15</b>	51,28	58,97	+	38,83	44,65	+
<i>Distance from disposal facilities in km (weighted average by type of waste)</i>	<b>0,41</b>	70,00	28,70	+	29,97	12,29	+
<i>Petrol average municipal cost (% difference from national average)</i>	<b>1,22</b>	-10,76	-13,13	+	1,41	1,72	+
<b>Final standard cost per tonne of waste disposed (G)</b>			<b>308,14</b>	=		<b>436,46</b>	=
<i>Tons of waste disposed (H)</i>		36			1.681.245		
<i>Standard expenditure depending on tons of waste (I = G*H)</i>			11.093	+		733.800.228	+
<i>Diseconomy of scale (J)</i>			6.321	+		6.321	+
<b>Total expenditure needs (K = I+J)</b>			<b>17.414</b>	=		<b>733.806.549</b>	=
<b>Expenditure needs of all municipalities (L)</b>			<b>8.818.067.127</b>			<b>8.818.067.127</b>	
<b>Allotment coefficient (M = K/L)</b>			<b>0,000001974833</b>			<b>0,083216257953</b>	

# AN EXAMPLE

## ROME (THE BIGGEST CITY IN ITALY, 2,9 MLN INHAB.)

	YEAR 2015		National average 2015		Gap % from national average 2015
	Per capita values 2015 (A)	Composition %	Per capita values 2015 (B)	Composition %	$C = (A-B)/B*100$
Waste management	256,18	24,08%	171,15	25,08%	49,68%
Central administration	132,93	12,49%	137,47	20,14%	-3,30%
Education	147,65	13,88%	90,86	13,31%	62,49%
Social care	166,82	15,68%	94,21	13,80%	77,08%
Planning and public roads	89,19	8,38%	92,85	13,61%	-3,94%
Local Police	108,91	10,24%	47,46	6,95%	129,48%
Nursery services	73,89	6,95%	27,30	4,00%	170,67%
Local public transport	88,35	8,30%	21,17	3,10%	317,34%
<b>TOTAL</b>	<b>1063,93</b>	<b>100,00%</b>	<b>682,47</b>	<b>100,00%</b>	<b>55,89%</b>

Standard expenditure needs 2015 and national average

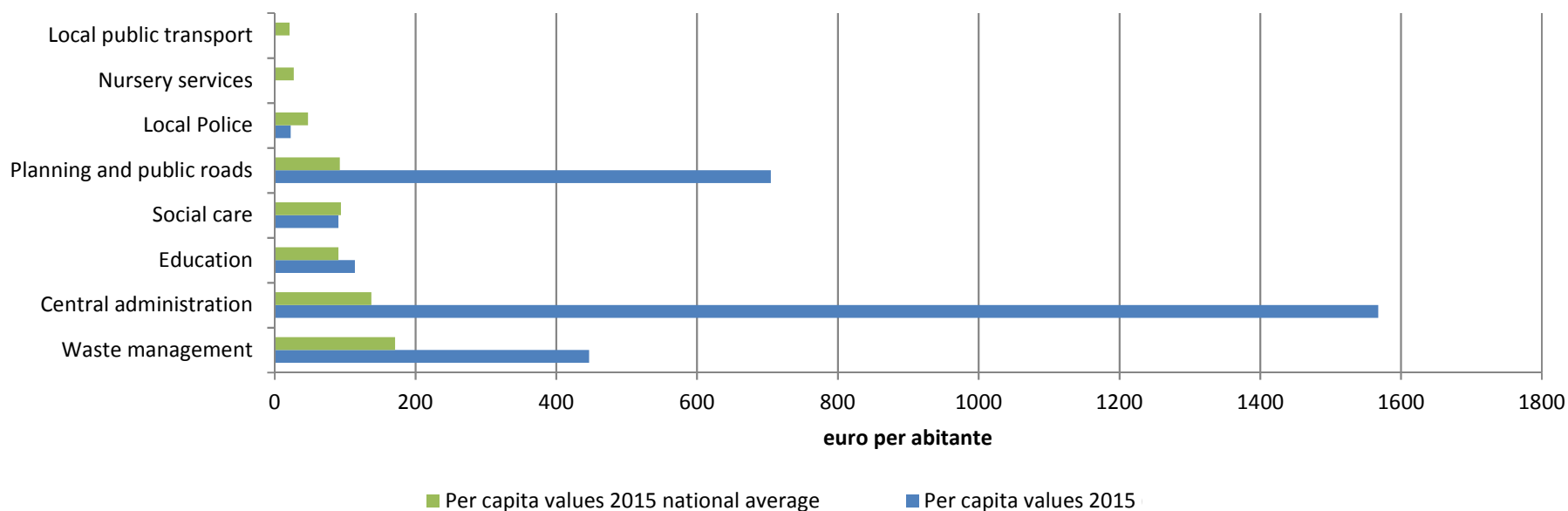


# AN EXAMPLE

## PEDESINA (THE SMALLEST VILLAGE IN ITALY, 39 INHAB.)

	YEAR 2015		National average 2015		Gap % from national average 2015
	Per capita values 2015 (A)	Composition %	Per capita values 2015 (B)	Composition %	$C = (A-B)/B*100$
Waste management	446,96	15,16%	171,15	25,08%	161,16%
Central administration	1567,61	53,19%	137,47	20,14%	1040,31%
Education	114,26	3,88%	90,86	13,31%	25,75%
Social care	90,82	3,08%	94,21	13,80%	-3,60%
Planning and public roads	704,72	23,91%	92,85	13,61%	658,98%
Local Police	23,06	0,78%	47,46	6,95%	-51,42%
Nursery services	0,00	0,00%	27,30	4,00%	-100,00%
Local public transport	0,00	0,00%	21,17	3,10%	-100,00%
<b>TOTAL</b>	<b>2947,43</b>	<b>100,00%</b>	<b>682,47</b>	<b>100,00%</b>	<b>331,88%</b>

**Standard expenditure needs 2015, 2013 and 2015 national average**





# SUMMARY OF DETERMINANTS OF STANDARD EXPENDITURE NEEDS

Homogeneous group of variables	2016 Methodology	
	No. of variables	% impact
TOTAL	<b>85 (40 from questionnaire)</b>	100
Service provided	23	28,68
Regional effect	15	20,87
Territorial morphology	6	11,08
Resident population	4	10,71
Input prices	8	5,20
Vehicles and road traffic	5	4,88
Local economy	3	4,61
Buildings and real estate	1	2,93
Census	2	2,67
Exogenous load factors	5	2,08
Managerial choices	8	2,11
Tourism	2	1,87
Investments	1	1,31
Deprivation	2	0,99

