Cultural Strategies and Public Value Creation: Empirical Evidence

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In recent years there has been a growing belief that cultural policies are very important drivers of the public value creation process. Many scholars show that cultural policies can generate social, economic, and political advantages. However, until now the importance of cultural policies in the social and economic growth of a country has been justified mainly by means of theoretical analysis or case studies. Little research supported by empirical evidence has been done on this subject. Moreover, analysis in international contexts is very rare.

This article aims to: 1) determine these factors with reference to a European context and, 2) investigate the relationship between the main elements of cultural policies and a set of social, economic, and political variables without disregarding the context of each country analyzed. The research was carried out in 39 European countries by means of statistical methods. Findings, implications, and suggestions for future research are discussed.

Keywords: cultural policies, public value, performance management, European countries

INTRODUCTION

The cultural sector[1] is very important for the European economy and the analysis of some data confirms this[2]:

- in 2009 over 3.6 million people (about 1.7 percent of all people in employment) worked in the cultural sector[3];
- in 2009 European countries exported more cultural goods to the rest of the world. The trade balance recorded a surplus of about 1.9 billion euros;
- "cultural attractiveness" is the second motivation in order of importance for European tourists in the choice of holiday destination or accommodation.

Recently, the importance of the cultural sector has also been highlighted by the European Commission in a Communication to the European Parliament, the European Council, the European Economic and Social Committee, and the Committee of the Regions. The communication focused on the definition of some objectives for a new European agenda for culture.[4] On page 3 it says that ". . . culture is an indispensable feature to achieve the EU's strategic objectives of prosperity, solidarity and security, while ensuring a stronger presence on the international scene".[5]

Having said that, it is believed that the definition of appropriate cultural policies—focused on the enhancement and promotion of countries' artistic, musical and historical heritage—by the Member States may be an important driver of the public value creation process (Moore, 1995; Murphy, 2001).

It is important to identify the elements and the context conditions that can help in the creation of public value. In

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[1]According to NACE classification, economic activities covered in the cultural sector are the following: "publishing activities"; "motion picture, video, and television program production, sound recording and music publishing activities"; "programming and broadcasting activities"; "creative arts and entertainment activities"; and "libraries, archives, museums and other cultural activities."

[2]Data on cultural workers, referred to the EU-27 countries, are available from the recent Eurostat report *Cultural Statistics* (2011).

[3]The highest shares were found in Iceland, Norway, and Sweden; the lowest in Portugal, Romania, and Turkey.

[4]We refer to the Communication COM (2007) 242.

[5]The European Commission recognized that defining the cultural sector was complex. However, the Commission noted that the term "culture" can refer to the fine arts, including a variety of works of art, and cultural goods and services. Culture also has an anthropological meaning. It is the basis for a symbolic world of meanings, beliefs, values, and traditions which are expressed in language, art, religion, and myths. As such, it plays a fundamental role in human development and in the complex fabric of the identities and habits of individuals and communities. Communication (COM) 242, p. 3.

Although this work is jointly authored, the sections called "methodology" and "results" are the work of Professor Nunzio Angiola, and the sections "literature review" and "conclusion" are the work of Dr. Piervito Bianchi. The "introduction" is the work of Dr. Roberto Marino.

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literature we find many studies that analyzed these elements and conditions. However, this analysis has been justified mainly by theoretical analysis or case studies. Very little research supported by empirical evidence has been carried out on this subject (Del Vecchio & Heller, 2003; Dalle Nogare & Galizzi, 2011).

Moreover, analysis in international contexts is very rare. Contributions referring to specific areas (cities, regions, countries, etc.) are more frequent. However, it is known that surveys referring to different contexts can help determine the factors that create public value.

This article aims to:

1) determine these factors with reference to a European context; and
2) investigate the relationship between the main elements of cultural strategies and a set of social, economic and political variables without disregarding the context of each country analyzed.

To achieve the aims of the research we have used statistical methods (bivariate correlation and regression analysis) on a sample of 39 countries. The analysis is cross-sectional.

Several implications come out of the research. In particular, the research can first help to fill the gaps in existing literature and, second, can provide information to define cultural policies that create public value.

LITERATURE REVIEW

In his work, *Creating Public Value: Strategic Management in Governance*, Moore (1995) stated that governments should "create value" for their "shareholders" (citizens) i.e., provide citizens with adequate benefits for what they put in (taxes) thereby safeguarding the public interest.

