Open Research Online

The Open University's repository of research publications and other research outputs

The introduction of mandatory inter-municipal cooperation in small municipalities: preliminary lessons from Italy

Journal Item

How to cite:

Giacomini, Davide; Sancino, Alessandro and Simonetto, Anna (2018). The introduction of mandatory inter-municipal cooperation in small municipalities: preliminary lessons from Italy. *International Journal of Public Sector Management*, 31(3) pp. 331–346.

For guidance on citations see [FAQs](#).

© [not recorded]

<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Version: Accepted Manuscript

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.1108/IJPSM-03-2017-0071>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

**The introduction of mandatory inter-municipal cooperation
in small municipalities: preliminary lessons from Italy**

Journal:	<i>International Journal of Public Sector Management</i>
Manuscript ID	IJPSM-03-2017-0071.R2
Manuscript Type:	Original Article
Keywords:	intermunicipal cooperation, local government reform, Public networks, Local Authorities, Public service, service delivery

SCHOLARONE™
Manuscripts

**The introduction of mandatory inter-municipal cooperation
in small municipalities: preliminary lessons from Italy**

Abstract

Purpose

This article studies effects of mandatory inter-municipal cooperation (IMC) in small Italian municipalities. Data from 280 small Italian municipalities on effects of IMC in terms of higher efficiency, better effectiveness of local public services, and greater institutional legitimacy of the small municipalities participating in IMC have been investigated against four variables: size; geographical area; type of inter-municipal integration and IMC membership (the presence in the IMC of a bigger municipality, the so-called big brother).

Design/methodology/approach

Data were gathered from a mail survey that was sent to a random sample of 1,360 chief financial officers acting in municipalities of under 5,000 inhabitants, stratified by size (0–1,000 and 1,001–5,000) and geographic area (North, Center, and South) criteria. To analyze dependency relationships between the three potential effects of participating in IMC and possible explanatory variables, we used a logistic regression model as the benefits were binarily categorized (presence or absence of benefits).

Findings

Findings show that in more than two-thirds of the municipalities participating in IMC there were benefits in terms of costs reduction and better public services, whereas greater institutional legitimacy was detected in about half of the cases. Our statistical analysis with logistic regression highlighted that IMC type is particularly critical for explaining successful IMC. In particular, positive effects of IMC were mainly detected in those small municipalities that promoted a service delivery organization rather than

participating in service delivery agreements or opting for mixed arrangements of joint public services delivery.

Originality/value

The paper focuses on small municipalities where studies are usually scant. Our analysis highlighted that the organizational setting is particularly critical for explaining successful IMC.

Keywords:

Inter-municipal cooperation, public service delivery, municipalities, public networks, austerity

1. Introduction

Over the last fifty years, in all European countries, municipalities – and especially smaller ones – have encountered increasing difficulties in satisfying the demands of citizens in public services delivery (e.g. Hulst & van Montfort, 2012). In this context, in order to deal with the challenge of delivering better public services with scarce financial resources, many governments have adopted policies for promoting inter-municipal cooperation (IMC) to overcome the limit of sub-optimally sized historical municipal borders for an efficient and effective provision of local public services (e.g. Bel et al, 2012; Blaeschke, 2014; Rayle & Zegras, 2013). Among others, the main benefits of joint provision of public services would include improvements from economies of scale and the internalization of some transaction costs.

However, there is no unanimity over the fact that IMC actually brings savings and it should be remembered that with regard to inter-municipal cooperation there are significant concerns regarding accountability and transparency. Scholars, policy makers, and public managers have been extensively debating on what the conditions are that make IMC really work (e.g. Bel et al., 2010; Cristofoli & Markovic, 2016; Frere et al., 2014). The aim of this article is to contribute on this issue by presenting an original research aimed at exploring some possible organizational and contextual variables of successful IMC in small Italian municipalities using logistic regression. The need for more studies on small municipalities has been explicitly identified as a gap to be filled in the literature (Mohr et al., 2010; Teles, 2016).

Since we are aware of the different meanings of IMC (e.g. Hulst et al., 2009), we follow in this article the definition provided by Steiner (2003, p. 553): IMC can be defined as “*the fulfilment of a public municipal task by two or more municipalities jointly or by a third legal entity, whereby the task fulfilment simultaneously serves at least two municipalities and the participating municipalities participate directly (‘performing’) or indirectly (‘organizing’)*”. It is important to highlight that IMC in the European context is different from the inter-municipal agreements typical of the US context (e.g. Holzer & Fry, 2011). Moreover, it is also important to point out that the focus of this paper is on IMC for the direct provision of public services, and not for other aims, such as, for example, contracting in and out (e.g. Brown, 2008) and/or for development and fundraising tasks (Goldkind & Pardasani, 2012).

The structure of our article is the following: the second section briefly reviews the main literature on IMC, the third section provides a contextual backdrop for the Italian case, the fourth section describes the methodology of the research, and the fifth section highlights the main findings of the research. The last section offers some concluding remarks.

2. Inter-municipal cooperation

A theoretical backdrop

The topic of IMC has gained momentum in the scientific debate over the last ten years. The economic and fiscal crisis that began in 2008 brought tensions in government finances and the resulting austerity policies have heightened the need for local governments to rethink their services in order to increase their efficiency (Bel & Warner, 2015; Meneguzzo et al., 2013). Mandatory IMC is one of the policies traditionally proposed to reduce local governments’ spending. Specifically, there are two main perspectives by which IMC has been approached.

