Assessing Types of Fiscal Rules[*]

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Abstract

We evaluate the impact of different sub-national fiscal rules on budget outcomes in a quasi-experimental setup. In 1999 the Italian central government introduced sub-national fiscal rules aimed to impose a fiscal discipline on the municipalities and facilitate the coordination of the local public finance with the national one. Since then every year the national government sets both the requirements and the targets of the rules, alternatively, expenditure cap and budget deficit. Using data at the municipal level, we test the impact of shifting from one rule to the other, given that the shift did not take place for the all municipalities in our sample at the same time. Our estimates show that when moving from a budget balance to an expenditures cap the main consequence is an increase of the fiscal gap and deficit, whereas it does not seem to be able to reduce the expenditures' decision.

Keywords: Fiscal Rules, Budget Balance, Expenditure Caps, Difference-in-Differences
JEL classification: H72, H75, H77

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1   Introduction

Fiscal rules constraining the discretionary powers of policymakers have become quite widespread at the national level as well as at the sub-national level. As response to the recent financial crisis, new and more complex systems of rules which are able to combine the requirements of financial sustainability with the need to react to macroeconomic shocks are therefore increasingly being adopted in both developed and emerging economies (see, on this point, Schaechter et al., 2012). At the same time the increasing expenditure and fiscal autonomy of lower tiers of governments and their impact on long-term fiscal sustainability showed the need for the local public finance to be disciplined to favor coordination with the public finance of the central government. In a decentralized context fiscal rules need a clear definition of intergovernmental relationships [Kopits, 2001; Sutherland et al. 2006; Ter-Minassian, 2007] and are supposed to be more needed when higher vertical imbalances are in place [Eichengreen and von Hagen, 1996].

Italy is an interesting case in this respect. Since 1999 the Italian central government introduced sub-national fiscal rules aimed to impose a fiscal discipline on the municipalities and facilitate the coordination of the local public finance with the national one (the Domestic Stability Pact). Every year the national government sets both the requirements and the targets of the rules, alternatively, expenditure cap and budget deficit. Such a discipline has changed for municipalities in Ordinary Statute Regions (ORS) moving from budget balance to expenditures caps in 2005 and 2006, whereas from 2002 (effective from 2003) Special Statute Regions (SSR) were allowed to differentiate the rules for municipalities and in several cases they opted for an expenditures cap. The variation in time and treated municipalities allow us to address the identification problem related to the relative effectiveness of sub-national fiscal rules in a quasi-experimental environment characterized by a homogeneous, national context exposed to similar economic and fiscal shocks. Using data at the municipal level, we apply the Difference-In-Differences methodology to evaluate the impact of different subnational fiscal rules on budget outcomes, given that the shift from one rule to the other did not take place for the all municipalities in our sample at the same time. Our contribution aim to evaluate the consequence of adopting different kind of rules, given that in a previous work Grembi et al. [2012] have shown, using a sound econometric approach (i.e. difference-in-discontinuities), that the exemption of fiscal rule for municipalities triggers an increase in the deficit equal to 2 percent of the total budget. Grembi et al. [2012] evaluate the impact of a release of fiscal rules on subnational government using data from 1999 to 2004, when the fiscal rule on municipal government targeted mainly deficit measures. They exclude the Special Statute Regions (SSR) sample from their analysis, since the latter could derogate the national discipline.

Moving from the Grembi et al. [2012] contribution, we focus on the pro and cons of a budget balance rule versus a cap on expenditures. The two recipe to control the deficit at the local level juxtapose two concepts of decentralization: whether local authorities have to be left free to decide how to allocate taxes and expenditures or not. As a matter of fact, fiscal rules targeting budget balance generally leave sub-national governments free to dispose their policy, eventually raising their taxes whenever they want to increase expenditures. Cap

on expenditures, on the other side, tend to tie the local government decision discretion, even if the sub-national government could cover an increase in expenditures with own taxes' revenues. Given the constraints on the local decision making process related to cap on expenditures, we aim to investigate whether the benefit linked to that policy design is able to counter-balance the costs. Our preliminary results show that a shift to the expenditures' cap rule produce a decrease in current expenditures, with no consequences on the other budget outcome variables. Hence, a shift to an expenditures cap rule would be recommended only when the central government needs to intervene directly on local government decisions to curve the expenditures.

