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Inter-municipal Cooperation and Cost Savings: Myth or Reality?

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Abstract

Cost reduction, increase in efficiency and the improvement of the quality of public services, together with the reduction of the size and scope of the public sector, are among the most recurrent themes of the New Public Management (Hood, 1991) and are the pillars of all public sector reforms all over the world.

Local governments in particular, over the last decade have experienced a drastic reduction in the resources available for the provision of services, and faced growing problems in ensuring adequate levels of quality of the services. Different strategies have been designed to cope with these problems, among which inter-municipal cooperation, based on the idea that economies of scale and scope may allow a reduction in the cost of service delivery (Warner, 2015). However, several studies show that cost reduction is rarely achieved through the cooperation between different municipalities (Oates 1988).

In Italy, a typology of inter-municipal cooperation (a kind of *city alliance*), the so-called *Unione di Comuni*, has emerged since 2000, in order to provide joint delivery of services, save money and gain economy of scope and scale. This paper aims at providing empirical evidence of the results (in term of cost reduction) achieved through inter-municipal cooperation so far, by analyzing a sample of municipalities that transferred some specific functions (which correspond to a set of services) to a *Unione di Comuni*. The *Regional Public Account System (RPA)* provides the official data related to the cost incurred to deliver specific functions for both the individual municipalities and the *Unioni di Comuni*.

Based on a comparison between the expenditure for delivering a sample of functions by a group of Italian municipalities before the decision to transfer those functions to the *Unioni di Comuni* and the expenditure incurred for the same functions by the *Unioni di Comuni* after the transfer (when municipalities stopped delivering those functions individually), the paper investigates whether or not the joint provision of the functions has resulted in a real reduced cost delivery.

Key Words: Inter-municipal Cooperation, Joint Provision, Shared Services

1. Introduction

Local Governments across the world have been experiencing increasing problems due the continuous reduction of the available resource and find it difficult to guarantee the delivery of public services (Bel & Warner, 2015; Spano, 2018). They are asked to 'do more with less' (Hulst, van Montfort, Haveri, Airaksinen, & Kelly, 2009) to guarantee the delivery of an increasing quantity and quality of services with less resources (Hulst & van Montfort, 2007). Several countries, such as the US, Spain, Italy and France are characterized by many very small municipalities; this aspect makes it even more difficult to provide services efficiently (McGarvey, 2012).

Different strategies have been designed and implemented to cope with these problems in the attempt to allow municipalities to continue delivering public services to meet the increasing demands of citizens (Dollery, Grant, & Crase, 2011). According to Hulst and van Montfort (2007), there have been four major strategies: (1) amalgamation, (2) redistribution of responsibilities between the different levels of government; (3) outsourcing and (4) inter-municipal cooperation.

Inter-municipal cooperation is one of these strategies and is based on the idea that it can foster economies of scale and scope and, in turn, a reduction in the cost of service delivery (Warner, 2015).

Similar to other countries, Italy as well tried to foster inter-municipal cooperation, but with limited success. In fact, only 30% of municipalities with less than 5,000, is actually delivering shared services with other municipalities (Corte dei Conti, 2015). In most of the cases, municipalities deliver a very limited fraction of their services jointly with other municipalities (Spano, 2018).

Consistently, the first hypothesis has been formulated as follows:

Hypothesis 1: A limited transfer of functions from municipalities to the *Unioni di comuni* took place in Italy.