## Main variables:

- Resident population (no.)
- Waste disposed (tons)
- Waste recycled (tons)
- Population above 65 (no.)
- Population between 3 and 14 (no.)
- Children served by Nursery (no.)
- School meals (no.)
- Presence of Metro/Tram service (yes/no)
- Surface area of the municipality (sqm)
- Altitude of the municipality (m)

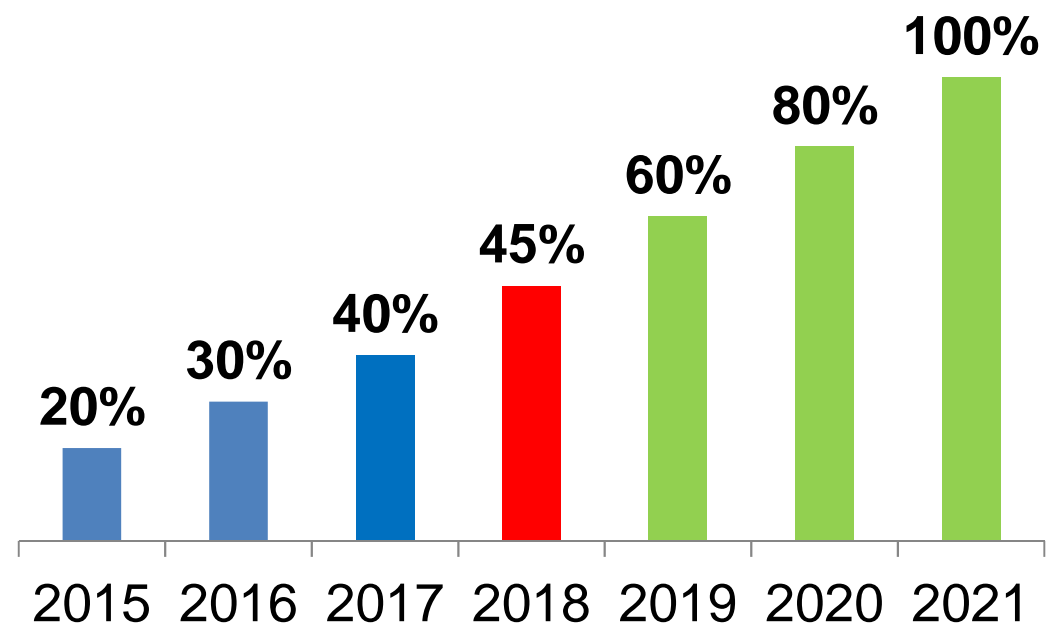
# THE ITALIAN MODEL OF MUNICIPAL FISCAL CAPACITY

REVENUES ITEM	MODELS	BILLION EUROS	%
Local income tax (ACI)	RTS (Representative Tax System)	2.6	10,3%
Property tax (IMU-TASI)	RTS with Tax-gap	12.3	48,8%
Fees	RFCA (Regression-based Fiscal Capacity Approach)	4.1	16,3%
Waste Management fees (TARI)	Neutralization against standard expenditure needs	6.3	25,0%
Total fiscal capacity =		25.2	100,0%

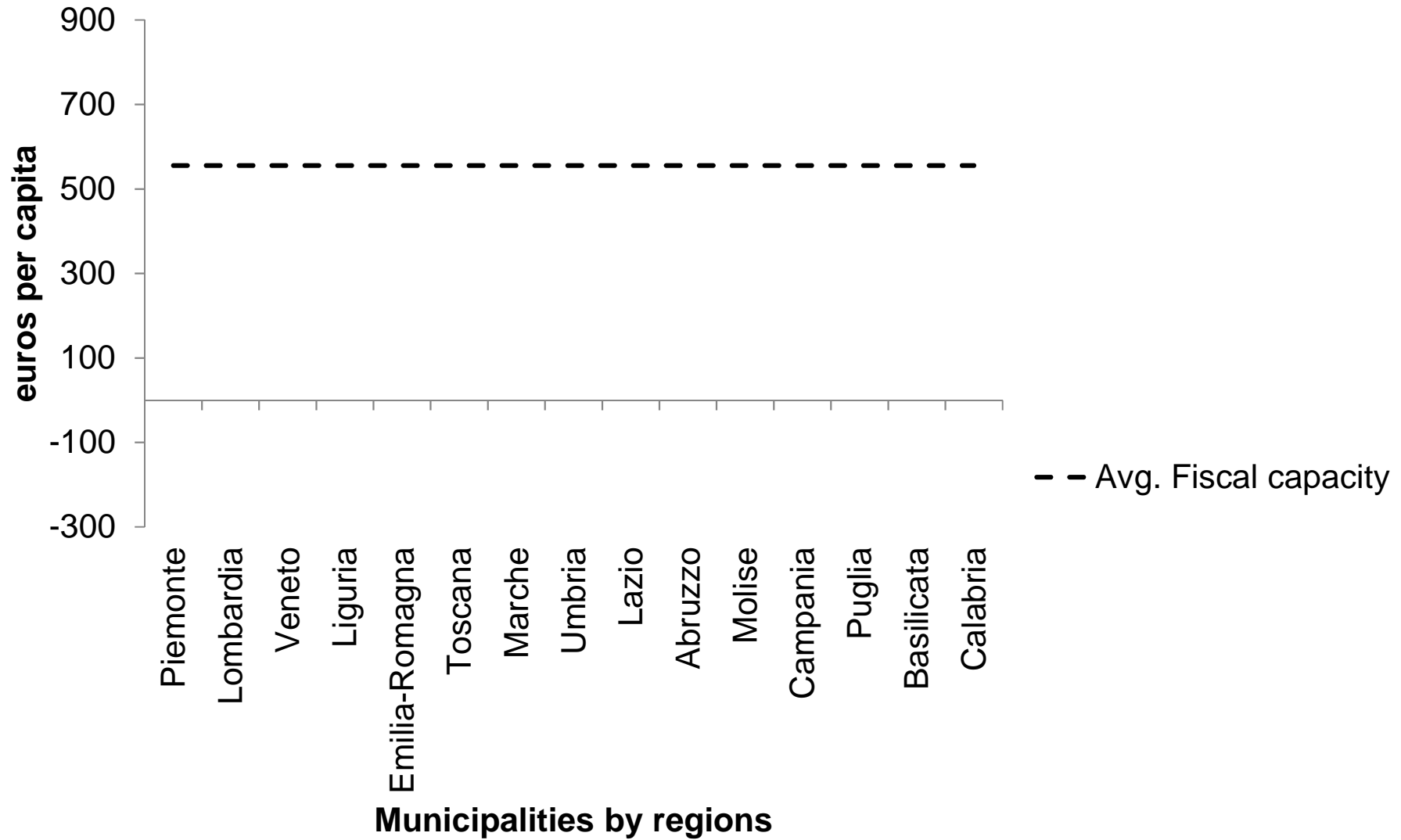
Macro budget (26.3 billion euros) = 25.2 + 1.1  
 Central gov. resources

