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*Original Citation:*

*Availability:*

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# Public Provision vs. Outsourcing of Cultural Services: Evidence from Italian Cities

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The final publication is available at Elsevier via <http://dx.doi.org/10.1016/j.ejpoleco.2014.06.004>

## Abstract

Cultural policy often implies the transfer of public resources to cultural institutions. In this contribution we focus on the determinants of a government's choice between subsidies to external cultural organizations and in-house cultural production. We argue that the determinants of grants in the cultural field may be the same as those of outsourced services, and we make reference to the empirical literature on the drivers of public services outsourcing. We consider Italian cities' cultural policies in the 1998-2008 period, a time when overall cultural expenditure shrank while cultural transfers increased. Using dynamic panel data analysis and controlling for specific economic, fiscal, and political characteristics of each city, we find that transfers to cultural organizations are negatively affected by assets specificity and more likely to occur in cities subject to fiscal stress. The results also highlight that the timing of elections plays a role.

**JEL classification:** H44; L33; H76; Z11

**Keywords:** Public Cultural Expenditure, Local Government, Outsourcing

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# Public Provision vs. Outsourcing of Cultural Services: Evidence from Italian Cities

## **Abstract**

Cultural policy often implies the transfer of public resources to cultural institutions. In this contribution we focus on the determinants of a government's choice between subsidies to external cultural organizations and in-house cultural production. We argue that the determinants of grants in the cultural field may be the same as those of outsourced services, and we make reference to the empirical literature on the drivers of public services outsourcing. We consider Italian cities' cultural policies in the 1998-2008 period, a time when overall cultural expenditure shrank while cultural transfers increased. Using dynamic panel data analysis and controlling for specific economic, fiscal, and political characteristics of each city, we find that transfers to cultural organizations are negatively affected by assets specificity and more likely to occur in cities subject to fiscal stress. The results also highlight that the timing of elections plays a role.

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# 1 Introduction

Cultural policy has been traditionally concerned with providing financial support for the arts, for heritage institutions and for cultural industries. Many economists and cultural policy scholars have discussed the benefits and costs of indirect vs. direct public support to cultural activities, with the former being generally devised as tax exemptions on donations while the latter is the use of public revenues to provide cultural services or subsidize producers (Throsby 2010). However, within the field of direct public support, less attention has been paid so far to the choice between supplying in-house produced cultural services and supporting external cultural organizations. In this paper we investigate the actual drivers of a government's choice between these two alternatives adopting a positive approach to the subject.

We argue that support to cultural institutions may be analyzed as a form of outsourcing, so we make reference to the by now vast empirical literature on outsourcing of public services (Domberger and Jensen 1997; Bel and Fageda 2007; 2009) and extend it to the cultural sector. However, unlike services such as public transport or waste disposal, cultural policy is not one of those governmental functions that are either outsourced or not. It consists of many actions and each of them may be outsourced, so that there is a continuum of positions. Unlike most empirical contributions, we therefore choose a non-dichotomic measure of outsourcing. We make use of public accounting data and adopt the share of the subsidies a government grants to cultural institutions on overall cultural spending as our variable of interest. Our focus is therefore on the value, not the number of outsourced services. Our focus is therefore on the value, not the number of outsourced services; in fact, we assume that the higher the value, the more relevant the activity.

A number of empirical papers have appeared in recent years adopting a positive approach to local governments' cultural policy and using public spending data (Getzner 2002; Noonan 2007; Werck, Heyndels and Geys 2008; Benito, Bastida and Vicente 2013), but they all aim at explaining the level of spending, not the type. Our focus is on the determinants affecting

the choice between direct production and outsourcing of cultural services at a local level of government. We concentrate our analysis on 106 Italian municipalities, namely the cities which are provincial administrative centres, in the time span 1998-2008. Italian cities are interesting in that they are big spenders in culture: they pay for libraries, own museums and theatres, and many of them have organized very popular cultural festivals in recent years. Up until 15-20 years ago Italy's public cultural policy was, at all levels of government and in the vast majority of cases, in-house production of cultural services, but in recent years, especially at the municipal level, a lot of variability has appeared as to the relative size of in-house production with respect to overall spending.

There are many reasons why a government may prefer to outsource a function: some of them are general, some are specific to the function itself. Among the general reasons, private production is often expected to be less costly than public production, as the latter is affected by government failures. Private production may be cost wise beneficial because it triggers competition and the choice of a more efficient production scale. Finally, there may be political economy explanations underlying the choice whether or not to outsource the production of cultural services. As for the specific traits of cultural policy that may influence a policy-maker's decision in this respect, peculiar measures of asset specificity (Hart, Shleifer and Vishny 1997; Brown and Potoski 2003), tourism and the presence of wealthy patrons may play a role.

We consider all these possible determinants and use dynamic panel data analysis in our investigation. Our results show that the main drivers of Italian cities' choice to outsource cultural services are two measures of fiscal stress and the share of municipal current spending on cultural facilities expressing high asset specificity. There is also evidence of a peculiar electoral cycle, in line with the findings of Dalle Nogare and Galizzi (2011).

The relevance of our contribution is also methodological and goes beyond the restricted field of cultural policy. Arguably, the use of transfers as a proxy for the value of a government's

outsourced services allows quantifying them in a number of governmental functions so far not so often considered by the literature on outsourcing, such as education.

The paper is organized in the following way: section 2 surveys the relevant literature; section 3 briefly outlines the exact focus of our investigation; section 4 describes the raising role of municipal governments in shaping cultural policy in Italy and how it has changed in the recent years; section 5 discusses our dependent variable and illustrates the independent ones; section 6 describes the estimation strategy; section 7 shows our results; section 8 is about the robustness checks while section 9 finally concludes.

## 2 Related Literature

The paper relates to two strands of literature. First, by focusing on the mode of provision of cultural services we contribute to the literature which analyzes the factors affecting outsourcing and contracting out of local public services.

This body of works uses local governments data to unveil the determinants affecting the decision whether to supply public services in-house or externally. These contributions test for the significance of both economic and political factors, which make reference to various extent to the public choice approach, the transaction costs literature as well as to political economy models. The empirical evidence generally comes from cross sectional studies across local jurisdictions of specific countries (Bel and Fageda 2007) and varies to the extent they analyze several services (Brown and Potoski 2003; Levin and Tadelis 2010, e.g.) or focus just on one (Dijkgraaf, Gradus and Melenberg 2003; Walls, Macauley and Anderson 2005, e.g.).

Among the economic determinants, various measures of local governments' fiscal stance and economic efficiency have been generally considered to have a positive relation with the likelihood to privatize or contracting out local public services (Kodrzycki 1998; Dijkgraaf, Gradus and Melenberg 2003). Other studies have provided empirical ground showing how

the level of transaction costs and contractual incompleteness (such as asset specificity, or the difficulty of performance monitoring) are central in determining when a local service may be outsourced (Brown and Potoski 2003; Levin and Tadelis 2010). Further, potential cases of quality shading also become an issue here (Jensen and Stonecash 2005).

As for the political factors, interest groups' pressure and ideological attitudes have been considered as possible drivers for public service delivery choices. The interest group influence hypothesis has usually been validated when a broad range of services is analyzed. For instance, Lopez-de Silanes, Shleifer and Vishny (1997) find that state laws that impose accountability requirements in contracting for personnel encourage privatization, whereas strong public unions discourage it. However, later studies (Kodrzycki 1998; Walls, Macauley and Anderson 2005) testing this hypothesis do not confirm these results. The ideological preferences of elected representatives or of the local population have been considered as an explanatory factor as well. A negative relationship between leftism and privatization or contracting out is what these empirical contributions generally test. However, ideology is found to be (moderately) significant in very few studies (Dijkgraaf, Gradus and Melenberg 2003; Walls, Macauley and Anderson 2005, e.g.).