Inter-municipal cooperation is based on the idea that economies of scale and scope may allow a reduction in the cost of service delivery (Warner, 2015). However, the literature does not support the assumption that inter-municipal cooperation may facilitate the reduction of the cost of service delivery (Oates 1988) and several studies show that economies of scale are rarely achieved through shared services and, in some cases there may also arise dis-economies of scale (Bish, 2001). There are also cases in which municipalities incur in higher costs when they participate in forms of cooperation with other municipalities, compared to when they act alone. For example, a study in Holland showed that municipalities pay lower interest rates when they act alone (Soguel & Silberstein, 2015). The evidence of the effects of inter-municipal cooperation on cost reductions, deriving from the joint delivery of public services is limited and contradictory (Bel & Warner, 2015). Despite the "mantra" that shared service delivery is a strategy to reduce cost, several studies found no support for this hypothesis. For example, Guengant and Leprince (2006) found that as a result of inter-municipal cooperation, the reductions in municipal spending are much smaller than the increases in inter-municipal spending. Also, although they did not find evidence of an increase in the overall cost as a result of the cooperation, Frère, Leprince, and Paty (2014) found that inter-municipal cooperation has no significant impact on municipal spending, so it did not help in achieving cost reduction.

With regards to Italy, one of the objectives behind the *Unioni di Comuni* in Italy was the reduction of the cost incurred to deliver municipal services. Giacomini, Sancino, and Simonetto (2018) in a survey of Italian Municipalities belonging to a *Unione* found out that in more than two-thirds of the cases, cost reduction and better public services were achieved as a consequence of inter-municipal cooperation. Other data show that there has been an increase in the expenditure for the *Unioni* and a reduction in the expenditure for the member municipalities between 2013 and 2014 (Corte dei Conti, 2015), but the latter has not been significant, so the overall expenditure (*Unioni* and Municipalities) did not face a significant reduction. This

latter finding is consistent with the international literature, that does not find significant support for the hypothesis that inter-municipal cooperation fosters cost reduction.

For these reasons, the second hypothesis has been formulated as follows:

Hypothesis 2: the transfer of a function from individual municipalities to a *Unione di Comuni* is not associated with a decrease in the overall expenditure.

The paper is organized as follows. The next section reports the context of the analysis and is followed by the description of the methodology used. The fourth section presents the results and the last section the discussion of the results and some concluding remarks.

2. The context of the analysis

The *Unioni di Comuni* are forms of inter-municipal cooperation introduced in the Italian legislation in 1990 and they are aimed at delivering shared services for the member municipalities (Ermini & Santolini, 2010). The first *Unione* was established in 1995 and as for April 2018 there are now 536 *Unioni*, with an average participation of about six municipalities per *Unione* (Table 1). The number of *Unioni* has seen a dramatic increase (+ 230%) in between 2000 and 2003, when the number of *Unioni* busted from 67 to 220 units. If one considers the period 2000-2012 the increase is almost 450% (Figure 1). 38% of the 8,100 Italian municipalities belong to a *Unione*, with an overall population of about 12 million, corresponding to 20% of the population of the country. Over the years some *Unione* have been cancelled, in some cases due to the merger of the municipalities involved.