The paper is organized as follows: in Section 2 we present the literature review. In Section 3 we illustrate the Italian institutional framework of the DSP as applied to municipal governments in both the ORSs and the SSRs. Section 4 discuss our econometric identification and methodology. In Section 5 we describe the data and the empirical results. Section 6 concludes.

2   Related Literature

When countries pursue the implementation of sub-national fiscal rules as the solution for weakly defined institutional arrangements, they mean to solve two major problems: common pool and soft budget constraint. First, the existence of vertical fiscal imbalances at sub-national levels may encourage an excess of local expenditure financed by the common pool of higher tier of government transfers rather than by local tax autonomy (Weingast et al. [1981]; Eichengreen and von Hagen [1996]). Secondly, a problem of soft budget constraint (moral hazard) derives from the insurance effect provided by the expectation that the higher-levels of government would intervene to face local deficits with special transfers or by taking over their liabilities.[1]

These underlying issues are often unfortunately addressed through the design and adoption of stringent sub-national fiscal rules defined as formalized numerical restrictions or general targets on relevant aggregate fiscal parameters which reduce the degree of discretion in the decision making process, promote an interest in sustainability issues, and limit the scope for time-inconsistent decisions. The unfortunate side of this approach relies into the fact that fiscal rules should not be considered a substitute for weak institutional design when dealing with decentralization. Hard budget constraints and low level of common pool risks should be precondition for an appropriate functioning of fiscal rules (Sutherland et al. 2006; Ter-Minassian, 2007; Grembi and Manoel [2012]).

Kopits and Symansky [1998] identify several key features of fiscal rules such as 1) the objective the rules have (target or ceiling); 2) their effective period; 3) whether they are

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[1]This phenomenon is positively correlated to the dimension of the local authority according to the principle of too big to fail (Wildasin [1997]). The political cost of a non-intervention policy would be higher for the central government than the cost of the intervention itself whenever the local services are politically sensitive(e.g. health care, education) and/or when the local consent is also relevant for national decisions (Dafflon [2002]; Rodden [2002]; Rodden et al. [2003]; Breulli et al. [2007]).

included in the constitution rather than any other law; 4) which government level is affected; and 5) whether any penalty for noncompliance is established. Sub-national fiscal rules can be listed as follows: rules on budget balances, expenditure caps (both characterizing the Italian case), ceilings on the own revenue of sub-national entities, limits on the stock of debt or on the issuance of new debt, restrictions on the type of expenditure that can be financed with debt, and limits on the debt linked to the cost of debt service or indicators of the ability to service the debt [see, among others, Gastaldi and Giuriato, 2009]. All these measures are usually introduced in different combinations, in order to reach more effectively the scope of limiting the common pool and moral hazard issues faced by the local authorities.

A number of empirical papers have tried to assess the impact of fiscal rules on budgetary outcomes (Tommasi and Braun [2004]; Broyles et al. [2009]). There is some evidence in this respect, i.e. fiscal rules result in lower budget imbalances, coming either from cross-country comparisons in specific regions, such as the European Union (Hallerberg and Von Hagen, 1999) or Latin America (Alesina et al., 1999); from comparisons between local governments in a federal state such as the U.S. (see, among the others, Bunch [1991], Alt and Lowry [1994], Bohn and Inman [1995], Poterba [1994,1996]), Germany (e.g., Lubke [2005]), for Switzerland (e.g., Kirchgssner and Feld [2006], Krongstrup and Walti [2007]; Spain (e.g., Joumard and Giorno [2005], Miaja [2005]); and Italy (e.g., Bartolini and Santolini [2009], Balduzzi and Grembi [2011], and Grembi et al. [2012]).