If the empirical literature on privatizations and contracting out helps analyze the factors explaining the delivery choices of local public services in general, cultural economics provides an additional and more specific ground for assessing the role of public spending in the provision of local cultural services. However, the drivers of the mode of public spending for culture has been only marginally covered.<sup>1</sup> The choice between supplying in-house produced cultural services and supporting external cultural organizations has been analyzed almost exclusively in a political economy context studying how different systems of direct support affect allocation decisions of public funds. The literature highlights that continental Europe's experience has generally been more oriented towards in-house production of cultural services

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<sup>1</sup>Some studies have focused on the holdup effect of public subsidies (Bises and Padovano 2004) or on their substitution or complementarity with private funding (Brooks 2000; Borgonovi and O'Hare 2004).

and, to a lesser extent, government-driven distribution of funds for culture (O'Hagan 1998). This has led politicians and bureaucrats to have a prominent role in allocation decisions with potential biases and rent-seeking problems (Grampp 1989; Frey 2003). On the contrary, UK and a number of other countries, such as Israel, have developed a peculiar model of public intervention in the cultural field, in which subsidies to cultural organizations play a bigger role. In this model, government delegates the allocation of funds to arm's length agencies (Arts Councils). Concerns about the possible distortions caused by a government's direct involvement in the process lead Van der Ploeg (2006) to claim the arm's length model may be a superior solution, as it leaves decision-making responsibilities to an independent statutory body made up of experts in the art and cultural field.<sup>2</sup>

A government's choice to adopt the arm's length system is then implicitly suggested to be the consequence of a government's wish to tie one's hands. In continental Europe, however, arm's length agencies in the cultural field are not at all common, in particular at the local level. As a result, the drivers of subsidies and grants to cultural organizations, whenever these are present and relevant, need to be considered in a different perspective. As already stated, our choice is here to consider them as a form of outsourcing.

### **3 Defining outsourcing in the cultural field**

While most of the literature on outsourcing has focused on contracting out arrangements for publicly provided services, in the cultural sector outsourcing may take up two distinct forms: contracting out (which we will define as contractual outsourcing) and the financing of an external organization for producing and delivering a cultural service (non-contractual outsourcing), which may be intended as a relational or implicit contract (Hart 2001). The two

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<sup>2</sup>However, experts are likely to enjoy some form of discretionary power and asymmetrical information in the cultural policy decision making process, which can arguably lead to rent seeking behavior as well (Mazza 2003; Rizzo and Throsby 2006).



are not exactly equivalent, but only in the sense that non-contractual outsourcing is a more flexible form of outsourcing, since it is not regulated by a multi-year contract and therefore, from a government's perspective, it does not imply a long engagement in the provision per se of a service or in its outsourced mode. In the cultural field, subsidizing is very similar to outsourcing especially when the subsidized cultural organization heavily depends on public support and produces cultural services for the wide public, which is often the case. Even if grants are for the production of a cultural service (say, a festival) which was not previously produced in-house, arguably this can still be defined as outsourcing, because a government could have decided to produce the same service in-house. Moreover, both with contractual and non-contractual outsourcing a government stays in control of the size and, to some extent, of the contents of cultural policy actions.<sup>3</sup>

The focus of this contribution is on non-contractual outsourcing. Anecdotal evidence leads us to believe that it constitutes a great proportion of total outsourcing in the case of Italian cities<sup>4</sup>, though it is not really possible to assess how well it proxies total outsourcing due to lack of detailed data on municipal governments' spending for the purchase of services, the accounting item comprising contractual outsourcing.<sup>5</sup>

A reasonable proxy for non-contractual outsourcing is public transfers to cultural institutions. Aggregate data referring to cultural expenditure of all 8.092 Italian municipalities show that, in overall cultural spending, transfers have been the fastest growing item (+41%) between 2000 and 2008 (ISTAT).

Following Brown and Potoski (2003), we do not intend outsourcing as a synonym for

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<sup>3</sup>This would not happen if a government decided to switch from in-house production to tax-exemptions or vouchers as their preferred support strategy in the market of cultural services.

<sup>4</sup>For instance, festivals are very often organized by cultural institutions heavily subsidised by municipal governments. As they usually did not pre-exist as in-house produced services, contractual outsourcing is not the only viable option, and the easy choice for a mayor is to avoid it, given the high percentage of contracts taken to court by cultural firms and institutions who have not been selected as providers.

<sup>5</sup>Available fiscal data on expenditures are broken down into different accounting items, but the one named "purchase of services" is a very heterogeneous one, including from electricity and heating costs to contracting out.

delegation of production to privately-owned institutions. Jensen and Stonecash (2005) claim that many contributions to the literature on outsourcing consider the notions of privatizations and outsourcing as equivalent or similar, but we take a different perspective. The reason why we do so is that we are convinced that this is particularly appropriate in the field of cultural policy, where we would miss a lot if we only looked at governments subsidizing private firms. The choice of a government wishing to support the supply of cultural services is between three types of recipients: private, public or hybrid firms or non-profit organizations. In particular, hybrid private-public institutions often play a relevant role in the cultural field (Schuster 1998), and this has also been the case in Italy in recent years. We argue that what matters is not the nature of the ownership of the service provider per se, but the legal rules shaping its management's action boundaries. As long as all institutions, except governments, are subject to the same legal framework (i.e. they can all sign the same type of work contracts, make use of voluntary work etc.), outsourcing to any of them can serve the same purpose, and a governments' choice between them may just be driven by the actual presence locally of potential partners of one or the other type. In fact, Domberger, Hall and Li (1995) find that the effects of outsourcing both on costs and quality are the same irrespective of the ownership of the service provider.

## **4 Recent trends in Italian municipalities cultural policy**

In the last two decades Italian municipalities have witnessed a growing role within public cultural spending. Traditionally, cultural expenditure in Italy had been mainly public and highly centralised, but towards the end of the last century central government's share rapidly declined from around 60% to 50%. According to Bodo and Spada (2004) in 2000 central government accounted for 52% of total public spending for culture, regions for 15%, provinces

for 3%, and municipalities for 30%. More recent but less detailed data Bodo and Bodo (2007)<sup>6</sup> for the last decade highlight that the decentralisation process has gone even further, mainly as a consequence of the stark decrease in central government expenditure (-8.6% in the period 2000-2010). The share of central government's expenditure for culture has therefore declined to 36% of total public cultural expenditure. Specularly, local governments' cultural expenditure – dominated by municipalities – increased to reach nearly two thirds of total public cultural spending. Municipalities have been especially active in the fields of the performing arts, heritage and contemporary art, which arguably comes from their being owners of libraries, museums and theatres.

Interestingly, the decentralization of Italian cultural policy has gone along with a process of growing outsourcing, a completely absent phenomenon in this governmental field of action before the mid-90's.<sup>7</sup> New European laws on economic services of general interest have triggered in the country a general trend towards the outsourcing of public services. The process has however witnessed a lot of variability in time, sectors and levels of government (Scarpa et al. 2010). Although Italian public law experts have generally understood culture as a social rather than an economic service, public intervention in this field has been characterized by an outsourcing trend, too. Outsourcing is common in the management of festivals but it is not infrequent to find that also theatres, libraries and some non-core museum functions (bookshops, tickets sale) are outsourced. Anecdotal evidence suggests contractual outsourcing has been growing at all levels of government, although no systematic analysis of quantitative data on the phenomenon and its variability has yet been published. As for non-contractual outsourcing, no systematic collection of data has been made so far, either.<sup>8</sup>

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<sup>6</sup>The breakdown is only between state and local expenditures, without any further distinction of the local authorities among the regions, provinces and municipalities.

<sup>7</sup>Law n. 4, 4-01-1993 on museum's ancillary services (bookshops, catering etc.) was the first law in Italy allowing outsourcing in the cultural field.