Table 1

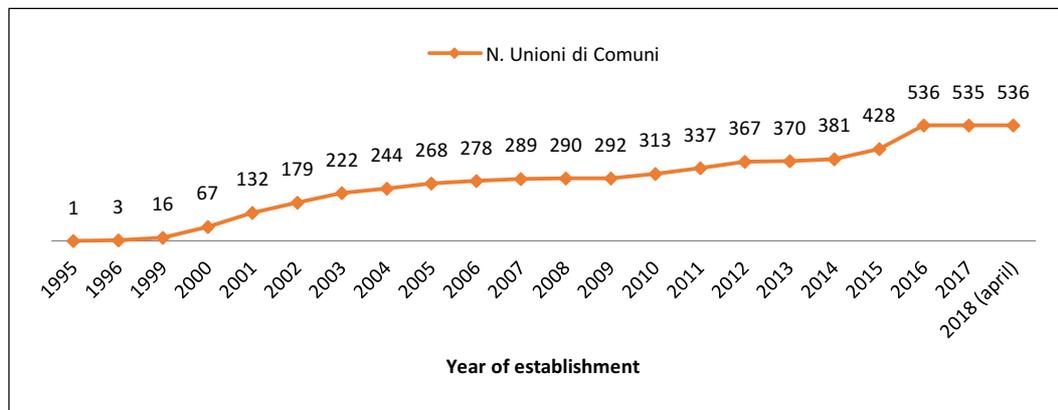
N. of *Unioni di Comuni* per Region

Region	N. Municipalities	<i>Unioni di Comuni</i>	Member Municipalities	Average Participation	% Participating Municipalities
Valle d'Aosta	74	8	73	9,13	98,65
Emilia-Romagna	331	42	270	6,43	81,57
Sardegna	377	36	281	7,81	74,54
Friuli-Venezia	215	18	146	7,68	67,91
Piemonte	1.197	108	778	7,2	65
Marche	229	19	120	6,32	52,4
Toscana	274	22	139	6,32	50,73
Liguria	234	23	110	4,78	47,01
Sicilia	390	47	174	3,7	44,62
Puglia	258	23	113	4,91	43,8
Veneto	571	43	225	5,23	39,4
Molise	136	8	52	6,5	38,24
Lazio	378	20	101	5,05	26,72
Abruzzo	305	11	68	6,18	22,3
Lombardia	1.516	80	277	3,46	18,27
Campania	550	15	90	6	16,36
Calabria	405	10	53	5,3	13,09
Basilicata	131	2	16	8	12,21
Umbria	92	1	8	8	8,7
Trentino-Alto Adige	292	0	0	0	0
TOT.	7.955	536	3.094	5,8%	

Source: www.comuniverso.it

Figure 1

N. of Unioni di Comuni per year of establishment



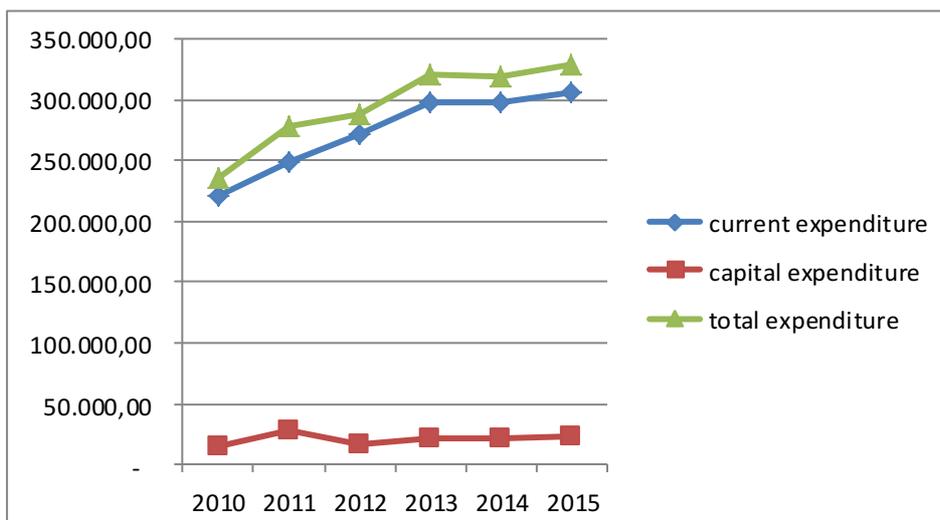
Source: Spano, 2018

According to the legislation, all Italian municipalities with fewer than 5,000 residents are obliged to deliver a set of functions jointly (i.e. *Fundamental Functions*).

In the 2010-2015 period, the expenditure of the Unioni increased significantly until 2013. Since 2013 the expenditure stabilized and got settled at a higher level compared to the previous periods (see figure 2). The expenditure has been almost entirely related to running costs with capital expenditure at a far lower level.

Figure 2

The expenditure of the Unioni di comuni



The expenditure of the Unioni di Comuni is on almost the same functions as the Municipalities, except from healthcare, justice and other expenses (table 2 shows that for these functions the expenditure of the Unioni is zero, while municipalities do incur in expenditure). In addition, the three functions with the highest expenditure are the same for both Unioni and Municipalities: social intervention, general administration, education.