The achievement of institutional goals in local government depends, therefore, on a careful measurement of the results. However, before measuring performance, we should make clear the same conception of "public sector performance" we refer to. In fact there is not a single definition of performance accepted in management literature (Hood, 1991; Pollitt, Bouckaert, 2000; Jørgensen, Bozeman, 2002; Poister, 2003; Meneguzzo, 2005; Hatry, 2006; Radin, 2006; Newcomer, 2007; Voets et al., 2008; Talbot, 1999, 2010).

Van Dooren, Bouckaert, & Halligan (2010, p. 17) note that "The conventional definition of performance uses the metaphor of the production process. Performances are outputs and outcomes of activities. An alternative view sees performance as the realization of public values." The latter definition of performance has a broader meaning, because it refers not only to outputs and outcomes of activities, but also to "values" which lead the production of outputs and outcomes, such as "impartiality," "fairness," "legitimacy," and "transparency," (Hood, 1991; Jørgensen & Bozeman, 2002; Radin, 2006).

This article focuses on the former definition of public sector performance, because it is "the most widely used conception of performance . . ." (Van Dooren, Bouckaert, & Halligan, 2010, p. 17). Therefore, we see public sector performance as a "production process" in which there are various variables (inputs, activities, outputs, outcomes, trust) linked together to make up a "value chain," according to the "input-output model" (Pollitt & Bouckaert, 2000).

Having said that, public sector performance could be assessed with reference to specific public administrations or to wider objects, such as public networks, program/policies, and a country or group of countries. More precisely, performance could be analyzed at "micro," "meso," or "macro" levels (Bouckaert & Halligan, 2008, pp. 19–26). In the first case, the focus is on the performance of an individual public sector organization (municipality, county, hospital, university, ministry, agency, etc.). Performance at the meso level refers to a specific policy field (social security, education, etc.) or network (public-private-partnership, etc.) which could involve various (public/private) organizations in the "production process" to obtain specific outputs/outcomes. Finally, macro performance is analyzed at country or supranational level to assess competitiveness of different geographical areas. In this piece of work we prefer to analyze "meso performance" (Figure 1) because we focus our attention on a specific policy field (the cultural sector).

As mentioned before many scholars have shown that cultural policies could generate social, economic, and political advantages (outcomes). In particular, with reference to "social" outcomes the implementation of cultural policies could contribute to the "social regeneration" of regions suffering from social crisis connected with the presence of high levels of marginalization (Zukin, 1982; Whitt, 1987; Bianchini, 1989, 1990; Lister, 1991; Rogers & Fisher, 1992; Bassett, 1993; Bianchini & Parkinson, 1993; Griffiths, 1993,
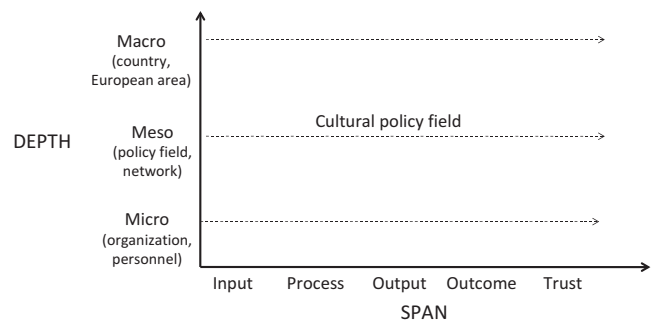

FIGURE 1   The performance of cultural policy field.

Sources: Bouckaert & Halligan, 2008; Van Dooren et al., 2010.

1995; Lim, 1993; Herbert, 1995;Wu, 2004; Wharton et al., 2010).[6]

In particular, some of them believed that the implementation of cultural strategies could help to restore the citizens' "sense of belonging" to their community (Bianchini, 1989; Montgomery, 1990; Fisher & Worpole, 1991, Benhamou, 2001; Del Vecchio, Heller, 2003). This is, among other things, ". . . because the diffusion of the consumption of cultural assets allows people to share the same values and lifestyles" (Del Vecchio & Heller, 2003, p. 211). Moreover, cultural policies could foster dialogue between people of different ethnic groups and cultures.

Some observers focused their attention on the role of cultural policies in the diffusion of knowledge. In particular, cultural policies (like educational policies) could enhance democratization of culture, diminish social differences, and contribute to emancipation of people. According to Del Vecchio and Heller (2003, p. 210), ". . . the fact that citizens are cultured may be an aim in itself or a prerequisite . . . for the convergence of values and lifestyles in a perspective of social integration . . . ."