<sup>8</sup>Notice that in a number of cases municipalities have informally delegated the production of cultural services to newly created private-public institutions. In most cases these hybrid institutions have private partners (often banking foundations). Some authors argue that their proliferation has often been used by mayors as a temporary escape from the budget constraints imposed by the Domestic Stability Pact, which

However, the number of private cultural institutions has boomed in the last 20 years, a quite new phenomenon for Italy.<sup>9</sup> Recent inquiries on the financial resources of cultural foundations highlight that they generally have little endowments and mainly rely on donations by banking foundations, firms and, often prominently, on public support (Centro di Documentazione sulle Fondazioni 2007). In this perspective, their booming may be the reflection of a rise in non- contractual outsourcing.

The data on the 106 Italian provincial administrative centres, which we will concentrate upon, are quite illustrative of the growing trend in non-contractual outsourcing. In the time span 1998-2008 the average yearly per capita current spending for culture is 40.9 euros, equal to 4.4% of total current spending. This figure is rather stable over the years, as the trend of cultural current spending has mirrored that of total current spending (Figure 1), probably a sign of a prevailing top-bottom procedure in municipal budgeting.

[FIGURE 1 HERE]

The average share of cultural transfers over total cultural spending is 0.20, a value almost double the average share of total transfers over total expenditures. This highlights that in the cultural field municipal governments tend to produce less and subsidize more than in other fields of action. Figure 2 highlights a growing trend of per capita cultural transfers.

[FIGURE 2 HERE]

As this trend is stronger than the one of total cultural expenditure (in fact, in real terms the latter is rather stagnating), the ratio of cultural transfers over total cultural expenditure is growing over the period<sup>10</sup>, too (Figure 3). This confirms the anecdotal evidence about the growing number of cities adopting informal outsourcing strategies in the cultural field.

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does not impose restraints on publicly-owned institutions. We argue this may not be a correct interpretation of the phenomenon where private partners play a major role, which is very often the case.

<sup>9</sup>We make reference to civil law foundations here; banking foundations were born in 1992 out of the privatization process of the banking system and have a different legal status.

<sup>10</sup>Table A1 in the appendix shows both the within and between variation of the ratio of cultural transfers.

[FIGURE 3 HERE]

## 5 Data and Variables

In order to investigate the determinants of a government’s choice to either provide cultural services through public transfers or produce them in-house, we consider the cultural policies of 106 Italian cities which are provincial administrative centres<sup>11</sup> in the 1998-2008 period.<sup>12</sup> There are three main reasons why we focus on this subset of Italian municipalities. First, these cities are the most populated towns in their respective geographical areas, so they represent Italy’s “urban contexts”.<sup>13</sup> Second, in the majority of cases, these cities are historic centres with a rich cultural life<sup>14</sup> and, arguably, with the most relevant cultural policies at the local level. Third, these municipalities are those where election candidates for a mayor position are almost always members of national parties, thus making political competition and local government orientation clearer than in smaller urban centres. Allowing smaller municipalities to be part of the sample would blur the effect of political variables. In line with the literature previously analyzed, our empirical specification tests the following relationships:

$$y = f(FISC, ECON, POL)$$

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<sup>11</sup>Their number has been slightly varying in the course of time with the institution of new provinces. We have considered the cities which were provincial administrative centres in 1998. Notice that there is a couple of cases where two distinct cities jointly share the provincial administrative centre status (Massa-Carrara, and Pesaro-Urbino). In these cases we have included both cities in our sample. This is why our sample consists in 106 cities, while the Italian provinces in 1998 were only 104.

<sup>12</sup>Data on cultural spending of Italian municipalities are available from the Italian Home Office since 1998. 1999 is the time the Domestic Stability Pact came into force. This Pact mirrors the European Stability and Growth Pact and imposes the monitoring of local accounts by central government. In the official “Certificati consuntivi” (final budget balances) we consider the headings “impegni”, as these certify expenses that have actually been decided in the year of interest.

<sup>13</sup>This probably also means more reliable data, because the smaller the towns, the lower the quality of local governments’ budget reports. The cities we consider are quite different in size (they have a population between about 20.000 and 2,5 millions), allowing to capture size effects if present.

<sup>14</sup>Today’s administrative centres often identify with the capitals of the small states Italy was divided into before it became a unified country in 1861. This is the main reason why they are so rich in cultural heritage.

Where  $y$  is a proxy for municipal outsourcing in the cultural field while *FISC*, *ECON* and *POL* represent three groups of main explanatory variables, expressing respectively fiscal, economic, and political factors. Table A1 in the appendix presents the summary statistics for these variables, while Table A2 relates the variables selected with those commonly adopted in the literature on outsourcing. We choose as dependent variable the ratio between current cultural transfers and current cultural expenditures (*CULTRANSFRATIO*). We argue that the larger the share of municipal transfers in total current cultural spending, the higher is the level of outsourcing in cultural services. Empirical works on local services privatization usually adopt categorical dependent variables to measure the extent of local services outsourcing. The use of municipal transfers arguably represents a novel methodological approach. Considering their weight in overall cultural expenditure allows us to better assess the real economic extent of the scope of government. Moreover, as the value of the ratio varies over time within the same city, using this dependent variable allows us to consider the determinants of outsourcing in a dynamic empirical setting.

As for the drivers of outsourcing, fiscal variables capture how central government restrictions on local finance influence the mode of provision of local services. There are two types of variables in this case. First, the effect of different fiscal rules on groups of municipalities can be tested through dummies capturing institutional heterogeneity.<sup>15</sup> Second, measures related to the “fiscal stance” of local governments may capture fiscal stress, i.e. whether or not the fiscal rule in force is (almost) binding in a given municipality. In Italy, all municipalities over 5.000 inhabitants are subject to the same fiscal rule, the so-called Domestic Stability Pact, which came into force in 1999 and sets ceilings on expenditures and deficits of sub-national governments (Ambrosanio and Bordignon 2007). As the Domestic Stability Pact restrictions apply to all the cities we consider, we cannot use this information to detect variability in fiscal conditions across municipalities.<sup>16</sup> We consider instead two different variables of the

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<sup>15</sup>These dummies are frequently adopted in contributions on US states’ and cities’ outsourcing policies.

<sup>16</sup>In theory, some of the time variability may be due to the repeated reforms the Domestic Stability Pact

second type. The first is deficit per capita (*DEFICIT*). We use it as a proxy for fiscal stress, as high deficits are likely to cause a municipality to violate the restrictions imposed by the Domestic Stability Pact, and may therefore induce a mayor to impose a cut in the near future. The second is the value of all other cultural expenditures (*OTHERCULTEXP*), obtained as the difference between per capita cultural current spending and cultural transfers. In fact, a Granger test shows that the value of these cultural expenditures causes cultural transfers, but not vice versa.<sup>17</sup> We interpret this as a sign that culture departments are assigned a budget, and that grants and subsidies are usually determined as what is left after spending for in-house production, interest repayments etc. The relevant item is the size of the budget of the cultural department, and we proxy it by *OTHERCULTEXP*, thus avoiding endogeneity issues.

Economic variables address issues linked to economic efficiency arguments. First, we control for the possibly divergent dynamics of public servants' productivity with respect to private employees, along the lines of Baumol's cost-disease argument (Baumol and Bowen 1966). Using OECD data at the national level, we construct the variable (*CPGW/CPI*) as government-consumption price deflator over GDP deflator. When wage costs in the public sector increase more than market prices, we expect a positive relation between the index and the proportion of outsourced cultural services.

Second, in order to control for city-specific factors, we use population size (*POPULATION*), per capita income level (*INCOME*) and a measure of asset specificity in municipal cultural activities (*CULTASSET*) as possible drivers of municipal governments' outsourcing behavior. While in many works focusing on local public utilities city size captures the effect of scale economies in service delivery, in the cultural field population is more likely to express the possibility to take advantage of competition from a larger number of service providers. As

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was subject to in the time span we consider. We argue however that this is unlikely, which has to do with the absence of a rigid enforcement mechanism for the budget rule, except for its informational requirements

<sup>17</sup>Considering two lags, the p-values are 0.000 and 0.378 respectively.

cultural industries and arts organizations tend to localize in larger and metropolitan urban areas, we expect that this covariate is positively related to the dependent variable. In turn, per capita income level of a city is generally considered in the literature on local services privatization (Hirsch 1995; Greene 1996) as a proxy of public preferences for private service delivery.