The first took a policy-making perspective. Within this mainstream, some studies looked at IMC as a mode of public service delivery to be compared with other possible institutional arrangements, such as, for example, privatization and contracting out (e.g. Bel et al., 2010; Mohr et al., 2010) or amalgamation (e.g. Dollery et al., 2009; Hanes, 2015; Reingewertz, 2012). Some other studies investigated the effects of IMC on democracy and subsidiarity (Mäeltsemees et al., 2013) and the role that incentives have played for prompting IMC (Sorrentino & Simonetta, 2013); on this matter, several studies (e.g. Osterrieder et al., 2006; Parrado Díez, 2006) highlighted that legislation and incentives can draw opportunities and constraints for cooperation and make some institutional arrangements more interesting than others.

The second perspective looked at the governance of IMC (e.g. Bock, 2006; Goldkind & Pardasani, 2012; Graddy & Chen, 2006; Sancton, 2005; Sørensen, 2007). Here, the possibility to reduce coordination and transactional costs with effective governance is one of the main triggers behind the positive inclination towards IMC. A comparative research on IMC in eight European countries showed a great variety of solutions for cooperation across the different countries (Hulst & van Montfort, 2012); in this respect, according to Hulst et al. (2009, p. 279), *"it is the interaction between external factors, the institutional context and the preference structures of local government that in the end determines the pattern of cooperation and the shifts therein"*. IMC has also been investigated in the literature as an example of public network governance. Public networks could be defined as *"more or less stable patterns of social relations between mutually dependent actors formed around policy problems and/or clusters of means and which are created, maintained, and changed through a series of games"* (Klijn, 1996, p. 97). Within this approach, there is a large amount of public administration literature, focusing, for example, on the mediating role of governance structures for determining public network performance (Provan & Milward, 1995; Provan & Sebastian, 1998). This work intends to consider both of these approaches, considering on one hand the expectations of the policy makers (first of all, the expected costs reduction) and on the other hand looking at the different forms of governance of IMC that have been chosen by the Italian municipalities.

Features of successful IMC

Regardless of the perspective taken, one of the main topics that commonly challenges scholars is that of performance of IMC. Drawing from earlier studies on public networks (Cristofoli et al., 2011; Niaounakis, T. & Blank, J., 2017; Provan & Milward, 2001; Turrini et al., 2010; Voets et al., 2008), we identify three main kinds of dimensions for successful IMC: higher efficiency in service delivery; better effectiveness in service delivery; and higher institutional legitimacy in negotiating and in engaging with other governmental entities. Considering the better effectiveness in service delivery, the presence of personnel potentially more specialized thanks to IMC and the ability to expand services provided only in some municipalities, even to small municipalities that lacked them, play a fundamental role. In this regard, the IMC toolkit manual (Council of Europe et al., 2010, p. 10) provides the following example: *"In many countries, services for children and older people are not provided at all, nor is it realistic to expect these municipalities to introduce such services by themselves."* About the third dimension of successful IMC, drawing from Suchman (1995, p. 574), we define institutional legitimacy as *"a generalized perception or assumption that organizational activities are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions"*. Institutional legitimacy is quite important in the current context of multi-level governance settings (Hooghe &

Marks, 2001), because it may influence the ability of municipalities to get more funds from upper levels of government.

Regarding features of successful IMC, we focused our analysis on four variables: geographical area, type of inter-municipal integration, size, and the presence in the IMC of a bigger municipality (more than 5,000 inhabitants, the so-called big brother) which was not formally obliged to join the IMC.

As far as geographical area is concerned, several authors highlighted that positive outcomes are easier to reach in communities with higher levels of trust in government and social capital with members who recognize the value of collaboration and participate in public activities (e.g. Conrad et al., 2003; Mitchell et al., 2002). Taking geographical area as a predictor of successful IMC is very important when considering the Italian context, as there are many differences within Italian regions in terms of social capital, institutional performance (e.g. Putnam et al., 2004; Weil & Putnam, 1994), and efficiency of public administration (D'Amuri & Giorgiantonio, 2016; Giordano & Tommasino, 2011; International Monetary Fund, 2015). In all the cases cited, public administration in Northern Italy performs better than in Central Italy and especially than in Southern Italy.

The organizational structure for IMC is another important issue. More specifically, the literature tends to distinguish between service delivery organizations and service delivery agreements (e.g. Hulst & Van Montfort, 2007; Rodrigues et al., 2012; Tavares & Camões, 2007). Service delivery organizations are second-level institutions aimed at delivering public services. They have delegated decision-making and authority from the cooperating municipalities. Conversely, service delivery agreements are based on the cooperation among municipalities through an agreement and without the creation of any second-level organization; in some cases, the agreement may require one of the partners, usually the largest municipality, to act as the lead organization. Service delivery organizations can prompt better integration, but can also lead to higher political transactional costs. According to Hulst et al. (2009, p. 278), *"Using contractual agreements, municipalities can avoid the start-up costs and costs related to the governance and management of a joint organization and still create the same economies of scale. As mentioned earlier, formal procedures for the establishment of joint organizations, joint management, and provisions for control and accountability of local councils involve additional costs."* On the other hand, this flexibility may also be a disadvantage, as Spicer (2014, p. 253) points out that *"interlocal agreements do not necessarily provide stable administration since their terms and conditions are subject to periodic renegotiation."*

In some cases, municipalities may decide to adopt a hybrid organizational form: some services delivered via SDA and others that are delivered via SDO.