- Ex-ante macro-budget definition (closed-end system)
- Equalization grants = *expend. needs - fiscal capacity*
- Horizontal equalization
- Equalization target = 50%

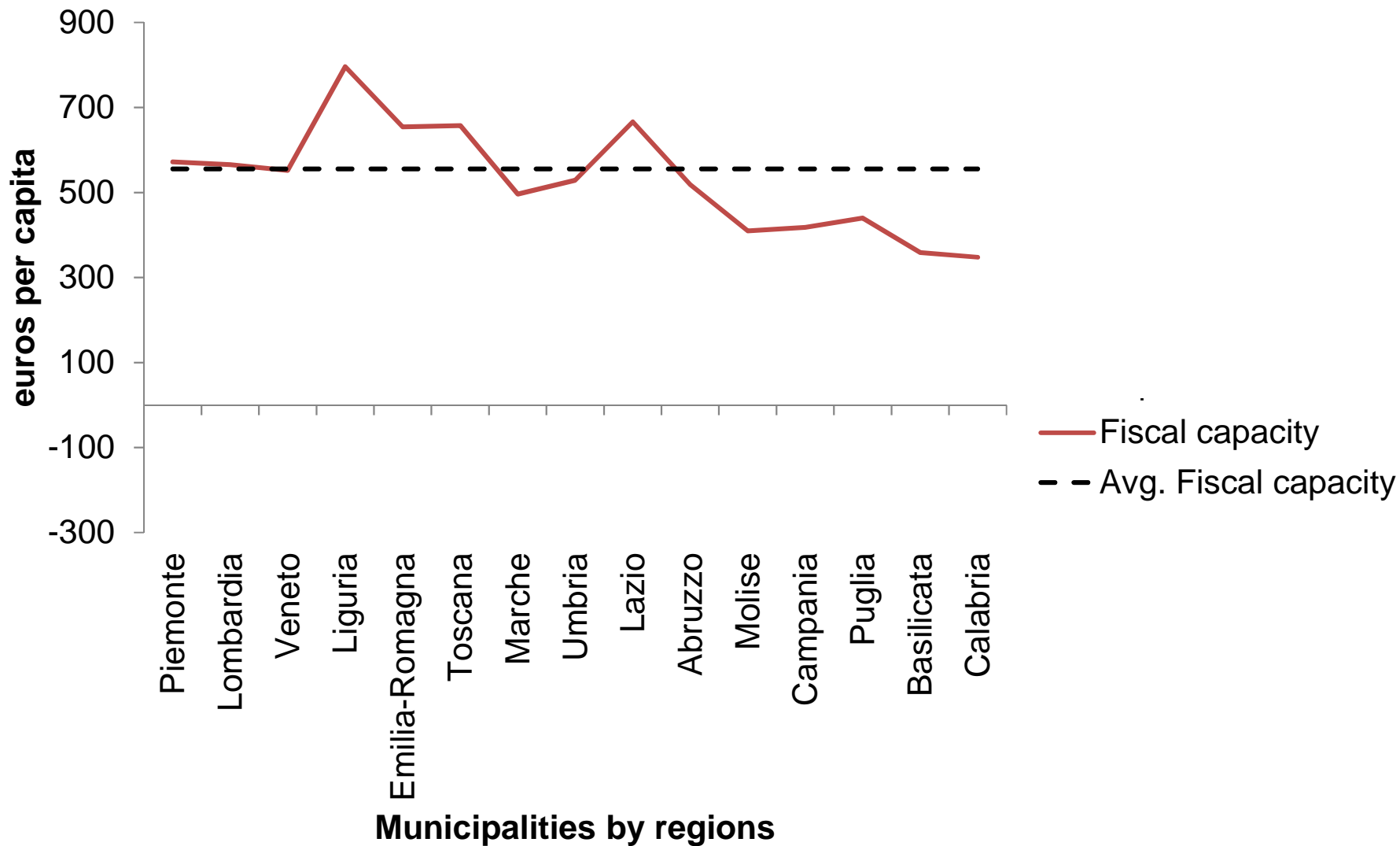
% of grants distributed through the standard system in the transitional period