In order to control for asset specificity in public cultural facilities we use the share of municipal current spending on ‘Libraries, Museums and Galleries’ over total cultural expenditures (*CULTASSET*). As compared to theatres, performing arts and the organizations of cultural events, libraries and museums often represent the facilities that provide cultural services with the highest level of asset specificity, as the expenditures devoted for the conservation and maintenance of the book and artworks collections often represent sunk costs and are hardly re-deployable in the short term; finally, monitoring is hard to implement (Brown and Potoski 2003; Levin and Tadelis 2010). Since there are no complete data on cultural facilities at the municipal level, we use local government’s financial involvement in these cultural activities as a proxy for their relative importance. We therefore expect that cities with a higher share of cultural spending dedicated to museums and libraries with respect to theatres and festivals are likely to be less outsourcing-prone.

Finally, political variables account for the possible influence of the distortions induced by politics on the behavior of policy-makers and for the strength of pressure groups. The variable *LEFTRIGHT* is a categorical variable capturing the left-wing orientation of the ruling government, and is a standard control in the empirical literature on outsourcing, while *ELECTION YEAR* and *TERMLIMIT* are dummies taking value 1 if the year is an election year or is in a mayor’s second (and therefore last) term of office respectively. The variable *ELECTION YEAR* is used to capture politicians’ manipulations of governmental outputs so as to favor their chances of re-election. As for *TERMLIMIT*, political economy studies point out that because elections have no disciplinary role for a ‘lame duck’, the latter is more prone



to deviate from the median voter's preferences (Besley and Case 1995). Anecdotal evidence shows that Italian mayors are sometimes tempted, after their last mandate, to consider job offers from non-profit organizations, so it may well be that in order to induce them, they grant these institutions more money before the end of their political career.

Finally, to control for additional factors specific to the cultural and leisure sector, we consider both a measure of the role of a city as a touristic destination (*TOURISM*) and local cultural private spending (*PRIVCULTEXP*). The former is the number of tourist accommodation establishments normalised by population. As the tourist sector benefits from a city's provision of cultural activities this variable is used to test whether the local tourist sector exerts pressure on the municipal government in favour or against outsourcing. As for local cultural private spending, potentially it may condition a mayor's outsourcing strategy in two ways: on one hand, it may induce her to squeeze non-contractual outsourcing, as cultural institutions may have alternative (private) patrons; on the other hand, the very presence of a rich private patron may make the birth of a hybrid, public-private cultural institution more likely. Unfortunately, there are no aggregate data at the local level concerning cultural and artistic activities sponsored by private firms. We therefore consider only cultural spending of non-profit organizations and more precisely those of the so-called banking foundations. These non-profit organizations are by far the richest and most active private subjects in financing projects in the areas of arts and culture. There are 88 banking foundations in total (17 of them spend 80% of aggregate expenditures), and they are mainly concentrated in the northern and central parts of the country (Di Lascio and Segre 2007). As the institutional mandate of banking foundations allows them to fund projects and initiatives only in the area they are located in, we use per capita expenditure by banking foundations as a reliable proxy of private cultural spending at the local level.<sup>18</sup>

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<sup>18</sup>Banking foundations are organized in an association, ACRI, from which we got the spending data for each of them. Some banking foundations are present in more than one city. Dalle Nogare and Galizzi (2011) dealt with these cases and imputed a portion of their overall cultural spending to every city they operate in. We use their series and integrated them for the 2006-08 years following the same methodology. The only

## 6 Estimation Strategy

Our dataset consists of a panel, and the model we estimate is the following:

$$y_{it} = \rho y_{it} + x'_{it}\beta + \alpha_i + \varepsilon_{it}$$

where  $y_{it}$  is current cultural transfers over current cultural expenditure of city  $i$  in year  $t$ ,  $x_{it}$  is the vector of the corresponding values for the explanatory variables,  $\alpha_i$  captures the source of unobserved heterogeneity across cities and  $\varepsilon_{it}$  is a idiosyncratic disturbance term.

One of the major shortcomings of most empirical contributions on outsourcing of local public services is the use of cross-section data with lack of consideration of the dynamics (Bel and Fageda 2007). The choice of a dynamic specification is justified by the fact that decisions concerning fiscal policy often persist over time (status quo bias due to the nature of the decision-making process underlying it in a democracy).

A statistical inspection of both nominator and denominator of our dependent variable confirm that they are AR(1)<sup>19</sup>, so persistence is an issue we cannot disregard. Lack of consideration of  $y_{it}$  would generate inconsistent estimates. In other words, we take advantage of the panel nature of our dataset to control for the (possibly large) effect of last year's proportion of outsourced cultural services on this year's value of the same ratio. Given our choice of a dynamic model, we rely on the use of Generalized Method of Moments estimation techniques. As a matter of fact, given the fact that our panel is (slightly) unbalanced and the relative size of  $N$  and  $T$ , Monte Carlo tests show that Arellano and Bond (1991) estimates outperforms all other estimators (Judson and Owen 1999). However, Arellano and Bond (1991) estimates have often been found to be characterized by a weak instruments problem. Moreover, as they rely on transformation of the original model into its differenced version,

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exceptions are the series for the cities Fondazione CARIPLLO operates in, which we re-calculated completely, following the discovery of a mistake in the previous imputations.

<sup>19</sup>Fisher tests detect no unit root instead.

they do not allow to estimate time invariant explanatory variables, and some of the extra variables we intend to use for the robustness checks are time invariant. As a consequence, we adopt Arellano and Bover (1995) – Blundell and Bond (1998) system GMM as our preferred estimation strategy. To increase efficiency, Blundell and Bond develop an approach outlined in Arellano and Bover: they difference the instruments to make them exogenous to the fixed effects instead of transforming the regressors to expunge them. This is valid assuming that changes in the instrumenting variables are uncorrelated with the fixed effects.<sup>20</sup> Unlike AB (1991) estimates, system GMM allows consideration of time invariant explanatory variables.

## 7 Results

The main findings of our analysis on Italian cities’ outsourcing strategies in the cultural field are summarised in Table 1.

[Table 1 here]

The dependent variable is the ratio between cultural transfers and total cultural expenditures (*CULTRANSFRATIO*). All covariates are in real terms, normalized by population (except the political dummies and the variables expressing a ratio), and for all of them (except the political ones) we initially consider both their current value and lag one.<sup>21</sup> The results obtained by the use of our preferred estimation strategy, namely system GMM, are in column 4, while a reduced model is presented in column 5. For comparative purposes, in columns 1-3 we show fixed effects, fixed effects with correction for first-order autoregression and Arellano-Bond GMM estimates respectively, all of them with robust standard errors.<sup>22</sup>

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<sup>20</sup>In order to apply system GMM,  $\rho$  must be less than 1, which in our case all the autocorrelation tests confirm, and cities in which outsourcing grows more rapidly are not systematically closer or farther from their steady states than slower-growing ones. We have no reason to believe this is not the case.

<sup>21</sup>We considered introducing time dummies, but an F test always revealed their coefficients were not significantly different from 0.