Size is also another important variable to be considered for analyzing IMC (e.g. Dixit, 1973; Hirsch, 1959). According to economic theory, increasing the size of the

provider of public services would allow partners to realize economies of scale, economies of scope, and economies of density. As Bel et al. (2015, p. 56) point out, those around economies of scale are the most important efficiency motivations for IMC. In this work, consistent with the objective of providing policy guidance for the IMC, authors have distinguished between micro (fewer than 1,000 inhabitants) and small (from 1,001 to 5,000 inhabitants).

Finally, linked to size there is the presence or not in the IMC of a bigger municipality not obliged by law to participate in the IMC. In this respect, previous studies on IMC (Giacomini et al., 2015; Hulst et al., 2009) have shown positive effects from the presence of a “big brother” in the IMC. In addition, studies on contract management capacity in municipal and county governments found how governments that have small populations and are more isolated from metropolitan areas have fewer capacity investments and can therefore be favoured by a collaboration with larger municipalities with more expertise (Brown & Potoski, 2003). Hence, we decided to include in our analysis also this fourth predictor as the support from a bigger town should allow the small towns to benefit from economies of specialization already obtained by the “big brother”.

However, it is important to highlight that in some cases IMC can be a source of inefficiencies and performance worsening. According to Feiock (Feiock, 2013; Feiock & Scholz, 2010), delegation of service responsibilities to an array of local authorities can improve resilience and attention to local needs, but it can also create the so-called institutional collective action (ICA) dilemmas. A horizontal collective action problem arises when governments are too large or too small to efficiently deliver on their own a service or if the service produces effects that spill across administrative boundaries. Hence, IMC is a mechanism that can potentially mitigate a horizontal manifestation of an ICA dilemma, but the benefits associated with IMC are not always superior to the diseconomies and inefficiencies related to the involvement of multiple actors. It should not be forgotten that the presence of more municipalities involved in public service provision can lead to high political transaction costs, as Bel and Warner (2015) have pointed out in the case of municipally owned companies with multi-government ownership. On the same topic, Sørensen (2007) found, analyzing the case of refuse collection in Norway, that efficiency losses owing to many owners are greater than the cost reductions obtained by pursuing economy of scale. On the same line, Voorn et al. (2017) highlighted, through a systematic review of previous studies, that more ownership dispersion implies a higher risk of failure. Briefly, in some cases IMC cannot work because individual municipalities, adopting opportunistic behaviours, can reduce the potential benefits of collaboration.

3. Inter-municipal cooperation in Italy

The debate on IMC for public service delivery is very topical across Europe, and it has recently gained momentum also in Italy. In Italy there are more than 8,000 municipalities, of which 70% are so-called “small municipalities” with a population of fewer than 5,000 inhabitants; in these towns live 17% of the total Italian population (Giacomini, 2017).

Italian municipalities are particularly relevant for local economies and supply several important public services for citizens, such as social services, urban planning, waste disposal, water and energy supply, nursery schools, policing, and many leisure services (e.g. swimming pools, local museums, and theatres). During the last decades, different laws have been issued on IMC. The latest law was the law no. 95/2012. This law, also called “Spending Review”, has forced municipalities below 5,000 inhabitants (3,000 for those operating in mountain regions) to the joint provision of public services in some core functions. The final version of the law established that municipalities have to meet the obligation of inter-municipal cooperation for the following functions (numbering as per the Italian law):

- a) general administration, financial and spending management and control;
- b) management of public and welfare services in the municipalities, including public transport;
- c) land charges register management, apart from the functions employed by the State in accordance with the current regulation;
- d) urban and housing planning in the municipality and participation in territorial planning at a supra-municipal level;
- e) planning, civil protection, and first-aid coordination activities within the municipality;
- f) organization and management of garbage collection and disposal service, and related tax collecting;
- g) local social service planning, management, and delivery to the citizens;
- h) school building (for the part Provinces are not entrusted with), planning and management of school services;
- i) municipal and local administrative police;
- l) general registry, electoral and statistics offices management, for the functions carried out on the part of and for the central government; and
- l bis) statistical services.

The mandatory introduction of IMC in Italy was inspired by the increasing need to cut public expenditures (Giacomini, 2016). More specifically, the Italian government gave the opportunity to small municipalities to implement public networks for service delivery through the creation of a third legal entity (“*Unione dei Comuni*”) or through the establishment of an agreement (“*Convenzione*”). *Unioni dei Comuni* are a form of IMC established for the first time by law no.142/1990. They are a new local authority

(the so-called “service delivery organization”) with their own legal power and structure. *Convenzioni* are the easiest and most flexible type of association (the so-called “service delivery agreements”) aimed at cooperation among local authorities: they are highly adaptable and consist of contractual agreements signed by two or more local authorities with the purpose of cooperating for the delivery of public services. Small Italian municipalities depending on the public services associated can opt for establishing a service delivery organization (*Unione dei Comuni*), service delivery agreements (*Convenzioni*), or mixed solutions (*Unione dei Comuni* for some public services and *Convenzioni* for other public services).