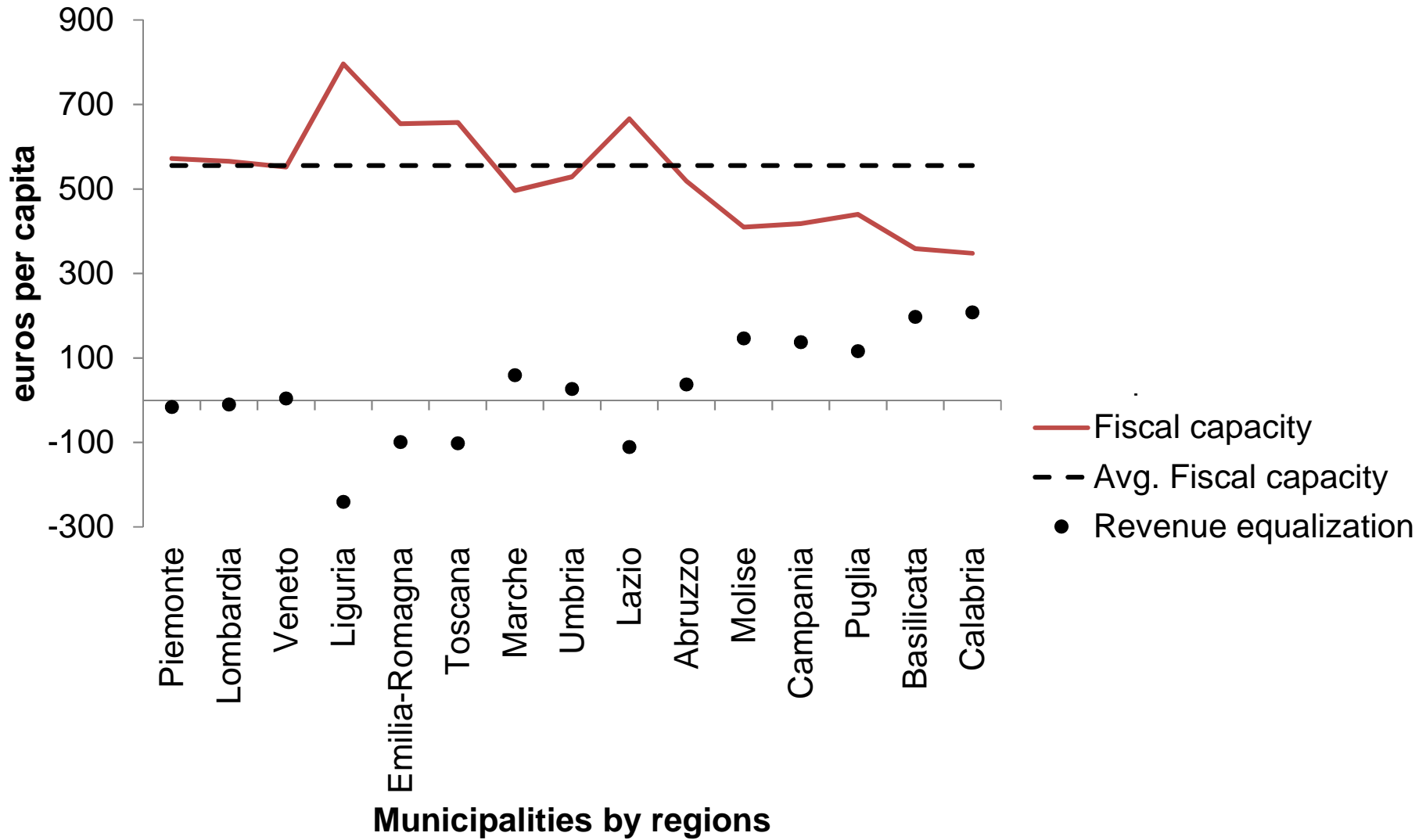
# FISCAL CAPACITY AND STANDARD EXPENDITURE



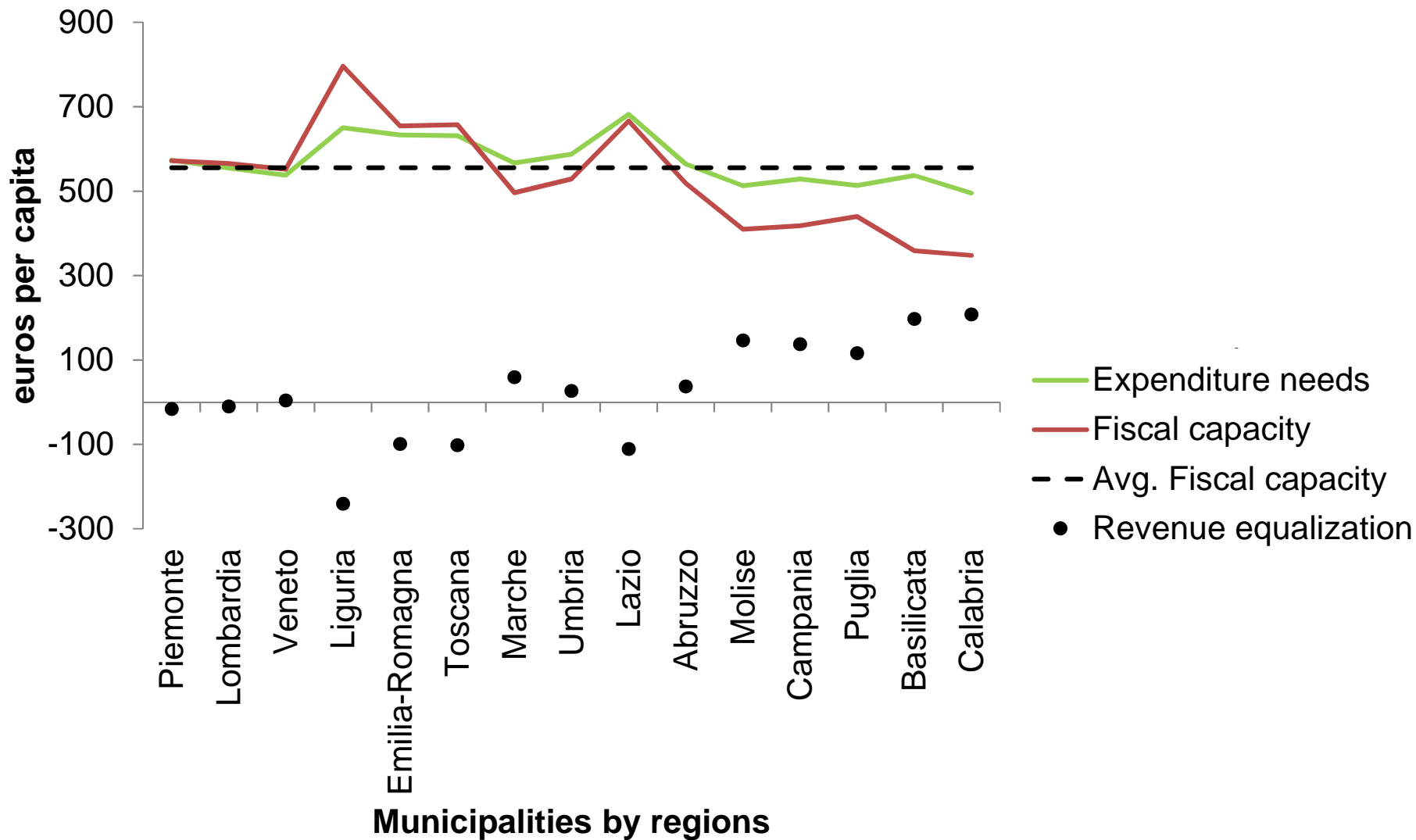
# FISCAL CAPACITY AND STANDARD EXPENDITURE