The % of Municipalities' expenditure on total expenditure (Unioni+Municipalities) is higher than that of the Unioni for all functions (see table 2). As a consequence, it is possible to say that there has been a partial re-allocation of the overall expenditure (i.e. Unioni started to spend for these functions), but not its full transfer from the Municipalities to the Unioni as yet.

Table 2

Current expenditure - annual average 2010-2015

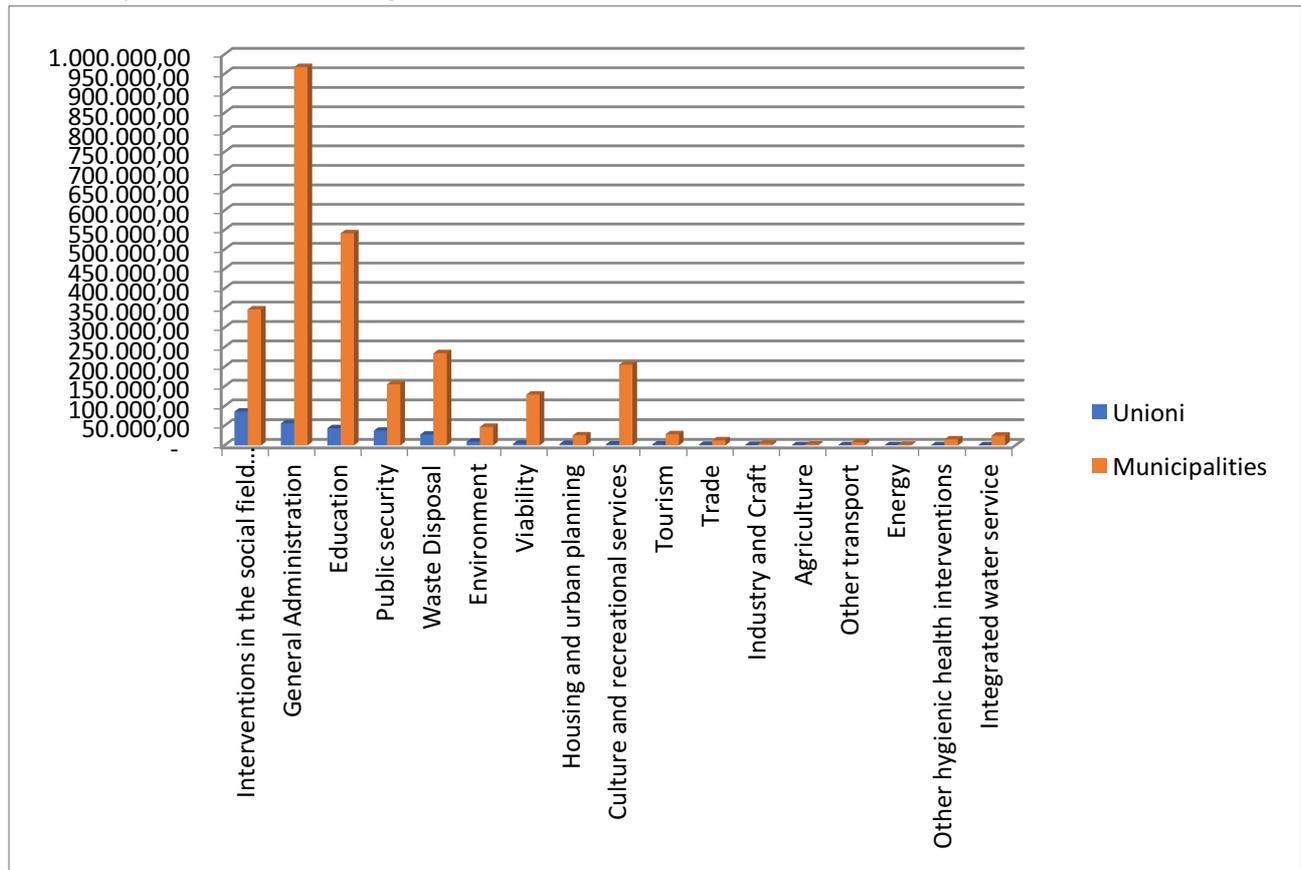
Functions	Unioni	Municipalities	Total	% Unioni on tot. exp	% Municipalities on tot. exp
Interventions in the social field (assistance and charity)	85.732	346.054	431.786	20%	80%
General Administration	55.803	967.092	1.022.895	5%	95%
Education	43.361	541.208	584.570	7%	93%
Public security	37.187	155.163	192.350	19%	81%
Waste Disposal	27.221	233.934	261.155	10%	90%
Environment	9.065	46.578	55.643	16%	84%
Road maintenance	4.297	128.792	133.089	3%	97%
Housing and urban planning	3.224	25.104	28.328	11%	89%
Culture and recreational services	2.554	204.647	207.201	1%	99%
Tourism	2.392	27.976	30.367	8%	92%
Trade	1.435	12.572	14.007	10%	90%
Industry and Craft	1.003	4.182	5.185	19%	81%
Agriculture	235	1.856	2.090	11%	89%
Other transport ¹	225	7.126	7.351	3%	97%
Energy	151	1.539	1.690	9%	91%
Other hygienic health interventions	113	14.983	15.097	1%	99%
Integrated water service	18	24.509	24.528	0,1%	100%
Health	-	17.527	17.527	0%	100%
Justice	-	5.147	5.147	0%	100%
Other expenses in the economic field	-	3.102	3.102	0%	100%