4. Methods

This paper studies the effects of IMC in the context of small Italian municipalities. As in other studies (e.g. Steiner, 2003), we distinguished between successful and unsuccessful experiences of IMC by relying upon the perception of the reform adopters. Specifically, we collected information about IMC in small Italian municipalities from chief financial officers (CFOs). In this respect, even if responses can be influenced by cognitive and personal bias, the detection of significant accounting data on a large scale will be possible only in the next few years. Also, the concept of success needs to be contextualized; as mentioned above, we focused on three different elements of “IMC success”: higher efficiency in service delivery; better effectiveness in service delivery; and higher institutional legitimacy in negotiating and in engaging with other governmental entities. The independent variables tested were: size (micro-municipalities with under 1,000 inhabitants and small municipalities 1,001–5,000), geographic area (North, Center, and South), the presence of a big brother (the presence in the IMC of a municipality with more than 5,000 inhabitants), and the type of inter-municipal cooperation (service delivery agreements, service delivery organization, or mixed arrangements).

Data were gathered from a mail survey that was sent to a random sample of 1,360 chief financial officers acting in municipalities under 5,000 inhabitants, stratified by size (0–1,000 and 1,001–5,000) and geographic area (North, Center, and South) criteria. The questionnaire consisted of five simple closed-ended questions, the first two on the characteristics of the inter-municipality (the first one on the IMC type and the other on the presence of the big brother), and the other three aimed at verifying the different elements of “IMC success” mentioned above (higher efficiency in service delivery, better effectiveness in service delivery, higher institutional legitimacy). The possible answers about the achievement of the three IMC effects were: Yes/No/Do not know. The questionnaires were previously pilot-tested by several small municipalities. The response rate obtained was 21% (280 responses).

The aim of our analysis is to identify the independent variables with the highest explanatory power as determinants or not of a particular attribute. Since the dependent variables are dichotomous (the occurrence or non-occurrence of the benefit), the methodology that best meets our needs is logistic regression, a special case of generalized linear model developed for binary response variables.

5. Findings

CFOs were queried with respect to three potential rewards of IMC: reducing costs (efficiency), better public services (effectiveness), and greater institutional legitimacy. It has to be remembered that, owing to the lack of reliable data to evaluate the effects of intercommunal cooperation on a large number of municipalities, the following data refer to perceptions of CFOs, with all the limitations related to the detection of subjective perceptions. In the first sub-paragraph the overall results are shown, while in the second sub-paragraph the results of a more analytical analysis using logistic regression are reported. In the appendix are reported the N distribution of the responses and the synopsis of the findings.

Main effects of IMC

As shown in table 1, reductions in costs and improvements in the delivery of public services were detected in almost two municipalities out of three, whereas greater institutional legitimacy was detected in 40% of cases.

Table 1. “Main effects of IMC”

According to the geographical area, the IMC type, the size, and the IMC membership (the presence or not of the so-called “big brother”), some interesting trends also emerge. Looking at the main effects of IMC considering the geographical area in Italy (North, Center, and South) where IMC was implemented, as we can see from

figure 1, small Italian municipalities from the Center that participated in IMC seem to have greater benefits in terms of better public services (especially) and greater institutional legitimacy. Moreover, differences in institutional legitimacy after implementing IMC seem particularly relevant looking at the different results of Central and Southern municipalities compared to those in the North.

Figure 1. “Geographical area and main effects of IMC”

Considering the relationship between the main effects of IMC and the type of IMC implemented, we can see from figure 2 that service delivery organizations show better results with all the three kinds of effects considered. More specifically, considerable differences have been detected on the issue of costs reduction: mixed arrangements – whereby some public services are delivered through service delivery agreements and other public services through a service delivery organization – result in costs reduction in 53% of cases, and SDA results in costs reduction in 59% of cases, whereas costs reduction occurs in 80% of cases when IMC is implemented through a SDO. Looking at all the three benefits obtainable, the improved performance in the municipalities that have adopted a SDO clearly emerges. It should also be noted that the SDAs have little effectiveness in obtaining greater institutional legitimacy; however, a SDA could be not helpful in increasing the institutional weight as the municipalities remain totally autonomous and no entity is created to represent them jointly (as opposed to the SDOs). The worst results in terms of costs reduction emerge instead in mixed forms. Their heterogeneity in the delivery of services restricts factors that favor the effectiveness of inter-municipal cooperation. In this respect, as highlighted by Niaounakis and Blank (2017), more research on the relationship between flexible structures of inter-municipal cooperation, efficiency, and the quality of service delivery is needed.

Figure 2. “IMC type and main effects of IMC”

Looking to the size, small municipalities (1,000–5,000 inhabitants) compared to micro-municipalities (fewer than 1,000 inhabitants) seem to benefit more in terms of better public services and greater institutional legitimacy; as concerns costs reduction, no significant differences between small and micro-municipalities were found.

Figure 3. “Size and main effects of IMC”

The last variable taken into account deals with IMC membership, i.e. the presence in the IMC of a big brother that is a municipality with more than 5,000 inhabitants (and so, according to Italian law, not formally obliged to implement IMC). The results in figure 4 below show a slight tendency to have better results with regard to better public services when a big brother is participating in IMC.

Figure 4. “IMC membership and main effects of IMC”

Logistic regression

So far we have looked at the relationship existing between the main effects of IMC and the other four independent variables (size; geographical area; type of inter-municipal cooperation; IMC membership) taking a binary perspective. Below we have considered the three effects (costs reduction; better public services; greater institutional legitimacy) separately, and for each of them we have estimated a logistic regression model. In the comments we highlighted for which explanatory variables the estimated coefficient is statistically significant, distinguishing the degree of significance by the p-value associated with it: ** – very significant where $p\text{-value} < 0.01$, * – significant where $0.01 \leq p\text{-value} < 0.05$, ‘.’ – small significance where $0.05 \leq p\text{-value} < 0.1$, ‘’ – not significant where $p\text{-value} \geq 0.1$.