The major methodological problems of many among these works, consists in an unsatisfactory treatment of the endogeneity problem related to the fiscal rules. As matter of fact the link between rules characteristics and voters preferences, for instance in terms of fiscal prudence, has been addressed as a problem of omitted variable bias [e.g. Tommasi and Braun, 2004]. In other words, a certain set of rules could be more effective due to the fact that the constituency, which will be affected by it, is fiscally more parsimonious or because it exerts more control on its politicians, but not because the rule is per se more effective. The endogeneity problem is often the reason why many times the compliance of the rule is taken as a measure of its effectiveness.[2]

3   The Italian Institutional Setting

The Italian Constitution foresees the principle of decentralization of the government functions (Article 5 and Title V of the Constitution). Italy counts 20 Regions (*Regioni*), and five of them (*Friuli Venezia Giulia, Sardegna, Sicilia, Valle dAosta, Trentino Alto Adige*[3]), enjoy a special statute (SSRs), because of their multilingual status, borderline geographical position

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[2]Balduzzi and Grembi [2011] argue that the compliance level can be a misleading proxy for the impact of the rules, given the possibilities that fiscal rules trigger window dressing and creative finance and test the presence of creative accounting in the Italian municipalities between 1999 and 2004 as the consequence of subnational fiscal rules in Italy, a context where the levels of compliance are generally very high but the status of local finance is very poor. They did not detect evidence of window dressing in the sample used for the analysis. For a more accurate definition of window dressing problems in a institutional framework with fiscal rules, see Milesi-Ferretti [2000].

[3]It consists of the autonomous Provinces of Trento and Bolzano.

or particular characteristics of the local economy. Overall Regions consist of more than 8,000 municipalities (*Comuni*), run by a local government (*Sindaco*, *Giunta Comunale*, and *Consiglio Comunale*). Municipalities (or groups of municipalities) run about VVV% of total public expenditure and handle the provision of a wide set of services such as water supply, waste management, local police, infrastructures, transportation and roads, housing, welfare and social assistance (care of the elderly, crches, welfare programs). In terms of revenues, they largely depend on transfers and user charges; local taxes amount to about VVVV% of municipal revenues.

Since 1999 (*Legge Finanziaria* n. 448, article 28) every year the national government sets both the requirements and the targets of the so-called Domestic Stability Pact (DSP) for municipalities has been either the balance budget or the expenditure cap.[4] Starting from 2003 SSRs (*Legge Finanziaria* n. 289/2002 article 29) were allowed to differentiate their own DSP. Such decision was basically ratifying an initiative already taken by the Autonomous Provinces of *Trentino Alto Adige* (i.e., Bolzano and Trento) since 2000. Regions are allowed modify the national DSP arrangements only to move to more stringent provisions. The are not allowed to derogate to implement lower standards compare to the national targets.[5] Therefore between 1999 and 2007, several shifts between budget balance and expenditures caps took place according to two dimensions: 1) the geographical location and 2) the municipality size.

Table 1, about here

With respect to the fiscal target, the shift to the expenditures' cap concerned municipalities located in Autonomous Province of Trento (2000), Bolzano (2001-2006), Friuli Venezia Giulia (2005), Sicilia (2005 and 2006), Sardegna (2005 and 2006), and the municipalities located in the ORSs (2005 and 2006). The threshold of the constrained municipalities varies as well. In the OSRs, the municipalities below 5,000 inhabitants started to be exempted by the rules in 2001, and with the exception of 2005, such threshold remains stable (see Table 1). Sicilia and Sardegna, which did not diversified their regulation from the ORSs standards, followed the same track. In the Autonomous Province of Trento the application of the rules interested the entire population of municipalities and the same approach was followed by Valle d'Aosta starting from 2003, having only one municipality greater than 5,000 inhabitants. The Autonomous Province of Bolzano ended up to the same widespread application only in 2006, after experiencing several thresholds. All in all, only municipalities greater than 5,000 residents have been ruled by a fiscal rule from 1999 to 2007.

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[4]In 1992 the Maastricht Treaty set out the convergence criteria in the form of numerical targets for deficits and public debt levels to be satisfied in order to ensure fiscal discipline in the member countries and prevent fiscal crises. In 1997 the Stability and Growth Pact strengthened the provisions of the Maastricht Treaty and introduced budget rules in order to sustain EMU governments in their commitment to fiscal prudence, improve co-ordination and transparency in the public finances of these governments and guarantee the sustainability of public finances. These constraints force governments to run their budget balances and the stock of debt with reference to general government, i.e. to the consolidated accounts of central government, local government and social security institutions. Control of the public finances thus requires the cooperation of all the levels of government, even though only the central government is committed to the respect of the European fiscal targets.

[5]From 2010 such derogative power was extended to all Regions.