<sup>22</sup>We use a static model when considering FE estimates. A Hausman test reveals FE estimates must be preferred to random effects estimates. A modified Wald test and a Wooldridge test reveal FE estimates

Column 6 presents system GMM estimates with a correction for potential endogeneity of the *OTHERCULTEXP* variable. In GMM estimates serial correlation in the first-differenced errors at an order higher than 1 implies that the moment conditions used to derive them are not valid; all of our GMM estimates show no evidence of serial correlation in the first-differenced errors at order 2.<sup>23</sup>

In all dynamic panel estimates of Table 1 the dependent variable lagged one is the most important driver of time  $t$  municipal governments' outsourcing strategies in the cultural field. System GMM estimates reveal the substantial sluggishness of political conduct in this governmental domain of action.<sup>24</sup> As for the other regressors, most of the significant ones are so in all columns, and their sign and size is quite similar. We interpret this coherence as a sign of robustness. The determinants of Italian cities' outsourcing policy in the cultural field are found to be quite few in the period of interest. In fact, the estimated coefficients of some potential drivers are never significant. We will consider these first, and then illustrate the significant ones. The relative price dynamics variable *CPGW/CPI* is never significant. This may be the effect of considering a national proxy for the gap in public and private productivity; unfortunately, there is no local indicator we can use. Ideology does not seem to play a role and that is again in accordance with most empirical works on outsourcing and privatizations at the local level of government published so far. *POPULATION* is never significant either.

The four variables that emerge as significant drivers of Italian cities' outsourcing policies in the cultural domain are:

- the level of fiscal stress

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are affected by both heteroskedasticity and serial correlation of the residuals. A modified Bhargava et al. Durbin-Watson test on the xtregar estimates, confronted with the critical values in Bhargava, Franzini and Narendranathan (1982), highlight that here, too, we must reject the null hypothesis of 0 autocorrelation.

<sup>23</sup>Sargan tests are not applicable because of the use of robust standard errors.

<sup>24</sup>The coefficient of lagged *CULTRANSFRATIO* is bigger in columns 4-6; this is consistent with the observation of a downward bias in the AB GMM estimator when the true value of the lagged dependent variable is high (Blundell and Bond 1998).

- the dynamics of the value of other cultural expenditures
- the degree of asset specificity, as expressed by the relative size of the expenditures for museums and libraries with respect to those for theatres and festivals
- the timing of elections

The *DEFICIT* coefficient has the correct sign: the higher the deficit, the stronger the incentive to outsource. The fiscal variable *OTHERCULTEXP* is a significant regressor both at time  $t$  and at time  $t-1$ . By interpreting this evidence together with Figure 1 and a Granger test revealing that *OTHERCULTEXP* causes *CULTRANSFRATIO* but not vice versa, we conclude that transfers are used as a buffer to keep the value of overall cultural expenditure at a desired level: in case of a rise of other cultural expenditures, some services are informally outsourced, possibly in the hope to reduce costs. It is as if cultural departments were given each year a budget, which is then divided into direct spending and transfers, and this choice depended on last year's choice, with more outsourcing being the chosen option today if last year's value of other cultural spending was high. This is compatible with the idea that the head of the cultural department is conscious the mayor follows a top-down budget procedure, and informally outsources cultural services whenever producing in-house becomes more costly. In some sense, this interpretation hints at the idea that, also indirectly, fiscal stress does play a role in a local government's outsourcing policy.

*CULTASSET* is almost always significant and with positive sign. This again is in line with our expectations: outsourcing is less dangerous, in terms of risks associated with the management of the cultural stock involved, in the field of the performing arts. Therefore, a higher expenditure for museums and libraries, proxying for the presence of a larger numbers of such institutions owned by a municipal government, impacts the relative value of a city's outsourced public cultural activities negatively. The significance of the *ELECTION YEAR* variable and its negative sign may seem surprising, but in fact, this is coherent with what

Dalle Nogare and Galizzi (2011) conclude when considering the determinants of Italian cities' levels of cultural spending. They claim that there is a peculiar electoral cycle in Italy at the municipal level of government, by which, in an election year, resources are re-directed by mayors to governmental functions which voters most care for, and culture is not one of them. Our analysis enriches those findings by revealing how spending cuts are made: the easiest way is to curb subsidies to cultural institutions, and this is in fact what the negative sign of the *ELECTION YEAR* variable in our analysis shows.

Some other potential drivers are either significant or not, depending on the model and/or estimation strategy adopted; more investigation is needed (perhaps with the use of more refined data) to assess their real role. Therefore, we limit ourselves here to consider whether when they appear to be significant, their sign is consistent with our expectations. *INCOME* is not always significant, but it is significant in reduced models, where it has the expected positive sign. Our term limit hypothesis, by which a mayor in his last term would be more generous to non-profit cultural organizations, is sometimes rejected by the data, but not always. When it is found to be significant, it always has a negative sign, which is in contrast with our prediction of term-limited mayors being more outsourcing-prone.

Interestingly, the variables that turn out to be highly significant in Table 1 are significant regressors also in models with the level of cultural transfers as dependent variable (Table 2, columns 7-9), revealing that the dynamics of the denominator of *CULTRANSFRATIO* do not play a relevant role: our results are driven by the growth of the nominator, which Figure 3 already anticipated.

[Table 2 here]

Table 2 also presents estimates where the dependent variable is the ratio between subsidies to private firms and non-profit organizations and total cultural spending (columns 10-12).

They do not differ substantially from those illustrated in Table 1.<sup>25</sup>

As models presented in Table 1 do not include private cultural expenditure and tourism as possible drivers, Table 3 reports the estimates of models including them. Notice that in specifications including private cultural spending, the sample is smaller.

[Table 3 here]

Columns 13-15 show that there is no evidence of a significant influence of private cultural spending on cities' outsourcing decisions regarding cultural policies, while not so much changes as to the significance of the other regressors. The irrelevance of the presence of other institutions financing cultural activities means that the presence and generosity of private patrons does not reduce public non-contractual outsourcing.<sup>26</sup> As for the effects of tourism, it is surprising to find that these, too, are irrelevant (columns 16-18).<sup>27</sup> The explanation of this counterintuitive evidence has probably to do with the proxy we use. The number of hotels is maybe not so correlated with the number of non-resident consumers of cultural services, both because these are often excursionists and because cultural tourism is not the only type of tourism present in Italian cities.

## 8 Robustness Check

As an alternative fiscal stress measure with respect to deficit we considered total current spending, but it is not significant. This evidence is in accordance with what the literature on outsourcing generally finds when models have just one governmental function as dependent variable, especially if it is not a major one.

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<sup>25</sup>These latter estimates are to be taken with caution because the dependent variable slightly changes in nature in the sample period due to a redefinition of "government" by the National Statistics office (Istat) in 2006.

<sup>26</sup>This does not deny that some substitution or complementarity effect is at work; it is the composition of public spending for culture which appears not to be affected.

<sup>27</sup>Dalle Nogare and Galizzi (2011) show that tourism is not a significant driver of a city's level of current cultural spending, either

In order to account for possible non-linear effect of size, we have added the square of population: it is never significant. We have also considered a sub-sample not including the cities recently classified by the Italian law as metropolitan areas<sup>28</sup>, but this does not change our main results, except for the deficit variable, the significance of which is now weaker. We have introduced a dummy variable capturing the Northcentre-South divide: it is not significant and does not change the sign and significance of the other regressors. The same happens when we try with a dummy equal to 1 when a city belongs to an Autonomous Region, in which the distribution of governmental functions among the different levels of government differ from the rest of the country.<sup>29</sup> Finally, as an alternative measure of asset specificity we have used the number of municipally owned museums per 10.000 inhabitants. This measure has some clear shortcomings, as it does not capture the presence of public libraries, the other relevant set of cultural facilities generally owned by municipalities. Furthermore, the information is available only for 2006 and therefore the variable is fixed over time. This alternative regressor is never significant.

## 9 Conclusion

Outsourcing of local public services has witnessed a growing trend for government policies in the last decades. Several theoretical and empirical works have analyzed the distinct drivers and conditions affecting local governments' choice for outsourcing, including fiscal, economic and political factors. In this article we propose a first analysis of the determinants of a government's choice between outsourcing and in-house production in the field of cultural services. We concentrate on grants and subsidies to cultural organizations, which we argue

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<sup>28</sup>The subsample excludes Rome, Milan, Naples, Genoa, Turin, Bologna, Florence, Venice and Bari. Similar results are obtained when excluding only Rome and Genoa, which are the two cities their cultural activities are delegated to a company entirely owned by the municipal government, a case in which transfers are not a good proxy for outsourcing.