The first logistic regression model refers to better services (effectiveness of IMC). We tested the four independent variables. Looking at table 2, it is possible to note that only some of the considered independent variables are statistically significant, that is they play an important role in discriminating whether a municipality belongs to one of the two groups of observations (municipalities that have shown an improvement in services and municipalities that have not detected it).

Table 2. Logistic regression model for “better services”

** – very significant, * – significant, ‘.’ – small significance, ‘’ – not significant

The second logistic regression model refers to cost reduction (efficiency of IMC). In this case, the role of any of the four independent variables in affecting the realization or not of the expected benefit is not highlighted through the logistic regression model.

Table 3. Logistic regression model for “cost reduction”

** – very significant, * – significant, . – small significance, – not significant

The third logistic regression model points again to the importance of the IMC type for achieving a greater institutional legitimacy. In this case, the model identifies a single strong relationship: the municipalities that have chosen as the type of IMC a service delivery organization have a higher probability of realizing a greater institutional legitimacy than those who chose a service delivery agreement.

Table 4. Logistic regression model for “greater institutional legitimacy”

** – very significant, * – significant, . – small significance, – not significant

Finally, considering all together the three positive effects after the introduction of IMC, our data show that 32% of municipalities detected all three improvements. We did another logistic regression analysis to see which among the independent variables statistically associate with the group of municipalities that achieved all three improvements, and we found that the adoption of a service delivery organization is statistically relevant.

Table 5. Logistic regression model for “all the positive effects achieved”

** – very significant, * – significant, . – small significance, – not significant

6. Conclusions

This paper discusses the effects of mandatory IMC in small Italian municipalities. Our research showed that, according to our empirical context and our observations (N=280), IMC seems to confirm policy makers’ expectations of costs reduction and better public services in two thirds of the small municipalities that have implemented IMC, and in one case out of two it seems to lead towards a greater institutional legitimacy.

Specifically, the aim of our research was that of identifying factors for successful IMC, operationalized with three dimensions: higher efficiency (costs reduction), better effectiveness of local public services, and greater institutional legitimacy, in a setting rarely examined by the existing literature, that of small and micro-municipalities (i.e. municipalities with between 1,001 and 5,000 inhabitants and fewer than 1,000 inhabitants, respectively).

Our statistical analysis with logistic regression highlighted that IMC type is particularly critical for explaining successful IMC. In particular, positive effects of IMC were mainly detected in those small municipalities that promoted a service delivery organization rather than participating in service delivery agreements or opting for mixed arrangements of joint public services delivery. It is important to emphasize how the creation of a stable entity that operates in the place of individual municipalities diminishes the direct control of individual municipalities. The presence of an over-municipal entity reduces (but does not eliminate) the so-called political transaction costs associated with multi-government ownership (Bel & Warner, 2015). These costs, however, remain extremely high in SDAs. With regard to the better services, it is conceivable that more stable forms of cooperation can easily lead to the standardization of the services provided and to the extension of some services to the associated municipalities where those services were absent. In other words, our study seems to confirm that more stable forms of cooperation can enhance trust, reduce transaction cost (e.g. Tavares and Camões, 2007) and improve the level of services provided although this preliminary result needs further investigation with accounting data and not only by relying upon the perception of the reform adopters. This result seems to confirm what have stated: when the number of previous stable collaborations between any given local governments is high, the transaction costs envisaged in a further collaboration remain low and the expected benefits of this collaboration are high.

The other three independent variables (size, geographical area, and IMC membership) had more limited significance in explaining the success or not of IMC. Contrary to what was found in previous research (Giacomini, 2015; Hulst et al., 2009), the presence in the established IMC of a larger municipality does not seem to bring significant advantages.

In terms of policy implications, these results point to the importance of creating more stable forms of cooperation, such as service delivery organizations, when small municipalities are involved in IMC. This is particularly relevant in our times of austerity, considering that many European countries have an average municipal population below 10,000 inhabitants (for example and among the others Germany, France, and Spain – see Teles, 2016) and may therefore consider implementing IMC as a solution to realize some of the effects investigated in this paper. In terms of research implications, we aim to follow up longitudinally the effects of IMC in small Italian municipalities as well as investigate the effects of IMC considering different types of public services. In this respect, future comparative studies as well as platforms for the exchange of learning and evidence will be particularly important to follow the phenomenon of IMC across countries.

As any piece of research, this paper study limitations. The results are exploratory in nature and may reflect the specific country, type, and size of government where the analysis was performed, as well as the subjective interpretations of the

respondents. As mentioned above, CFO perceptions have been measured, as precise data of the implemented inter-municipality are not yet available. Doubtless, this is a limitation of this study. For this reason, the study should be expanded to include objective data and performance measures of the IMC as soon as available. By combining qualitative judgments, financial parameters, and non-financial measures (Jones & Pendlebury, 2010), it will be possible to get a more complete representation of the effects of mandatory inter-municipal cooperation. In particular, a promising area to explore could be the relationship between the types of inter-municipality cooperation and the quality of service delivery, and its effects on institutional legitimacy. Furthermore, in addition to the variables considered, the relationship between network structure, mechanisms and managers that jointly affects network performance (Cristofori et al., 2015) needs to be approached. Finally yet importantly, the accounting and accountability mechanisms have to be studied as often overlooked in the discussion on inter-municipal cooperation are concerns related to transparency. We believe that these paths can be a basis for future and even more deep investigation into the features of successful IMC processes.