Source: Regional Public Account System

¹ Other than road maintenance.

Figure 3

Current expenditure- annual average 2010-2015



Source: Regional Public Account System

Table 3 shows how the highest increase in the expenditure of the Unioni in between 2010-2012 and 2013-2015 concerns different functions compared to those with the highest absolute levels of expenditure (social intervention, general administration, education), namely other hygienic health interventions, culture and recreational services, environment and Industry and craft. On the one hand, this may be explained by the fact that the expenses of the Unioni for these functions had speeded up prior to the observed period; on the other hand, by the unwillingness of the municipalities to foster the process of the transfer of these functions, that, given their expenditure level, may be considered strategic.

It should also be noted that the increase in expenditure for the functions of the Unioni does not always correspond to a reduction in the expenditure of the municipalities for the same functions. For example, the Environment function show a 99% of increase for the Unioni and a 18% increase for the Municipalities. It is necessary to note that these are aggregate data, so this may mean that the municipalities that increased the expenditure for this function are not necessarily belonging to the same Unioni.

Table 3

% variation in current expenditure by function (2013-15 and 2010-12 comparison)

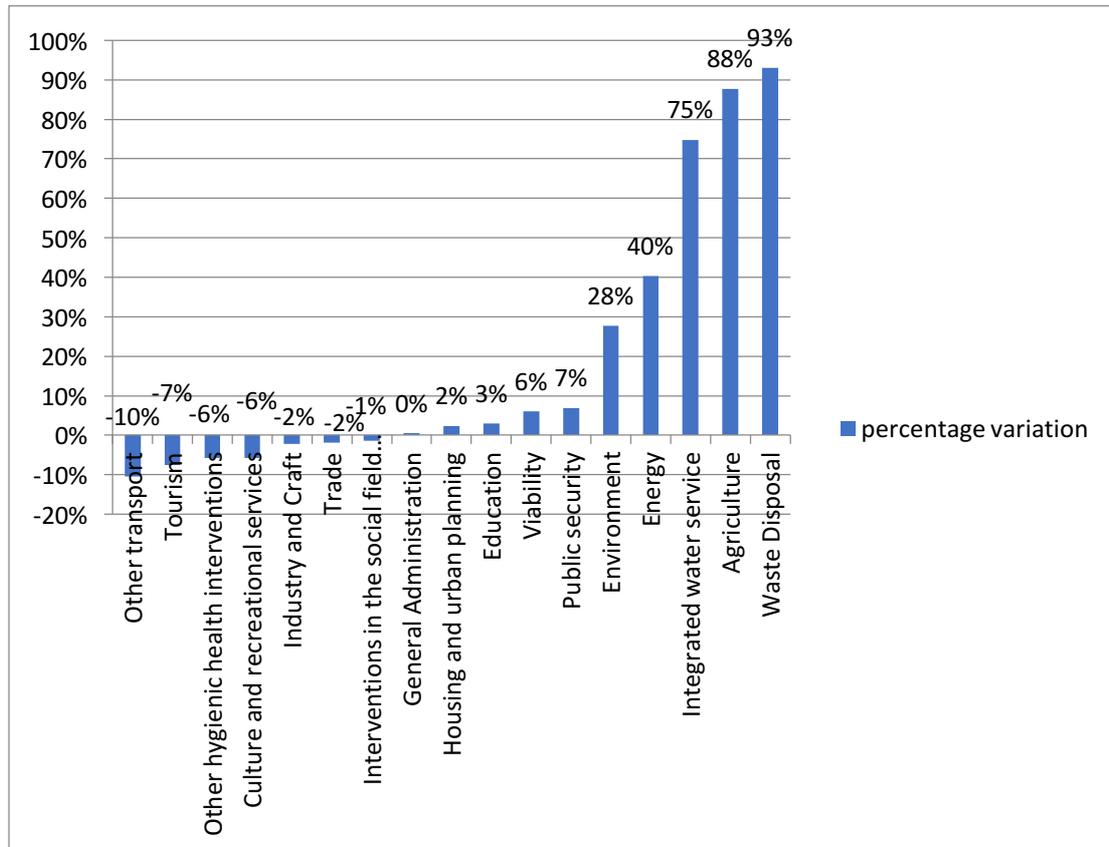
Functions	Unioni	Municipalities
Other hygienic health interventions	219%	-7%
Culture and recreational services	99%	-7%
Environment	92%	18%
Industry and Craft	71%	-14%
Housing and urban construction	58%	-3%