<sup>29</sup>Each Autonomous Region has a specific status in this respect.



may be considered as non contractual outsourcing within a government's cultural policy. Using data on 106 Italian cities over the 1998- 2008 period, we produce estimates of the impact of several standard and sector-specific potential drivers of the relative share of subsidies in total public cultural spending. Our results are in line with the literature on outsourcing in general or in other public functions: outsourcing of cultural services is negatively affected by cultural assets specificity and is more likely to occur in cities subject to fiscal stress. Furthermore, we find evidence of a peculiar electoral cycle by which incumbent mayors spend less in cultural subsidies around an election year.

Finally, the relevance of our contribution is also methodological and goes beyond the restricted field of cultural policy. Arguably, the use public transfers as a proxy for the value of a government's outsourced services allows to quantify them in a number governmental functions so far not often considered by the literature on outsourcing.

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## DATA APPENDIX

In Table A1 we summarize the statistical properties of the main variables we use in our model specification. All variables are in real terms, except for the political variables (which are dummies or categorical variables) and those expressing ratios (*CULTRASFRATIO* and *CULTASSET*).

The information in our Dataset has been obtained from different sources.

Data on municipal expenditures and revenues come from the Database of the official ‘certificati consuntivi’ (final budget balances) made available by the Italian Home Office (<http://finanzalocale.interno.it/apps/floc.php/in/cod/4>, last access on 25.10.2012). Data on private cultural expenditure refer to banking foundations’ cultural spending and have been provided by ACRI (Associazione di Fondazioni e di Casse di Risparmio). As for socio-economic and tourism variables, the source is the National Statistical Office (ISTAT). Income data refer to per capita tax base at municipal level and the source is the Ministry of Economy and Finance ([http://www.finanze.it/export/finanze/Per\\_conoscere\\_il\\_fisco/Fiscalita\\_locale/addirpef/dati\\_statistici.htm](http://www.finanze.it/export/finanze/Per_conoscere_il_fisco/Fiscalita_locale/addirpef/dati_statistici.htm)). Political data on Italian municipalities have been collected by Fabio Padovano for IREF (Institut de Recherche Economique et Fiscal). Finally, data on consumer price and government wage deflators come from OECD Statistical Database (Source: <http://www.oecd.org/statistics/>, last access on 25.10.2012).

**Table A1 – Summary Statistics**

Variable	Description		Mean	St.Dev.	Min	Max	Observations
Cultrasfratio	ratio between current cultural transfers and current cultural expenditures	overall	0.204	0.173	0	0.872	N = 1136
		between		0.153			
		within		0.082			
Deficit	Total expenditures minus revenues (per capita)	overall	12.537	69.254	-1535.547	284.370	N = 1157
		between		24.985			
		within		64.762			
Othercultexp	Per capita current cultural expenditures minus transfers	overall	29.131	20.159	0	163.317	N = 1149
		between		18.623			
		within		8.624			
Population	City Population (10.000)	overall	16.275	30.346	1.510	272.434	N = 1165
		between		30.452			
		within		0.849			
Income	Income per Capita (10.000)	overall	1.410	0.304	0.668	2.308	N = 1162
		between		0.301			
		within		0.055			
cpgw/cpi	Ratio between government-consumption price deflator and GDP deflator	overall	1.180	0.049	1.107	1.246	N = 1165
		between		0.0005			
		within		0.049			
Cultasset	Ratio between current expenditure in "libraries, museums and galleries" and Total current cultural expenditures	overall	0.398	0.241	0	1	N = 1126
		between		0.226			
		within		0.081			
PrivCultexp	Municipal banking foundations per capita cultural spending	overall	21.400	62.362	0	821.495	N = 1129
		between		59.642			
		within		23.259			
Tourism	Tourist accomodation establishments per 10.000 inhabitants	overall	7.956	14.985	0.350	118.964	N = 1152
		between		14.358			
		within		5.074			
Election year	1 if the year is an election year; 0 Otherwise	overall	0.217	0.412	0	1	N = 1163
		between		0.047			
		within		0.410			
Leftright	Municipal Government Political orientation; 1 (left), 0.5 (centre) or 0 (right)	overall	0.604	0.488	0	1	N = 1153
		between		0.381			
		within		0.309			
Termlimit	1 in all years of a mayor's last term; 0 otherwise	overall	0.361	0.480	0	1	N = 1163
		Between		0.170			
		Within		0.449			

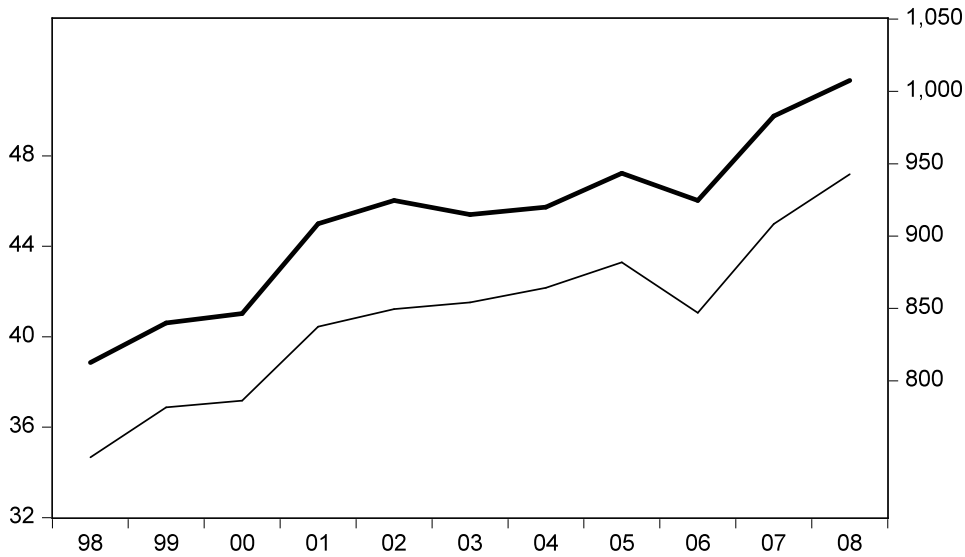
**Table A2 – Comparison between variables used in the literature and here.**

		<i>Variables in existent literature</i>	<i>Variables Adopted</i>
<b>Fiscal Variables</b>			
<b>Fiscal rules</b>	Legal limitations to short term borrowing (dummy)	López-de-Silanes et al., 1997	-
	State imposed debt limits (dummy)	López-de-Silanes et al., 1997	
	Property tax limit (dummy)	Brown and Potoski, 2003	
<b>Measures of fiscal stress</b>	size of transfers from central government	Dijkgraaf et al. 2003	Deficit
	city debt/revenues	Levin and Tadelis, 2010	Othercultexp
	Surplus(deficit)/total Budget	Kodrzycki, 1998	
	Interest payments/general revenues	Kodrzycki, 1998	
<b>Economic Efficiency Variables</b>			
<b>Transaction costs related measures</b>	Asset specificity (indicator derived from survey involving city managers)	Brown and Potoski, 2003	Cultasset
	Government ownership of facilities (dummy)	Walls et al., 2005	
	Service Contracting difficulty (indicator composed from survey among city managers)	Levin and Tadelis, 2010	
<b>Economies of scale in inhouse production/ supply of external contractors</b>	City population size	All	Population
<b>In house production efficiency</b>	-	-	cpgw/cpi
<b>Political Variables</b>			
<b>Ideology</b>	fraction of votes for political parties	López-de-Silanes et al., 1997	Leftright
		Levin and Tadelis, 2010 Dijkgraaf et al. 2003 Walls et al., 2005	
<b>Interest group</b>	Income per capita	Walls et al., 2005	Income
	Fiscal capacity per capita	Brown and Potoski, 2003	Tourism PrivCultexp
<b>Political patronage</b>	Unemployment	Dijkgraaf et al. 2003 López-de-Silanes et al., 1997	electionyear
	Number of civil servants	Dijkgraaf et al. 2003 López-de-Silanes et al., 1997	termlimit
	Degree of unionization of public workers	López-de-Silanes et al., 1997 Walls et al., 2005	