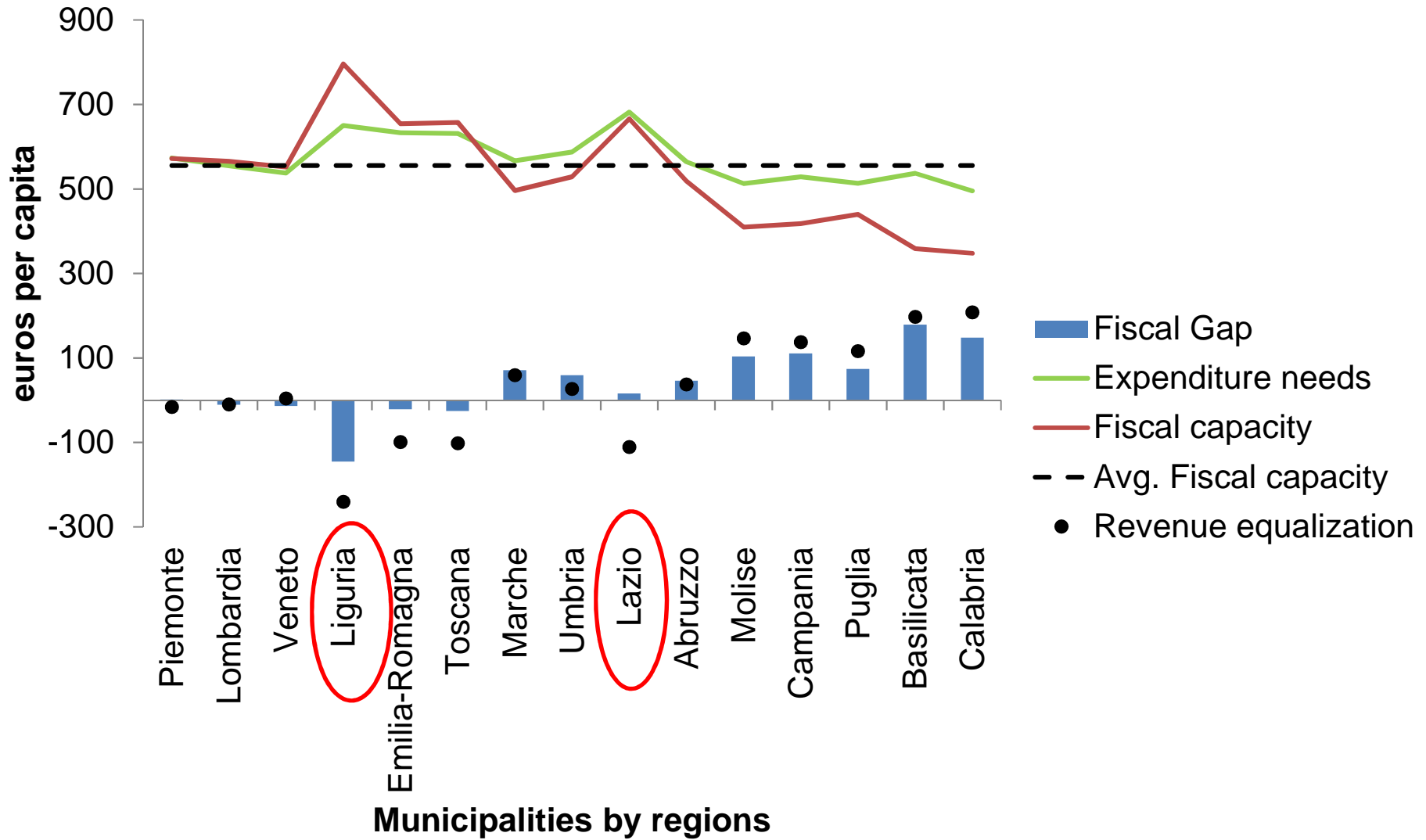
# FISCAL CAPACITY AND STANDARD EXPENDITURE



# FISCAL CAPACITY AND STANDARD EXPENDITURE



# FISCAL CAPACITY AND STANDARD EXPENDITURE





**THE CASE OF ITALIAN  
PROVINCES AND  
METROPOLITAN DISTRICTS  
(AN EXAMPLE OF SPENDING REVIEW  
PROGRAM)**

# THE ITALIAN REFORM OF PROVINCES

## Italian Law n. 56 of 2014 has redefined the structure of Provinces, Metropolitan Districts

1. Transformation of Provinces in Second-tier Institutions and creation of Metropolitan District;
2. Determination of fundamental functions of Provinces and Metropolitan Districts;
3. Reorganization of the non-fundamental functions of Provinces.



## ESSENTIAL FUNCTIONS

(3 BLN EUROS 50% OF TOTAL CURRENT EXPENDITURE)

- **Public education** (Provincial planning of the school network in accordance with regional planning, management of high school buildings);
- **Provincial roads** (Construction and management of provincial roads and regulation of road traffic);
- **Environment** (Provincial spatial planning coordination and protection and enhancement of the environment);
- **Transportation** (Planning of transport services in the provincial area, authorization and control of private transport in accordance with the regional planning);
- **General Functions** (Collection and processing of data, technical and administrative assistance to Local Authorities and additional planning and coordination functions for Metropolitan Districts)