4 Econometric Identification and Methodology

We use a Difference-in-Differences (DD) approach to identify the causal impact of the shift from a budget balance rule to an expenditures cap rule in terms of fiscal gap, deficit, and expenditures decisions. Define Y_{irtp} as the outcome of interest for municipality i located in Region r at time t and belonging to the population class p. The specification of p is needed since 1) there is only one class of municipalities, which was constantly under the effect of a rule, municipalities above 5,000 inhabitants, and 2) there are other policies changing at different thresholds for municipalities with more than 5,000 inhabitants. This is the reason to focus on municipalities with a population between 5,000 and 10,000 residents (i.e. 10,000> p ≥ 5,000). The DD estimator is defined by the following equation (Angrist and Pischke [2009]):

$$E[Y_{irt}|i \in EC_r = 1, PostEC_t \geq t_1^*] - E[Y_{irt}|i \in EC_r = 1, PostEC_t < t_1^*] - \tag{1}$$
$$E[Y_{irt}|i \in FG_r = 1, PostEC_t \geq t_1^*] - E[Y_{irt}|i \in FG_r = 1, PostEC_t < t_1^*] = \delta$$

where δ is the causal effect of interest, EC represents the rule targeting the rate of growth of the expenditures (i.e., expenditures caps), and FG represents the rule targeting the rate of growth of the Fiscal Gap, defined as the difference between revenue (net of transfers) and expenditures (net of debt services). All in all, the treated group is represented by municipalities located in those regions where the rule is cap on expenditures, whereas the control group is represented by municipalities run under the fiscal gap containing rule. Treated and control change over time as in Autor et al. (2006). Hence, we aim to explain variations of Y_{irtp} through the following specification:

$$Y_{iprt} = \gamma_r + \lambda_t + \iota Z_{rt} + \delta D_{rt} + X'_{iprt}\beta + \varepsilon_{iprt} \tag{2}$$

where $E(\varepsilon_{iprt}|ipr,t) = 0$, γ_{ip} is a vector of regional intercepts, λ_t is a vector of year dummies, Z_{rt} is the interaction of regional and year fixed effects, and δ the coefficient of interest. X'_{iprt} is a vector grouping controls at the municipal level, which can explain part of the variation in the financial outcomes of interest. These variables include: 1) transfers both from the Central State and the Regional Government; 2) the average income at the municipal level, which accounts for the available tax base at the local level; 3) the geographical area covered by the municipality, which together with its sea level is one of the determinants of the the expenditures decisions; 4) the budget rigidity, which defines the margin of freedom local authorities have in terms of discretional spending decisions, since it is the ratio between the total revenues and the total expenditures for payrolls and debt services. Budget rigidity ties, so to say, the local administration decision's power given it sets the part of the budget, which is available for expenditures once the main expenditures' items are covered. D_{iprt} is a dummy variable, which is equal to 1 if municipality i, with a resident population in p, is

placed in Region r, which adopted a cap on total outlays when $t \geq t^*$, with t^* being the year of the policy adoption.

5   Descriptive Statistics and Results

The data we use are provided by the Italian Ministry of the Interior (e.g. municipal budgets) and by the Italian National Institute of Statistics.[6] Table 3 shows the distribution of the tread and the control in our 1999-2007 unbalanced panel sample. As stated in the institutional part, the more relevant move towards the total outlays cap took place in 2005-06.

Table 3, about here

We consider five outcomes of interest (i.e., Y_{iprt}): Fiscal Gap, Deficit (i.e. the difference between revenues and expenditures), Current Outlays, Capital Outlays, and Total Outlays. In Table 4 we report the mean per capita value in 2009 euro of each outcome during the period 1999-2007. A first interesting trend is the one characterizing the deficit (i.e. expenditures-revenues), which appears to decrease significantly from 1999 to 2007.[7]

Table 4, about here

Table 5 presents the results. Since SSR were allowed to move from the national fiscal rule designed for municipalities starting 2003, we provide estimation results for equation 2 also on the subsample of municipalities located in SSR.[8] Indeed the results are different according to the subsample. On the aggregate sample the introduction of a cap on total outlays growth rate seems to produce a reduction of the current expenditures, but not impact on the deficit measures. Once we analyze the disaggregated samples, we cannot associate a statistically significant effect to the choices of municipalities located on SSR.