Road conditions	37%	5%
Trade	31%	-5%
Instruction	27%	1%
Interventions in the social field (assistance and charity)	25%	-4%
General Administration	20%	-1%
Waste disposal	13%	106%
Public security	4%	8%

Source: Regional Public Account System

In those cases in which the Unioni's growth of expenditure is more than offset compared to the municipalities' expenditure decrease (health and hygiene interventions, culture, industry and craft, trade, culture and recreational services, intervention in social field), there has been a reduction in total expenditure for each function (unions + municipalities). When this phenomenon occurs, it could be interpreted as a step toward the achievement of the economies of scale desired by the legislator.

Figure 4

Expenditure of the Unioni and municipalities. % variation 2013/15 - 2010/12



Source: Regional Public Account System

3. Methodology

In order to select those cases in which there has been a transfer (at least partial) of functions from the municipalities to the Unioni, the Regional Public Account System (RPA) database has been analyzed. With regards to the Unioni, the PAS contains the data related to the Unioni in 3 regions and 54 Unioni (27 in Emilia Romagna, 19 in Sardinia and 8 in Apulia), as not all Italian Regions provide the data for the expenditure of the Unioni; the overall number of municipalities belonging to the 54 Unioni is 384. We assumed that the very fact that a municipality eliminated the expenses for a specific function, means that that function has been transferred to the Unione. Given this assumption, the first phase consisted in selecting those municipalities that eliminated the expenses for at least one function in the period 2013-2015.