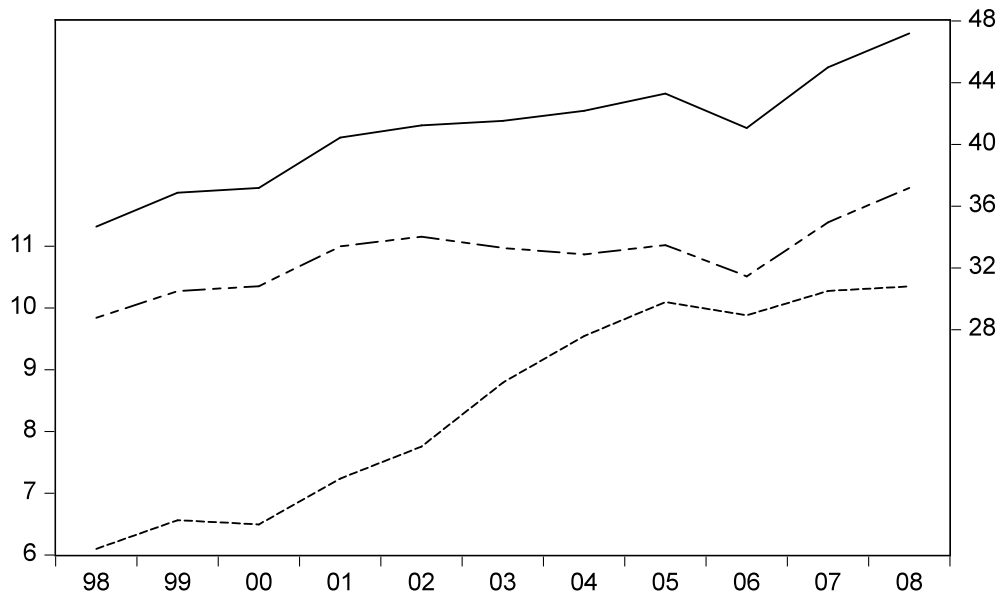
## FIGURES

**Figure 1: Sample average of per capita total and cultural current expenditures in current €**



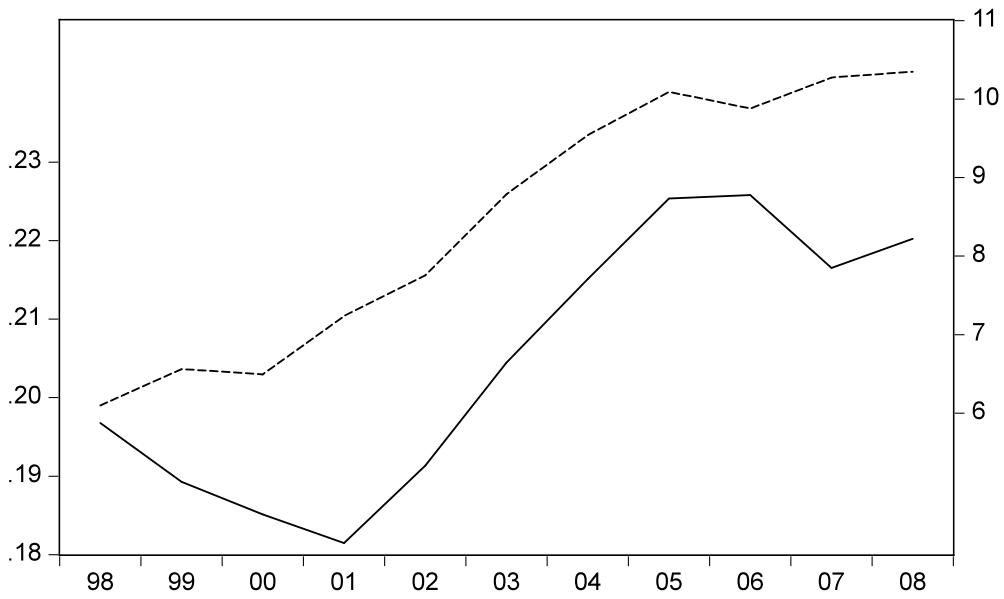
*Fat line: yearly average of cities' total current spending per capita (right axis)*  
*Thin line: yearly average of cities' cultural current spending per capita (left axis)*

**Figure 2: Sample average per capita current cultural spending, cultural expenditure without transfers and cultural transfers in current €**



*Continuous line: yearly average of per capita cultural expenditures (right axis)*  
*Semi-continuous line: yearly average of percapitav cultural expenditures except transfers (right axis)*  
*Dotted line: yearly average of per capita cultural transfers (left axis)*

**Figure 3: Sample average of current cultural transfers and ratio of cultural transfers over cultural expenditures**



*Dotted line: yearly average of per capita current cultural transfers in current € (right axis)*

*Continuous line: yearly average of ratio of current cultural transfers over total current cultural expenditure (left axis)*

**TABLES**

**Table 1**– Determinants of Italian municipal outsourcing in the cultural sector, 1998-2008

Dependent Variable: Cultransfratio						
	(1)	(2)	(3)	(4)	(5)	(6)a
	FE	FE Ar(1)	AB GMM		GMMsys	
Cultransfratio(-1)		(0.573)	0.451*** (0.097)	0.608*** (0.0797)	0.595*** (0.0855)	0.571*** (0.0894)
Deficitpc	0.0001*** (0.00003)	0.00007*** (0.00002)	0.00006** (0.00002)	0.00005** (0.00002)	0.00006*** (0.00001)	0.00006*** (-.0045)
Deficitpc(-1)			-0.00003 (0.00002)	-0.00004 (0.00002)		-0.00003 (0.00007)
Othercultexp	-0.0052*** (0.0008)	-0.0047*** (0.0003)	-0.0039*** (0.0004)	-0.0038*** (0.0005)	-0.0036*** (0.0004)	-0.0045*** (0.00007)
Othercultexp(-1)			0.0017* (0.0009)	0.0024** (0.0015)	0.0021*** (0.0005)	0.0024*** (0.0008)
Population	0.0019 (0.0027)	0.0015 (0.0012)	0.0018 (0.0059)	-0.0005 (0.0041)		-0.0006 (0.0049)
Population (-1)			0.0059 (0.0046)	-0.0005 (0.0048)		-0.0004 (0.0053)
Income	-0.0342 (0.0453)	0.0037 (0.0379)	0.0128 (0.0803)	0.0611 (0.0535)	0.111*** (0.0317)	0.0797 (0.0637)
Income(-1)			0.0139 (0.0357)	0.0450 (0.0366)		0.0626 (0.0494)
cpgw/cpi	0.0463 (0.0988)	0.0926 (0.0658)	-0.0860 (0.2717)	0.0053 (0.2739)		0.0949 (0.2169)
cpgw/cpi(-1)			0.0883 (0.2912)	0.0270 (0.2949)		-0.0690 (0.2838)
cultAsset	-0.1064 (0.0752)	-0.1082*** (0.0286)	-0.108*** (0.0358)	-0.107*** (0.0384)	-0.0997** (0.0440)	-0.0930 (0.0664)
cultAsset(-1)			0.0189 (0.0584)	0.0311 (0.0557)		0.0013 (0.0538)
election year	-0.0023 (0.0043)	-0.0055 (0.0036)	-0.0061 (0.0038)	-0.0068* (0.0039)	-0.0098** (0.0041)	-0.0114** (0.0046)
leftright	-0.0185 (0.0120)	-0.0115 (0.0081)	-0.0193 (0.0185)	-0.0186 (0.0232)		-0.0261 (0.0258)
termlimit	0.0004 (0.0074)	-0.0105** (0.0053)	-0.0118* (0.0061)	-0.0140* (0.0072)		-0.0103 (0.0120)
Observations	1108	1003	877	992	1003	992
R2	0.061	0.071				
Number of Instruments			60	69	60	123
Estat AB(1)			-3.282***	-3.727***	-3.787***	-3.598***
Estat AB(2)			-0.547	-0.352	-0.269	-0.43667

Standard errors in parentheses: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

All GMM estimatio GMM estimates show two steps results with Windmeijer bias-corrected robust standard errors.

a - estimations with correction for potential endogeneity of cultexpnotransf variable.