Regarding the "economic" advantages (outcomes) cultural policies can help to attract tourists by an improvement in a country's "attractiveness." (Zukin, 1995; Bramwell & Rawling, 1996; Sofield & Li, 1998; Huges, 2000; Del Vecchio & Heller, 2003; Watkins & Herbert, 2003; Nicolau, 2010). Generally speaking the improvement in the intensity of tourist activities has a significant impact on the economic system of a specific area. Nicolau (2010, p. 182) put it eloquently saying, ". . . cultural tourism should consistently contribute to local welfare as an inclusive, spatially balanced and self-supported industry . . . with lots of synergies with other strategic sectors of the urban economy. . . ."[7] However, it seems to be essential that policy makers are able to identify (and satisfy) stakeholders' claims so that cultural policies could generate economic advantages (Pulido-Fernandez & Sanchez-Rivero, 2010).[8] From this point of view the definition, among other things, of pricing policies that could be appropriate to the set of cultural goods and services seems very important. Finally, with reference to the "political" advantages (outcomes) it was observed that cultural policies could generate a significant improvement in politicians' reputations (Frey, 2000). In other words the activation

of cultural strategies could enhance a country's "image" (Del Vecchio & Heller, 2003; Heilbrun & Grey, 2001).

After briefly analyzing the existing literature on the effect of cultural policies it is necessary to identify the variables that represent the above-mentioned social, economic, and political elements and some cultural factors that can contribute more than others to the creation of public value.

As stated above it is useful to control the effect of some specific "context conditions" as well. This is important to "neutralize" the differences between countries. In fact, the performance of cultural strategies could be influenced by specific context conditions. We refer to some characteristics of the countries analyzed, such as cultural heritage, investments in the education policy field, level of inhabitants acculturated, and economic development. In particular, cultural heritage could make easier the adoption of cultural strategies in "rich" countries, because there could be much more possibilities and opportunities to take advantage of it. Investments in the education policy field could positively affect performance of cultural strategies, because they are interconnected each other and regard knowledge enhancement. Finally, cultural policies in less developed countries should struggle the most with obstructing factors, such as unemployment, violence, and the social divide. In these situations, the attainment of specific social, economic, and political outcomes by means of cultural strategies could be much more difficult. All these variables will be described in the next section.

DESCRIPTION OF THE VARIABLES

We identified a set of social, economic and political variables referring to the countries concerned to pursue the aims of the research. The variables are as follows:

- standard of social welfare (*Soc_Welfare*);
- standard of educational (*Educ_Degree*);
- tourism competitiveness (*Tour_Comp*);
- tourist intensity (*Number_Tour*);
- tourism expenditure (*Tour_Exp*);
- perceived government effectiveness (*Public_Image*).

The *Soc_Welfare* and *Educ_Degree* variables were useful in representing the potential social advantages related to cultural policy implementation. As stated above many observers believed that cultural policies could contribute to the social development of a specific area because these policies aided the "regeneration" of depressed regions, the increase in employment rate, etc. These elements could improve the level of social welfare. Considering the above-mentioned authors' positions (Del Vecchio & Heller, 2003) we also considered the contribution that the implementation of cultural policies could give to enhance the level of citizens' cultural background.

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[6]With reference to the urban areas, Griffiths (1995, p. 253) noted that the . . . "cultural realm" is destined to play an increasingly important part in the future evolution of cities."

[7]Similar considerations can be found in: Del Vecchio & Heller (2003) and Russo & Van der Borg (2002).

[8]Over the last few decades cultural tourism has expanded greatly. For this, many authors focused their attention on the study of the "behavior" of the cultural tourists trying to provide useful information to policy makers to define their "cultural supplies." Further sources are available, among others, in: Pearce (1982), Poria et al. (2001, 2006), Richards (2002, 2007), and Silverberg et al. (1996).

The *Tour_Comp, Number_Tour,* and *Tour_Exp* variables estimated the economic advantages—with reference to tourism—that might come from cultural policies. Using these indicators we aimed at evaluating whether and to what extent the design of cultural policies to promote and enhance a country's cultural heritage was able to optimize its attractiveness to tourists.