References

- Bel, G., Dijkgraaf, E., Fageda, X., & Gradus, R. (2010). Similar problems, different solutions: Comparing refuse collection in the Netherlands and Spain. *Public Administration*, 88(2), 479–495.
- Bel, G., Fageda, X., & Mur, M. (2012). Does cooperation reduce service delivery costs? Evidence from residential solid waste services. *Journal of Public Administration Research and Theory*, 24(1), 85–107.
- Bel, G., & Warner, M. (2015). Inter-municipal cooperation and cost: Expectations and evidence. *Public Administration*, 93(1), 52–67.
- Blaeschke, F. (2014). What drives small municipalities to cooperate? Evidence from Hessian municipalities, in (Joint Discussion Paper Series in Economics, No. 14.).
- Bock, S. (2006). ‘City 2030’ – 21 cities in quest of the future: New forms of urban and regional governance. *European Planning Studies*, 14(3), 321–334.

Brown, T. (2008). The dynamics of government-to-government contracts. *Public Performance & Management Review*, 31(3), 364–386.

Brown, T. L., & Potoski, M. (2003). Contract-management capacity in municipal and county governments. *Public Administration Review*, 63(2), 153–164.

Conrad, D., Cave, S., Lucas, M., Harville, J., Shortell, S., Bazzoli, G., Hasnain-Wynia, R., Sofaer, S., Alexander, J., Casey, E., & Margolin, F. (2003). Community care networks: Linking vision to outcomes for community health improvement. *Medical Care Research and Review*, 60(4), 95–129.

Council of Europe, United Nations Development Programme, & Local Government Initiative of the Open Society. (2010). *Inter Municipal Cooperation toolkit manual*.

Cristofoli D., Macciò L. & Pedrazzi L. (2015). Structure, Mechanisms, and Managers in Successful Networks. *Public Management Review*, 17 (4), 489-516.

Cristofoli, D., Sancino, A., & Maccio, L. (2011). Managing successful networks: The case of intermunicipality collaboration in Switzerland. *Switzerland Yearbook of Swiss Administrative Sciences*, 121–139.

Cristofoli, D. & Markovic, J. (2016). How to make public networks really work: a qualitative comparative analysis. *Public Administration*, Vol. 94(1), 89–110

D’Amuri, F., & Giorgiantonio, C. (2016). La distribuzione dei dipendenti pubblici in Italia: Ruolo e funzioni della mobilità. *Questioni di Economia e Finanza*. Banca d’Italia.

Dixit, A. (1973). The optimum factory town. *The Bell Journal of Economics and Management Science*, 4(2), 637.

Dollery, B., Akimov, A., & Byrnes, J. (2009). Shared services in Australian local government: Rationale, alternative models, and empirical evidence. *Australian Journal of Public Administration*, 68(2), 208–219.

Feiock, R. (2013). The institutional collective action framework. *Policy Studies Journal*, 41(3), 397–425.

Feiock, R., & Scholz, J. (2010). *Self-organizing federalism*. 1st ed. Cambridge, UK: Cambridge University Press.

Frere, Q., Leprince, M., & Paty, S. (2014). The impact of intermunicipal cooperation on local public spending. *Urban Studies*, 51(8), 1741–1760.

Giacomini, D. (2017). Intermunicipal cooperation. In A. Farazmand, *Global encyclopedia of public administration, public policy, and governance*. Springer.

Giacomini, D., Mazzoleni, M., & Muzzi, C. (2015). Il cambiamento organizzativo legato alle gestioni associate obbligatorie. *Sviluppo e Organizzazione*, 267, 44–56.

Giacomini, D. and Sancino, A. (2016). Intermunicipal co-operation in Italy: a reform without reformer?. *Regions*, 30(3), pp.19-21.

Giordano, R., & Tommasino, P. (2011). Public sector efficiency and political culture. *Temi di discussione 786 – Working Papers*, Banca d'Italia. Roma.

Goldkind, L., & Pardasani, M. (2012). More than the sum of its parts: An innovative organizational collaboration model. *Administration in Social Work*, 36(3), 258–279.

Graddy, E., & Chen, B. (2006). Influences on the size and scope of networks for social service delivery. *Journal of Public Administration Research and Theory*, 16(4), 533–552.

Hanes, N. (2015). Amalgamation impacts on local public expenditures in Sweden. *Local Government Studies*, 41(1), 63–77.

Hirsch, W. (1959). Expenditure implications of metropolitan growth and consolidation. *The Review of Economics and Statistics*, 41(3), 232.

Holzer, M., & Fry, J. (2011). *Shared services and municipal consolidation* (Public Technology Institute, Alexandria, VA).

Hooghe, L., & Marks, G. (2001). *Multi-level governance and European integration*. Lanham, MD: Rowman & Littlefield Publishers.

Hulst, R., & van Montfort, A. (2007). *Inter-municipal cooperation in Europe*. Dordrecht: Springer.

Hulst, R., & van Montfort, A. (2012). Institutional features of inter-municipal cooperation: Cooperative arrangements and their national contexts. *Public Policy and Administration*, 27(2), 121–144.

Hulst, R., van Montfort, A., Haveri, A., Airaksinen, J., & Kelly, J. (2009). Institutional shifts in inter-municipal service delivery. *Public Organization Review*, 9(3), 263–285.

International Monetary Fund. (2015). Italy: Selected issue. IMF Country Report No. 15/167.