# MAIN EXPENDITURE DRIVERS

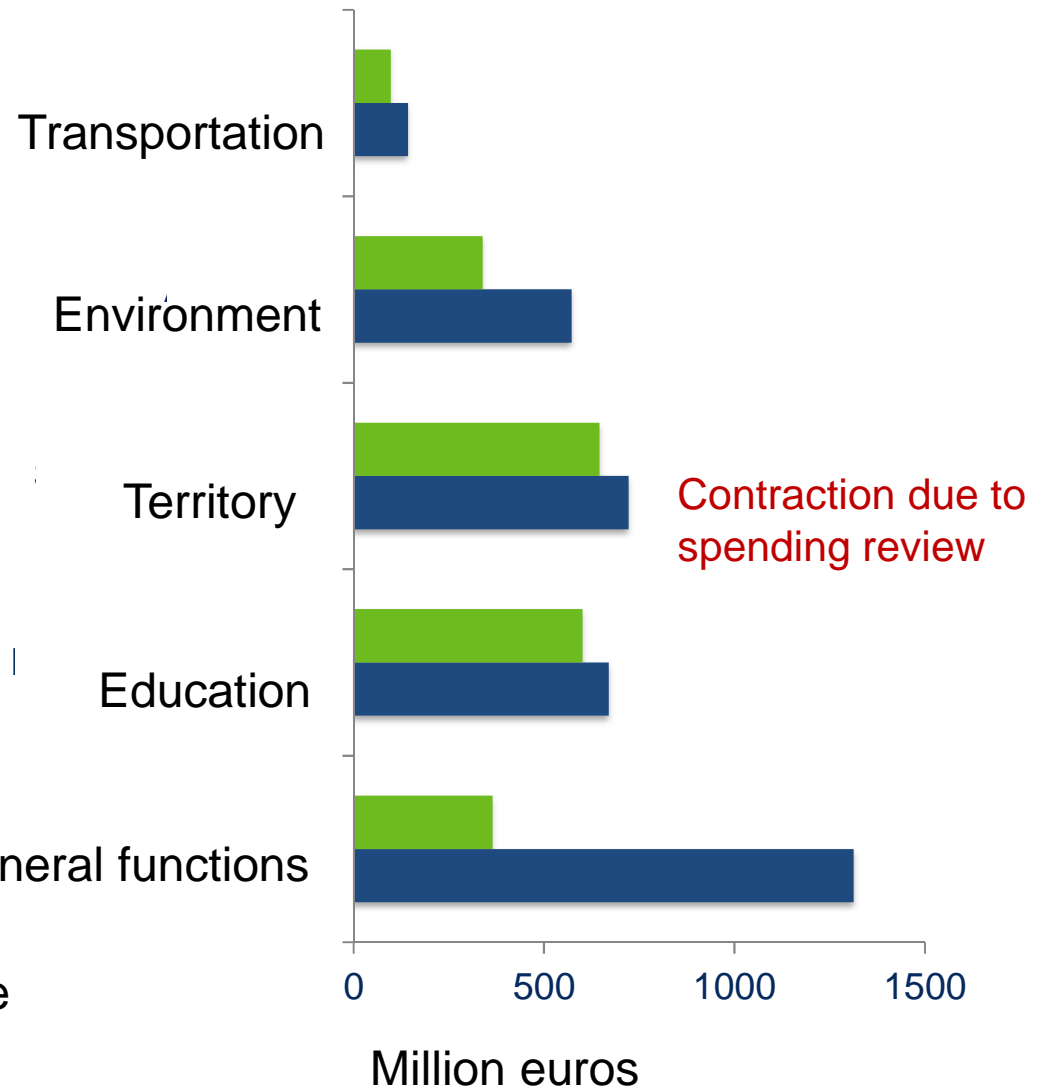
<p><b>EDUCATION</b></p>	<p>Number of State high schools <b>5.100</b></p>
<p><b>TERRITORY</b></p>	<p>Km of provincial roads subject to maintenance <b>105.963</b></p>
<p><b>ENVIRONMENT</b></p>	<p>Resident population <b>51.525.535</b></p>
<p><b>GENERAL FUNCTIONS</b></p>	
<p><b>TRANSPORTATION AND LOCAL TRANSPORT</b></p>	<p>Number of vehicles in circulation <b>41.508.849</b></p>

# CALCULATION OF STANDARD EXPENDITURE

FUNCTIONS	Main components (M)	Additional components (X)
<p><b>EDUCATION</b> (Number of high schools)</p>	<p>44,932.64 euros per school + 516.55 * (% of sqm in climate zone EF) 5,136.76 for Metropolitan Districts 1,245.85 for other Provinces</p>	<p>Pupils with disabilities from state secondary schools of second grade (5,451.23 per pupil) Area in square meters of school buildings (2.84 per square meter)</p>
<p><b>TERRITORY</b> (Km of roads)</p>	<p>2,9499 euros per kilometer of provincial roads subject to maintenance 1,591.97 for Metropolitan Districts (10% maintenance hypothesis)</p>	<p>Km of roads in mountainous areas (1,820.11 per km) Total number of employees (16.77 per person employed)</p>
<p><b>ENVIRONMENT</b> (Resident population)</p>	<p>3,22 euros per inhabitant + 1,07 for Metropolitan Districts - 0,26 for other Provinces</p>	<p>Total surface area in square kilometers (605.21 sq km) Risk of landslides (13.38 per inhabitant exposed to serious risks)</p>
<p><b>GENERAL FUNCTIONS</b> (Resident population)</p>	<p>7,80 euros for Metropolitan Districts 5,08 euros for mountainous Provinces 3,63 euros for large areas institutions</p>	<p>Value of tangible fixed assets, land and buildings (2.18% for Metropolitan Districts, 1.56% for other provinces)</p>
<p><b>TRANSPORTATION</b> (vehicles in circulation)</p>	<p>2,11 euros per circulating vehicle + 1,34 for Metropolitan Districts - 0,32 per other Provinces</p>	

# COMPOSITION OF STANDARD EXPENDITURE AND COMPARISON WITH HISTORICAL EXPEND.

FUNCTION	Average need weight of the function on the total
Education	26,01%
Territory	28,24%
Environment	17,45%
General functions (fundamental part)	22,51%
Transportation	5,78%
<b>TOTAL</b>	<b>100 %</b>



- Historical expenditure
- Efficient Standard expenditure

# OWN TAX REVENUES OF PROVINCES AND METROPOLITAN DISTRICTS

■ Fiscal capacity

■ Actual tax revenues

■ Potential tax revenues



RES (standard tax rate)



RES (max tax rate)

## Tax on landfill waste disposal

Tax base: Municipal waste tax

Standard tax base: 1% (increase up to 5%).



## Tax on vehicle property transfer

Tax base: no. of property transfers

Standard tax rate: 150,8 euros (increase up to 30%)



## Car Insurance Premium Tax

Tax base: insurance premium.

Standard tax rate: 12,5% (3.5% changes up or down)