After selecting those municipalities that had transferred at least one function to a Unione, in the second phase a comparison of the overall expenditure before 2013 and afterwards was performed. The average for the periods 2010-2012 and 2013-2015 was used.

In case not all municipalities of a specific Unione transferred a specific function, the comparison was made between the sum of the average expenditure for the functions of both the above selected municipalities plus the expenditure of the Unione they belong to in the 2010-2012 and 2013-2015 periods.

In a constantly changing normative setting, with continuous deferment of the deadlines to deliver the fundamental functions jointly (at the moment of the writing of the present paper, the end of 2018) and a strong regional variability, the choice of the period for the analysis was not determined by an official deadline imposed by the legislation, but by the trend of the expenditure incurred by the Unioni di Comuni. In fact, after a period of constant decrease, since 2013 the expenditure stabilized and got settled at a higher level compared to the previous periods. Hence, the hypothesis that starting from 2013 there has been a higher level of operation and an increase in the number of functions that were transferred to the Unioni. In addition, considering 2013 as the divide between the two analyzed periods, allowed us to have a sufficiently long period for the comparison in order to consider a wider time-frame than one year only.

4. Analysis

The first step of the analysis aimed at finding out whether or not there were cases of functions for which the expenditure incurred by municipalities was completely eliminated. The elimination of the expenditure for a function by a specific municipality (provided that that function and its services continue to be delivered to citizens), has been considered the demonstration of the transfer of that function from the municipality to the Unione. In other words, if (1) the function continues to be delivered (it means, all the services in the function), (2) a specific municipality does not incur in any expense for that function, and at the same time, (3) the Unione is spending for the same function, these elements together mean that the function has been transferred.

The analysis did not consider those cases in which the elimination of the expenditure by a specific municipality corresponds to no increase in the expenditure of the Unione for the same function (basically, in some cases, after 2013 neither the municipalities nor the Unione were spending for a specific function). The reason for this exclusion is that, in such cases, it is possible that those municipalities decided to use other associative forms, such for example consortia, amalgamation, or other forms of agreement.

Table 4 shows that 11 municipalities only, distributed in 5 Unioni, completely eliminated the expenses for at least one function in the period 2013-2015.

Table 4

Unioni di Comuni-Municipalities that eliminated the expenses for at least one function

Unione	Municipality	Region	Function	Average curr. Expend 10/12	Average curr. Expend 13/15
Unione dei Comuni della bassa Romagna	CONSELICE	Emilia-Romagna	Trade	37,61	0
	COTIGNOLA	Emilia-Romagna	Agriculture	3,68	0
			Industry and Craft	5,78	0
	FUSIGNANO	Emilia-Romagna	Agriculture	3,76	0
	MASSA LOMBARDA	Emilia-Romagna	Agriculture	1,84	0
Industry and Craft			21,46	0	
Unione dei Comuni del Meilogu	BESSEDE	Sardegna	Environment	8,04	0
	SEMESTENE	Sardegna	Public Security	15,51	0
	TORRALBA	Sardegna	Integrated water	0,51	0
Unione dei Comuni della Romagna Faentina	BRISIGHELLA	Emilia-Romagna	Agriculture	21,96	0
	SOLAROLO	Emilia-Romagna	Industry and Craft	2,89	0
Unione dei Comuni del Logudoro	PATTADA	Sardegna	Industry and Craft	30,73	0
Unione dei Comuni Val Tidone	CASTEL SAN GIOVANNI	Emilia-Romagna	Agriculture	15,18	0
			Tot.	168,95	0

The extremely limited number of municipalities that eliminated the expense for at least one function, shows that the transfer of functions from Italian municipalities to a Unione for a joint service delivery has been irrelevant so far. Consequently, the first hypothesis, related to the limited transfer of functions from municipalities to Unioni di comuni has been confirmed.