Jones, R., & Pendlebury, M. (2010). *Public sector accounting*. 6th ed. Harlow: Financial Times/Prentice Hall.

Klijn, E. (1996). Analyzing and managing policy processes in complex networks: A theoretical examination of the concept policy network and its problems. *Administration & Society*, 28(1), 90–119.

Mäeltsemees, S., Ratas, J., & Lõhmus, M. (2013). Inter-municipal cooperation: Possibility for advancing local democracy and subsidiarity in Estonia. *Administrative Culture*, 14(1), 73–97.

Meneguzzo, M., Sancino, A., Guenon, M. & Fiorani, G. (2013), “New development: The crisis and European local government reforms”, *Public Money & Management*, 33(6): 459-462.

Mitchell, R., Florin, P., & Stevenson, J. (2002). Supporting community-based prevention and health promotion initiatives: Developing effective technical assistance systems. *Health Education & Behavior*, 29(5), 620–639.

Mohr, R., Deller, S., & Halstead, J. (2010). Alternative methods of service delivery in small and rural municipalities. *Public Administration Review*, 70(6), 894–905.

Niaounakis, T., & Blank, J. (2017). Inter-municipal cooperation, economies of scale, and cost efficiency: An application of stochastic frontier analysis to Dutch municipal tax departments. *Local Government Studies*, 43(4), 533–554.

Osterrieder, H., Bahloul, H., Wright, G., Shaffner, K., & Mozur, M. (2006). *Joining forces and resources for sustainable development. Cooperation among municipalities – A guide for practitioners*. 1st ed. UNDP Bratislava Regional Centre, Bratislava.

Parrado Díez, S. (2006). Creating economies of scale. Promoting intermunicipal cooperation, in Public administration reform and territorial organization: Empowering local governments, <http://www.oecd.org/dataoecd/43/23/36680376.pdf>.

Provan, K., & Milward, H. (1995). A preliminary theory of interorganizational network effectiveness: A comparative study of four community mental health systems. *Administrative Science Quarterly*, 40(1), 1.

Provan, K., & Milward, H. (2001). Do networks really work? A framework for evaluating public-sector organizational networks. *Public Administration Review*, 61(4), 414–423.

Provan, K., & Sebastian, J. (1998). Networks within networks: Service link overlap, organizational cliques, and network effectiveness. *Academy of Management Journal*, 41(4), 453–463.

Putnam, R., Leonardi, R., & Nanetti, R. (2004). *Making democracy work: Civic traditions in modern Italy*. Princeton University Press.

Rayle, L., & Zegras, C. (2013). The emergence of inter-municipal collaboration: Evidence from metropolitan planning in Portugal. *European Planning Studies*, 21(6), 867–889.

Reingewertz, Y. (2012). Do municipal amalgamations work? Evidence from municipalities in Israel. *Journal of Urban Economics*, 72(2–3), 240–251.

Rodrigues, M., Tavares, A., & Araújo, J. (2012). Municipal service delivery: The role of transaction costs in the choice between alternative governance mechanisms. *Local Government Studies*, 38(5), 615–638.

Sancton, A. (2005). The governance of metropolitan areas in Canada. *Public Administration and Development*, 25(4), 317–327.

Sørensen, R. J. (2007). Does dispersed public ownership impair efficiency? The case of refuse collection in Norway. *Public Administration*, 85(4), 1045–1058.

Sorrentino, M., & Simonetta, M. (2013). Incentivising inter-municipal collaboration: The Lombard experience. *Journal of Management & Governance*, 17(4), 887–906.

Spicer, Z. (2014). The ties that bind? Exploring the dynamics of intermunicipal agreement formation between separated cities and counties. *Canadian Public Policy*, 40, 245–258.

Steiner, R. (2003). The causes, spread, and effects of intermunicipal cooperation and municipal mergers in Switzerland. *Public Management Review*, 5(4), 551–571.

Suchman, M. (1995). Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review*, 20(3), 571.

Tavares, A., & Camões, P. (2007). Understanding intergovernmental cooperation: An empirical study of collaboration among Portuguese municipalities. 1st ed. University of Minho (Portugal), WP NEAPP Série IV (6), Minho.

Teles, F. (2016). Local governance and inter-municipal cooperation. 1st ed. Palgrave Macmillan UK.

Turrini, A., Cristofoli, D., Frosini, F., & Nasi, G. (2010). Networking literature about determinants of network effectiveness. *Public Administration*, 88(2), 528–550.

Voets, J., Van Dooren, W., & De Rynck, F. (2008). A framework for assessing the performance of policy networks. *Public Management Review*, 10(6), 773–790.

Voorn, B., Van Genugten, M. L., & Van Thiel, S. (2017). The efficiency and effectiveness of municipally owned corporations: A systematic review. *Local Government Studies*. 43(4) doi:10.1080/03003930.2017.1319360

Weil, F., & Putnam, R. (1994). Making democracy work: Civic traditions in modern Italy. *Contemporary Sociology*, 23(3), 373.