Table 5, about here

6   Conclusive Remarks

Fiscal rules are increasingly considered a key policy instrument in achieving fiscal discipline at sub-national and/or local level and guaranteeing fiscal sustainability. Our work is a contribution in assessing the impact of different combinations of fiscal rules on the targeted fiscal items and aggregates. Preliminary results on the Italian case study shows that when moving from a budget balance to and expenditures cap rule no particular increase in the benefits of adopting fiscal rules stem out.

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[6]For a better definition of the used variables and their sources see Table A1.

[7]Part of it could depend by municipalities in SSR.

[8]If we use only the OSR subsample, we lose the variation of the treatment needed to identify its effect.

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Tables and Figures

Table 1: **The rules of the Domestic Stability Pact (DSP)**

Year	The DSP Rules	OSR	Sicilia	Sardegna	Valle d'Aosta	Friuli Venezia Giulia	Bolzano	Trento
1999	Municipalities	All	All	All	All	All	All	All
	Target	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap
2000	Municipalities	All	All	All	All	All	All	All
	Target	Fiscal gap Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Total Outlays
2001	Municipalities	Above 5,000	Above 5,000	Above 5,000	Above 5,000	Above 5,000	Above 5,000	All
	Target	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Total Outlays	Fiscal Gap
2002	Municipalities	Above 5,000	Above 5,000	Above 5,000	All	Above 5,000	Above 5,000	All
	Target	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Total Outlays	Fiscal Gap
2003	Municipalities	Above 5,000	Above 5,000	Above 5,000	All	Above 5,000	Above 1,200	All
	Target	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Total Outlays	Fiscal Gap
2004	Municipalities	Above 5,000	Above 5,000	Above 5,000	All	Above 5,000	Above 1,200	All
	Target	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Fiscal Gap	Total Outlays	Fiscal Gap
2005	Municipalities	Above 3,000	Above 3,000	Above 3,000	All	Above 5,000	Above 1,200	All
	Target	Total Outlays	Total Outlays	Total Outlays	Fiscal Gap	Total Outlays	Total Outlays	Fiscal Gap
2006	Municipalities	Above 5,000	Above 5,000	Above 5,000	All	Above 5,000	All	All
	Target	Current and Capital Outlays	Current and Capital Outlays	Current and Capital Outlays	Fiscal gap	Total Outlays Outlays	Fiscal gap	All
2007	Municipalities	Above 5,000	Above 5,000	Above 5,000	All	All	All	All
	Target				Total Outlays			

Notes. The *Domestic Stability Pact* is a set of fiscal rules imposed by the central government to discipline the fiscal management of local governments. The targets between 1999 and 2007 have been the *Fiscal gap* and the *Total Outlays* (see the Appendix Table A1 for details). Legislative sources: annual national budget law (*Legge Finanziaria*) from 1999 to 2004.

Table 2: **Legislative thresholds for Italian municipalities, 1999–2007**

Resident Census Population	Wage of mayor	Size of executive committee	Size of city council	Electoral rule
Below 1,000	1,291	4	12	single
1,000-3,000	1,446	4	12	single
3,000-5,000	2,169	4	16	single
5,000-10,000	2,789	4	16	single
10,000-15,000	3,099	6	20	single
15,000-30,000	3,099	6	20	runoff
30,000-50,000	3,460	6	30	runoff
50,000-100,000	4,132	6	30	runoff
100,000-250,000	5,010	10	40	runoff
250,000-500,000	5,784	12	46	runoff
Above 500,000	7,798	14-16	50-60	runoff

Notes. Policies varying at different legislative thresholds in the period 1999–2007. The available Census data are 1991 and 2001, for the period of interest. *Size of executive committee* is the maximum allowed number of executives appointed by the mayor. *Size of city council* is the number of seats in the city council. The wage thresholds at 1,000 and 10,000 were introduced in 2000; all of the other thresholds date back to 1960. This table is taken by Grembi et al. [2012].

Table 3: **Treated and Control**

Year	*Treatment*		*Total*
	FG	TO	
1999	1,076	34	1,110
2000	1,102	42	1,144
2001	1,101	41	1,142
2002	1,092	41	1,133
2003	1,081	37	1,118
2004	1,101	40	1,141
2005	54	1,086	1,140
2006	88	1,049	1,137
2007	1,096	28	1,124

NOTE: FG: Target on the rate of growth of the fiscal gap. TO: Target on the rate of growth of the total outlays. The reference threshold for both targets is the value of two years before.