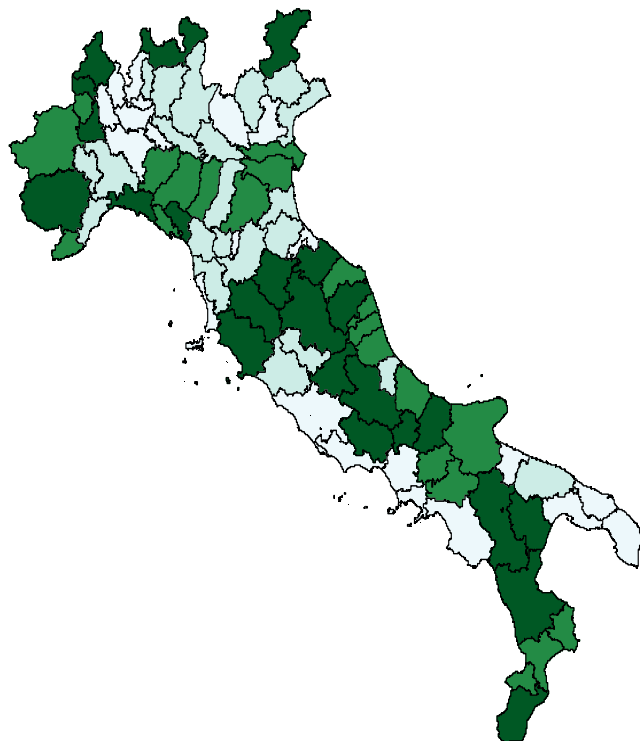


0 500 1000 1500 2000 2500

Million euros

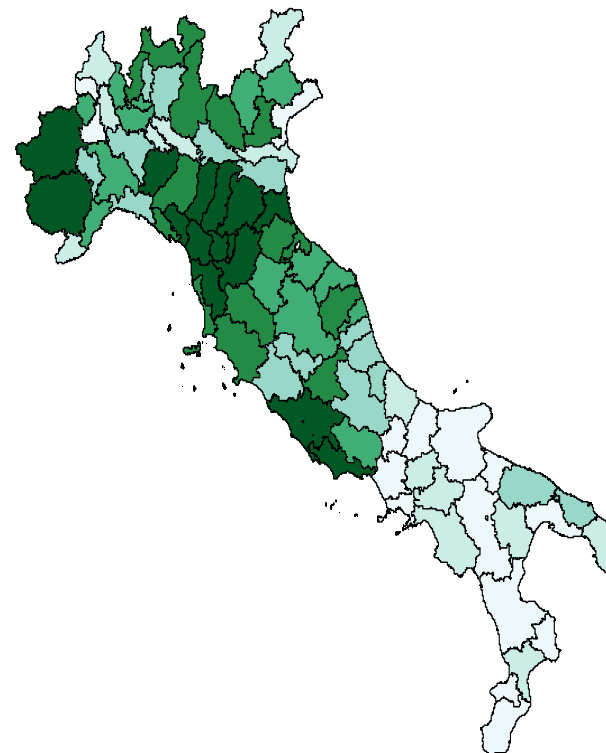
# SPENDING REVIEW PROGRAM EVALUATION OF FISCAL GAP







**Standard (efficient) expenditure  
of fundamental functions per  
inhabitant**



Euro per capita  19.53 - 33.49  33.82 - 40.47  40.74 - 50.13  50.62 - 82.6

**Potential tax revenues per  
inhabitant**



Euro per capita  58.27 - 64.76  64.8 - 67.11  67.25 - 69.25  
 69.64 - 72.37  73.19 - 76.29  77.46 - 102.68

***FISCAL GAP = STANDARD EXPENDITURE – POTENTIAL TAX REVENUE***



Allocation mechanism 2015 spending cuts (900 million euros), based on a comparison between potential revenues and standard expenditures

REVENUES		EXPENDITURE	
Potential revenues (A)	3.045.081.463	Standard current expenditures (D)	2.120.250.802
2015 spending cuts (B)	900.000.00	Interest expense (E)	240.501.605
<b>TOTAL (C = A-B)</b>	<b>2.145.081463</b>	<b>TOTAL (F = D+E)</b>	<b>2.360.752.407</b>
		<b>Structural imbalance (G = F-C)</b>	<b>215.670.944</b>

*figures in euros*

**THE CASE OF ITALIAN  
MUNICIPALITIES  
(AN EXAMPLE OF MONITORING AND  
INCENTIVE MECHANISMS)**



OpenCivitas ([www.opencivitas.it](http://www.opencivitas.it)) is a web portal containing information coming from all local Governments in Italy. The data are elaborated in order to benchmark and evaluate the different performances and promote transparency, efficiency and effectiveness of local Governments



# OPENCIVITAS ROMA vs PEDESINA

## Spesa media per abitante



## Spesa Storica vs Fabbisogno



## Livello servizi vs livello servizi standard



Comune di Roma	
Popolazione al 31/12/2013	2.863.322
Spesa storica	€ 3.784.946.628
Fabbisogno Standard	€ 3.192.414.770
Differenza in €	€ +592.531.858
Differenza %	+18,56 %
Livello quantitativo delle prestazioni globale	★★★★★☆☆☆☆ (3,20) Livello su scala da 1 a 10
Livello quantitativo delle prestazioni per servizio	
Tributi	★★★★★☆☆☆☆ (5,20)
Ufficio Tecnico	★★★★★☆☆☆☆ (3,20)
Anagrafe	★★★★★☆☆☆☆ (4,80)
Altri Servizi Generali	★★★★★☆☆☆☆ (3,60)
Polizia Locale	★★★★★☆☆☆☆ (5,60)
Istruzione	★★★★★☆☆☆☆ (6,40)
Viabilità	★★★★★☆☆☆☆ (4,60)
Trasporti	★★★★★☆☆☆☆ (4,00)
Territorio	★★★★★☆☆☆☆ (3,00)
Rifiuti	★★★★★☆☆☆☆ (3,20)
Sociale	★★★★★☆☆☆☆ (3,80)
Asili Nido	★★★★★☆☆☆☆ (6,80)

Comune di Pedesina	
Popolazione al 31/12/2013	38
Spesa storica	€ 82.486
Fabbisogno Standard	€ 61.370
Differenza in €	€ +21.116
Differenza %	+34,41 %
Livello quantitativo delle prestazioni globale	★★★★★☆☆☆☆ (6,40) Livello su scala da 1 a 10
Livello quantitativo delle prestazioni per servizio	
Tributi	★★★★★☆☆☆☆ (9,20)
Ufficio Tecnico	★★★★★☆☆☆☆ (10,00)
Anagrafe	★★★★★☆☆☆☆ (2,20)
Altri Servizi Generali	★★★★★☆☆☆☆ (6,40)
Polizia Locale	N.D. - Spesa storica e livello dei servizi offerti non misurabile
Istruzione	N.D. - Livello dei servizi offerti non misurabile
Viabilità	★★★★★☆☆☆☆ (6,40)
Trasporti	N.D. - Spesa storica e livello dei servizi offerti non misurabile
Territorio	N.D. - Livello dei servizi offerti non misurabile
Rifiuti	★★★★★☆☆☆☆ (8,40)
Sociale	N.D. - Livello dei servizi offerti non misurabile
Asili Nido	N.D. - Spesa storica e livello dei servizi offerti non misurabile
Servizi non erogati dall'ente	Asili Nido
Servizi con spesa storica non misurabile	Polizia Locale, Trasporti