Appendix

Table 6: “N distribution of the IMC effects”

Table 7: “Synopsis of our findings”

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Type of effects of IMC	Yes	No	Don't know
Costs reduction (efficiency)	64% (N=179)	29% (N=82)	7% (N=19)
Better public services (effectiveness)	65% (N=181)	29% (N=82)	6% (N=17)
Greater institutional legitimacy	40% (N=112)	44% (N=125)	15% (N=43)

Table 1. "Main effects of IMC"
133x40mm (96 x 96 DPI)

Figure 1. "Geographical area and main effects of IMC"

127x89mm (96 x 96 DPI)

Figure 2. "IMC type and main effects of IMC"

127x89mm (96 x 96 DPI)

Figure 3. "Size and main effects of IMC"

127x89mm (96 x 96 DPI)

Figure 4. "IMC membership and main effects of IMC"

127x89mm (96 x 96 DPI)

Coefficients	Estimate	Std. Error	P-value	Significance
(intercept)	10.152	0.54	0.060	.
Size = Small (1,001-5,000 inhab.)	0.6340	0.30	0.036	*
Area = North	-0.9164	0.54	0.088	.
Area = South	-12.559	0.55	0.023	*
IMC = Mixed	0.1044	0.47	0.826	
IMC = Service delivery organization	10.293	0.39	0.008	**
IMC = Memberships	0.3319	0.35	0.347	

Table 2. Logistic regression model for "better services"

150x46mm (96 x 96 DPI)

Coefficients	Estimate	Std. Error	P-value	Significance
(intercept)	0.5166	0.432	0.232	
Size = Small (1,001-5,000 inhab.)	-0.0439	0.291	0.880	
Area = North	0.1233	0.415	0.766	
Area = South	0.0306	0.434	0.944	
IMC = Mixed	-0.2485	0.431	0.565	
IMC = Service delivery organization	0.4588	0.338	0.175	
IMC = Memberships	0.3839	0.345	0.266	

Table 3. Logistic regression model for "cost reduction"

148x46mm (96 x 96 DPI)

Coefficients	Estimate	Std. Error	P-value	Significance
(intercept)	-0.5152	0.4568	0.259	
Size = Small (1,001-5,000 inhab.)	0.3159	0.2956	0.285	
Area = North	-0.1511	0.4393	0.731	
Area = South	-0.1411	0.4564	0.757	
IMC = Mixed	0.6355	0.4454	0.154	
IMC = Service delivery organization	10.043	0.3311	0.002	**
IMC = Memberships	0.1219	0.3345	0.716	

Table 4. Logistic regression model for "greater institutional legitimacy"

140x46mm (96 x 96 DPI)

Coefficients	Estimate	Std. Error	P-value	Significance
(intercept)	-12.434	0.443	0.005	**
Size = Small (1,001-5,000 inhab.)	0.2254	0.293	0.441	
Area = North	-0.1601	0.415	0.699	
Area = South	0.2815	0.435	0.517	
IMC = Mixed	0.7412	0.421	0.078	.
IMC = Service delivery organization	10.542	0.311	0.001	**
IMC = Memberships	0.0266	0.318	0.934	

Table 5. Logistic regression model for “all the positive effects achieved”

138x46mm (96 x 96 DPI)

IMC EFFECTS OBTAINED			
COSTS REDUCTION 179 out of 280			
SIZE			
Total	0-1,000 inhabitants	1,001-5,000 inhabitants	
179	56	123	
GEOGRAPHICAL AREA			
Total	North	Centre	South
179	100	21	58
IMC TYPE			
Total	SDA	SDO	Mixed
178	106	56	16
IMC MEMBERSHIP			
Total	Yes	No	
179	45	135	
BETTER PUBLIC SERVICES 181 out of 280			
SIZE			
Total	0-1,000 inhabitants	1,001-5,000 inhabitants	
181	49	132	
GEOGRAPHICAL AREA			
Total	North	Centre	South
181	101	27	53
IMC TYPE			
Total	SDA	SDO	Mixed
181	106	57	18
IMC MEMBERSHIP			
Total	Yes	No	
181	47	134	
GREATER INSTITUTIONAL LEGITIMACY 112 out of 280			
SIZE			
Total	0-1,000 inhabitants	1,001-5,000 inhabitants	
112	32	80	
GEOGRAPHICAL AREA			
Total	North	Centre	South
112	59	15	38
IMC TYPE			
Total	SDA	SDO	Mixed
112	59	39	14
IMC MEMBERSHIP			
Total	Yes	No	
112	28	84	

Table 6: "N distribution of the IMC effects"

93x261mm (96 x 96 DPI)

COSTS REDUCTION			
SIZE			
Total	0-1,000 inhabitants	1,001-5,000 inhabitants	
64%	62%	66%	
GEOGRAPHICAL AREA			
Total	North	Centre	South
64%	63%	66%	67%
IMC TYPE			
Total	SDA	SDO	Mixed
64%	59%	80%	53%
IMC MEMBERSHIP			
Total	Yes	No	
64%	64%	64%	
BETTER PUBLIC SERVICES			
SIZE			
Total	0-1,000 inhabitants	1,001-5,000 inhabitants	
65%	53%	71%	
GEOGRAPHICAL AREA			
Total	North	Centre	South
65%	63%	83%	61%
IMC TYPE			
Total	SDA	SDO	Mixed
65%	58%	79%	59%
IMC MEMBERSHIP			
Total	Yes	No	
65%	69%	64%	
GREATER INSTITUTIONAL LEGITIMACY			
SIZE			
Total	0-1,000 inhabitants	1,001-5,000 inhabitants	
40%	35%	42%	
GEOGRAPHICAL AREA			
Total	North	Centre	South
40%	36%	46%	43%
IMC TYPE			
Total	SDA	SDO	Mixed
40%	33%	56%	44%
IMC MEMBERSHIP			
Total	Yes	No	
40%	40%	40%	

Table 7: "Synopsis of our findings"

85x255mm (96 x 96 DPI)