In order to verify whether or not the transfer of at least one function by at least one municipality resulted in a reduction of the overall expenditure for the transferred functions, a comparison of the average expenditure for the functions of both the above selected municipalities plus the expenditure of the Unione in the 2010-2012 and 2013-2015 periods, was performed.

Table 5 reports the sum of the average expenditure for the above selected functions for both the municipalities and the corresponding Unione in the 2010-2012 and 2013-2015 periods.

Table 5

Average expenditure for the selected functions 2010-2012 and 2013-2015

Unione di comuni	Regions	Function	Average expenditure 2010/12			Average expenditure 2013/15			% Δ total expenditure 2010-12 / 2013-15
			Municipalities	Unioni	Total expenditure (municipalities + unioni)	Municipalities	Unioni	Total expenditure (municipalities + unioni)	
Unione dei comuni della Bassa Romagna	Emilia Romagna	Trade	775,75	399,31	1.175,06	810,01	297,99	1.108,00	-6%
		Agriculture	33,44	12,85	46,29	-	50,37	50,37	9%
		Industry and craft	143,41		143,41	77,84	308,47	386,31	169%
Unione dei comuni del Mailogu	Sardegna	Environment	322,14	4,80	326,94	308,84	7,92	316,76	-3%
		Public security	1.527,85	3,26	1.531,11	1.343,67	3,56	1.347,23	-12%
		Integrated water service	278,29	0,09	278,38	253,80	0,18	253,98	-9%
Unione dei comuni della Romagna faentina	Emilia Romagna	Agriculture	238,90	12,92	251,82	73,93	9,92	83,85	-67%
		Industry and craft	719,75	19,51	739,26	541,76	19,69	561,45	-24%
Unione dei comuni del Logudoro	Sardegna	Industry and craft	36,46	16,75	53,21	4,41	25,71	30,12	-43%
Unione dei comuni Val Tidone	Emilia Romagna	Agriculture	20,37	3,26	23,63	2,61	6,87	9,48	-60%

Our data show that in those very limited cases where the transfer (of at least one function by at least one municipality) did take place, there has been a reduction of the overall expenditure in 80% of the cases. These reductions ranged from -9% to -67%. As it may be seen from the data, in some cases the Unione was already spending for that function before the complete transfer from at least one municipality. This may be interpreted as a partial transfer that took place in the previous years.

The second hypothesis that the transfer of a function is not associated with a decrease in the overall expenditure is, therefore, not confirmed. However, it is interesting to note that in the only case in which all municipalities of the same Unione transferred the same function (i.e. for that function, all Municipalities eliminated the expenses), there has been an increase of +9% (Unione Bassa Romagna, function *Agriculture*). So, our data provide controversial results. On the one hand, the data seem to contradict the second hypothesis, as in the majority of the cases there has been a decrease in the overall expenditure.

However, in the only case of a complete transfer of a function by all the municipalities of a Unione, the increase foreseen by the literature did take place.

5. Discussion and Conclusions

Our results show that the process of transferring the functions from municipalities to the Unioni has been irrelevant so far in the Italian context. In fact, eleven municipalities only, out of the 384 in the sample, that belong to a Unione (Comuniverso, 2018; Spano, 2018) transferred at least one function. This data alone is sufficient to demonstrate the failure of the policies to foster the joint provision of services by Italian municipalities through the Unione dei Comuni.

In 8 out of 10 cases, the overall expenditure for the transferred functions has reduced, but not in the only case where all municipalities fully transferred the same function to the Unione, in which case the cost increased, consistently with the extant literature.

Our results, based on expenditure data only, cannot provide any explanation for the reasons for these reductions, for which further investigation is needed.

We aim at deepening the comprehension of the reasons for these changes in the expenditure by interviewing representatives from the municipalities and Unioni in which there has been a complete elimination of at least one function by at least one municipalities and, in particular, we aim at better understanding what happened in the only case where one function was totally transferred to a Unione.

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