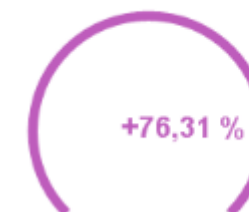
## Spesa media per abitante



## Spesa Storica vs Fabbisogno



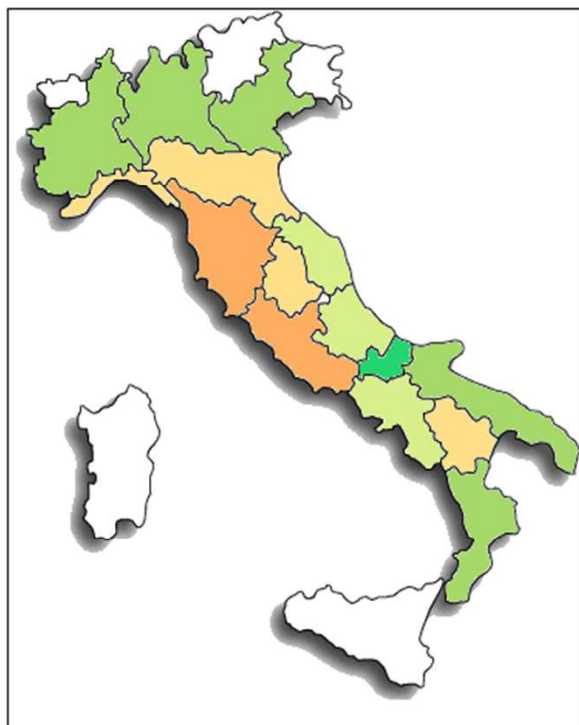
## Livello servizi vs livello servizi standard



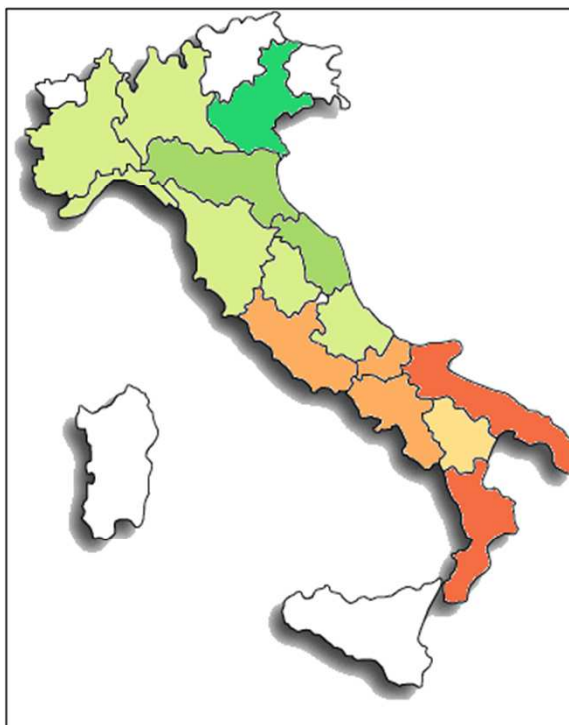
# THE RATING SYSTEM OF OPENCIVITAS.IT

## REGIONAL AVERAGES All municipal functions (2015)

**Expenditure score**



**Service score**



**QLS score**



# CONCLUSIONS

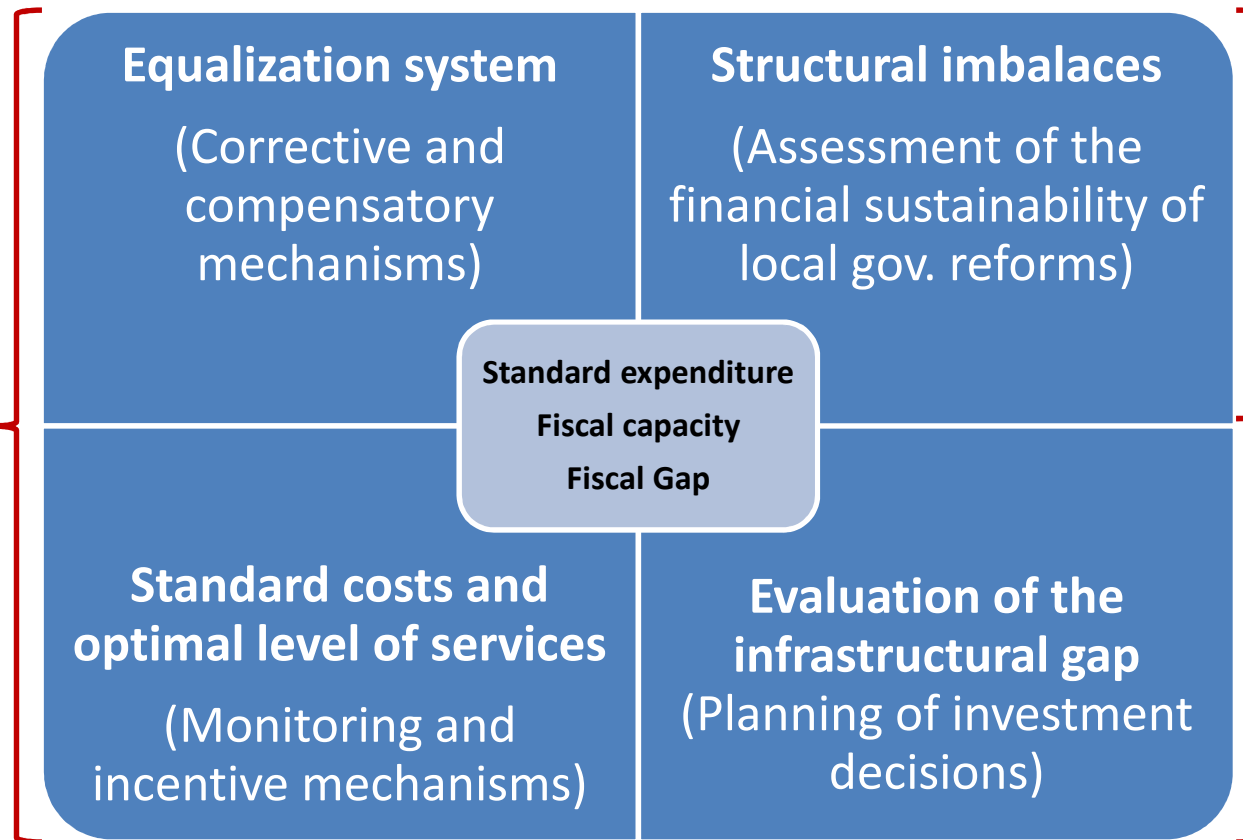
## THE ITALIAN EXPERIENCE



**Italian Provinces**

**Italian Regions**

**Italian Municipalities**



The fiscal gap analysis can also be a tool for the evaluation of the long run sustainability of the municipal financial structure in Lithuania

**sose** 



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