**Table 2** – Determinants of Italian municipal outsourcing in the cultural sector: other depvars.

	(7)	(8)	(9)a	(10)	(11)	(12)a
	Depvar = Cultransflevel			Depvar = grants to private sector		
depvar(-1)	0.538*** (0.1442)	0.573*** (0.1343)	0.671*** (0.0511)	0.517*** (0.1013)	0.539*** (0.0901)	0.531*** (0.1226)
Deficitpc	0.0063*** (0.0014)	0.0053*** (0.0017)	0.007** (0.0031)	0.00007** (0.00004)	0.00005** (0.00002)	0.00008** (0.00004)
Deficitpc(-1)	0.0015 (0.0029)		-0.0006 (0.0037)	-0.00002 (0.00006)		-0.00001 (0.00007)
Othercultexp	-0.156*** (0.0425)	-0.138** (0.0547)	-0.199*** (0.0456)	-0.0033*** (0.0006)	-0.0036*** (0.0006)	-0.0041*** (0.0007)
Othercultexp(-1)	0.018588 (0.0825)		0.102** (0.0443)	0.0015 (0.0010)	0.0021*** (0.0006)	0.0021 (0.0014)
Population	-0.3811 (0.3602)		-0.2720 (0.7089)	-0.0012 (0.00532)		-0.0019 (0.0064)
Population(-1)	0.3495 (0.3378)		0.0971 (0.7899)	0.0019 (0.005278)		0.0023 (0.0063)
Income	14.554** (7.1247)	17.866*** (6.8937)	9.339*** (3.0265)	0.0927 (0.08344)	0.150*** (0.0295)	0.0689 (0.1008)
Income(-1)	5.710* (2.9989)		2.647 (3.5670)	0.0966 (0.0651)		0.0915 (0.0855)
Cpgw/cpi	12.765 (22.0554)		6.004 (22.9633)	0.0631 (0.3093)		-0.0792 (0.3286)
Cpgw/cpi(-1)	-16.358 (22.6253)		-9.112 (26.3869)	-0.1208 (0.3393)		0.0420 (0.4790)
CultAsset	-9.228* (5.1215)	-10.554** (4.4194)	-10.335** (4.5305)	-0.0989** (0.0482)	-0.1248** (0.0544)	-0.0912 (0.0614)
CultAsset(-1)	0.992 (4.0532)		6.066* (3.2248)	0.0217 (0.0520)		0.0283 (0.0501)
Election year	-0.712** (0.3317)	-1.124*** (0.3687)	-0.951** (0.4726)	-0.0104** (0.0047)	-0.0151*** (0.0043)	0.0062* (0.0062)
Leftright	0.0271 (1.0105)		-0.735 (1.0822)	-0.0169 (0.0223)		-0.0268 (0.0190)
Termlimit	-0.2813 (0.5764)		-0.073 (0.9771)	-0.0008 (0.0070)		-0.0012 (0.0153)
Observations	993	1004	993	993	1003	993
Number of	69	59	123	69	60	123
AR(1)	-2.757***	-2.989***	-3.628***	-3.349***	-3.831***	-3.374***
AR(2)	-1.362	-1.2478	-1.1679	-0.1348	-0.0027	-1.119

Standard errors in parentheses: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

GMM estimates show two steps results with Windmeijer bias-corrected robust standard errors.

a - estimations with correction for potential endogeneity of cultexpnotransf variable.

**Table 3 – Role of local Private Patrons and Tourism on cultural outsourcing, Italian Cities 1998-2008**

Dependent Variable: Cultransfratio						
	(13)	(14)	(15) a	(16)	(17)	(18) a
	Private Cultural Expenditure			Tourism		
depvar(-1)	0.584*** (0.0884)	0.581*** (0.0859)	0.547*** (0.1689)	0.605*** (0.0806)	0.603*** (0.0877)	0.565*** (0.1183)
Deficitpc	0.00005** (0.00002)	0.00005*** (0.00001)	0.00006*** (0.00002)	0.00005** (0.00002)	0.00005*** (0.00001)	0.00007*** (0.00002)
Deficitpc(-1)	-0.00002 (0.00002)		-0.00002 (0.00005)	-0.00003 (0.00002)		-0.00003 (0.00008)
Othercultexp	-0.0037*** (0.0005)	-0.0035*** (0.0005)	-0.0043*** (0.0006)	-0.003*** (0.0005)	-0.0036*** (0.0004)	-0.0043*** (0.0006)
Othercultexp(-1)	0.0016* (0.0009)	0.0017*** (0.0005)	0.0021* (0.0010)	0.002** (0.0011)	0.0022*** (0.0005)	0.0024*** (0.0009)
Population	-0.0014 (0.0033)		-0.0021 (0.0042)	-0.0008 (0.0041)		-0.0006 (0.0043)
Population(-1)	0.0005 (0.0035)		0.0010 (0.0042)	-0.0001 (0.0047)		-0.0003** (0.0044)
Income	0.0413 (0.0589)	0.126*** (0.0370)	0.0582 (0.0653)	0.0624 (0.0534)	0.106*** (0.0316)	0.0731 (0.0773)
Income(-1)	0.0614 (0.0378)		0.0698 (0.0493)	0.0438 (0.0358)		0.0601 (0.0434)
Cpgw/cpi	0.0946 (0.2365)		0.1060 (0.2846)	-0.0211 (0.2760)		0.0666 (0.2920)
Cpgw/cpi(-1)	-0.0256 (0.2543)		-0.0436 (0.3215)	0.0500 (0.2995)		-0.0325 (0.3616)
CultAsset	-0.1021** (0.0417)	-0.0993** (0.0495)	-0.0844* (0.0456)	-0.107*** (0.0390)	-0.097** (0.0452)	-0.0853 (0.0617)
CultAsset(-1)	-0.0121 (0.0529)		-0.0244 (0.0444)	0.0288 (0.0541)		-0.0006 (0.0450)
Election year	-0.0071* (0.0042)	-0.0128*** (0.0043)	-0.0127*** (0.0045)	-0.0070* (0.0040)	-0.0093** (0.0039)	-0.0108** (0.0051)
Leftright	-0.0107 (0.0165)		-0.0206 (0.0182)	-0.0180 (0.0226)		-0.0265 (0.0235)
Termlimit	-0.0079 (0.0072)		-0.0037 (0.0098)	-0.0140** (0.0072)		-0.0106 (0.0109)
PrivCultexp	-0.0002 (0.0001)	-0.0001 (0.0001)	-0.00003 (0.0001)			
PrivCultexp(-1)	-0.0001 (0.0002)	-0.00007 (0.0001)	-0.00003 (0.0001)			
Tourism				0.0001 (0.0002)	-0.00006 (0.0003)	-0.00001 (0.0006)
Observations	953	964	953	986	997	986
Number of Instruments	71	62	125	70	61	124
AR(1)	-4.198***	-4.326***	-2.963***	-3.724***	-3.774***	-3.302***
AR(2)	-0.025	0.329	-0.115	-0.326	-0.238	-0.428

Standard errors in parentheses: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

GMM estimates show two steps results with Windmeijer bias-corrected robust standard errors.

a - estimations with correction for potential endogeneity of cultexpnotransf variable.