Table 4: **Descriptives statistics**

Years	Fiscal Gap		Deficit		Current Outlays		Capital Outlays		Total Outlays	
	Control	Treated	Control	Treated	Control	Treated	Control	Treated	Control	Treated
1999	240.0724	158.674	7.232	13.341	529.193	469.299	439.981	370.014	969.175	839.313
2000	241.7515	154.373	13.015	10.842	464.093	489.790	355.557	353.702	819.650	843.234
2001	231.7234	184.388	12.441	12.635	450.064	535.843	422.172	412.948	872.236	948.791
2002	229.1107	178.841	5.985	7.362	452.679	534.790	406.673	454.827	859.352	989.617
2003	237.4812	196.408	8.714	11.549	498.127	545.644	428.023	513.390	926.150	1058.555
2004	230.8405	188.100	5.237	11.244	514.022	565.728	426.349	519.720	940.371	1085.448
2005	230.5658	193.782	11.239	17.528	545.923	595.988	437.596	499.504	983.519	1095.492
2006	224.3785	187.227	0.314	10.485	540.227	585.1022	386.236	491.618	926.462	1076.720
2007	237.748	181.197	-3.662	-1.189	595.346	624.856	465.376	440.166	1060.723	1065.022

NOTE: Mean values reported. Treated are municipalities under a total outlays cap rule. Control are municipalities under a fiscal gap rule.

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Table 5: **Results DD**

	(1)	(2)	(3)	(4)	(5)
	Fiscal Gap	Deficit	Current Outlays	Capital Outlays	Total Outlays
All Sample					
Treatment	-95.061	15.134	-309.020***	167.511	-140.408
	(81.869)	(29.349)	(84.883)	(184.196)	(231.092)
Year FE	Yes	Yes	Yes	Yes	Yes
Regional FE	Yes	Yes	Yes	Yes	Yes
Region*Year FE	Yes	Yes	Yes	Yes	Yes
Observations	8,619	8,620	8,620	8,618	8,620
R^2	0.729	0.032	0.409	0.376	0.441
Special Statute Regions					
Treatment	-5.209	-8.567	-36.115	-115.270	-151.384
	(19.125)	(22.325)	(30.727)	(207.962)	(226.740)
Year FE	Yes	Yes	Yes	Yes	Yes
Regional FE	Yes	Yes	Yes	Yes	Yes
Region*Year FE	Yes	Yes	Yes	Yes	Yes
Observations	1,043	1,043	1,043	1,043	1,043
R^2	0.697	0.082	0.325	0.601	0.519

NOTE: All specifications include the following controls: municipal area, sea level, per capita income, per capita Central transfers, and per capita Regional transfers. Treatment captures the effect of adopting a cap on total outlays. Robust standard errors clustered at the regional level in brackets. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A1: Variables' description and sources

Variable	Definition and measure	Available from-to	Source
Deficit	Expenditure minus revenues Per-resident; 2009 Euros	1999-2007	IMI
Fiscal gap	Expenditure minus revenues (net of central transfers and debt service) Per-resident; 2009 Euros	1999-2007	IMI
Current outlays	Total current expenditure Per-resident; 2009 Euros	1999-2007	IMI
Capital outlays	Total capital expenditure Per-resident; 2009 Euros	1999-2007	IMI
Total Outlays	Total expenditure Per-resident; 2009 Euros	1999-2007	IMI
Central transfers	Total transfers by the central state Per-resident; 2009 Euros	1999-2007	IMI
Regional transfers	Total transfers by the Regional state Per-resident; 2009 Euros	1999-2007	IMI
Census population	Census population of the municipality	1991 and 2001	ISTAT
Income	Municipal taxable income mean Per-resident; 2009 Euros	1999-2007	ME-DF
Area size	Municipal area size In km^2	1999-2007	IMI
Sea level	Municipal sea level In meters	1999-2007	IMI

Notes: IMI stands for Italian Ministry of the Interior; IFEL-ANCI stands for Institute for the Local Finance and Economy of the National Italian Association of Municipalities; ME-DF stands for Italian Ministry of the Economy, Department of Finance.