Finally, the *Public_Image* variable helped us identify the political benefits that might come from cultural policies. More precisely we observed the effects that decisions taken in the cultural field might have on the image and effectiveness of public institutions. We focused in particular on the relationship between cultural policies and key stakeholders' perceptions on the effectiveness of public institutions.[9]

There may be several variables representing cultural factors. In this article we focused our attention on the following:

- annual per capita government spending on culture (*Cult_Gov_Exp*);
- price levels of cultural goods and services (*Price_Level*);
- cultural institutions financed by public authorities (*Public_Instit*);
- political responsibility broken down by level of government (*Pol_Gov_Resp*).

There are many reasons for justifying the choice of these variables. In particular, with reference to the *Cult_Gov_Exp* variable public spending on culture reflected the governments' interest in cultural activities. Moreover, we observed that this variable has been used frequently in existing literature (Dalle Nogare & Galizzi, 2011) to explain the economic policy adopted by a government in the cultural sector.

With reference to the *Price_Level* variable pricing policies for cultural activities could have a relevant effect on the "attractiveness" of cultural goods and services for citizens. This is a very interesting matter if we consider that over the years many authors analyzed the "sensitivity to price"

of cultural tourists. The analysis of the most relevant literature revealed two distinct points of view. Some observers demonstrated the presence of a strong relationship between prices and the intensity of cultural tourism (Bille-Hansen, 1997). Other researchers revealed that demand for cultural goods and services was "insensitive" to the price policies adopted (Prieto-Rodriguez, & Fernandez-Blanco, 2006; Choi, 2009; Zieba, 2009; Nicolau 2010). At the same time there were no studies analyzing the social and political effects that price levels of cultural goods might cause.

With reference to the *Public_Instit* variable we believed that the number of organizations (museums, theatres, art galleries, etc.) backed—wholly or partially—by public funds could be another useful element in judging how much politicians care about cultural activities. However, no studies analyzed the social, economic, and political impacts generated by transferring public funds to cultural organizations.

Finally, as regards the *Pol_Gov_Resp* variable we observed that the distribution of political responsibility between central and local government in the cultural policy field was a determining factor in the management of cultural public functions and services. Even in this case there was no research analyzing the social, economic, and political effects relating to cultural policies.

As stated in the previous pages the evolution of the social, economic, and political variables could be influenced not only by cultural policies (as described above) but also by specific "context conditions" (i.e., "initial differences") that characterized the countries analyzed. For this reason we identified some "control variables" to "neutralize" the differences to some extent between the country contexts. Specifically, the control variables are as follows:

- the country's cultural heritage (*Cult_Herit*);
- cultural workers as a percentage of total employment (*%Cult_Workers*);
- annual spending on education as a percentage of public spending (*Ed_%Gov_Exp*);
- Internet users as a percentage of total population (*%Int_Users*);
- urban population as a percentage of total population (*Urban_Pop*);
- unemployment rate (*%Unempl*).

We expected a country's great cultural heritage and a large number of cultural workers to have a positive impact on the social, economic, and political variables identified in this article (e.g., the tourism competitiveness). Similar comments could be formulated for the *%Ed_ Gov_Exp, %Int_Users*, and *Urban_Pop* variables. We believed that these were positively related to social, economic, and political variables because they reflected a more educated population and a more advanced socio-economic context. Finally we believed that high unemployment rates were strongly related to low levels of social, economic, and political indicators. *Figure* 2
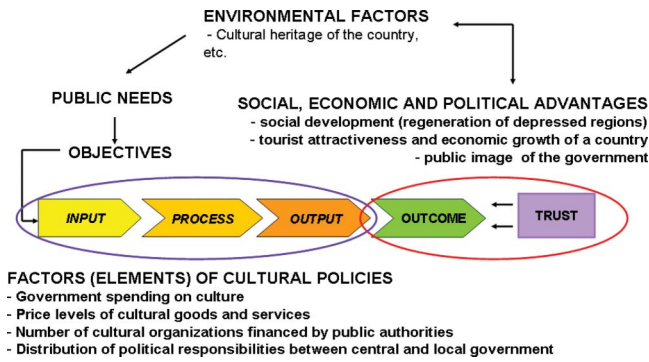
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[9]According to the public administration and management literature (Mohr, 1999; Mussari, 1999; Poister, 2003; Borgonovi, 2004; Pollitt & Bouckaert, 2004; Valotti, 2005; Hatry, 2006; Hinna, 2006; Fouchet & Guenoun, 2007; Bouckaert & Halligan, 2008; Onesti, Angiola, 2009; Van Dooren, Bouckaert & Halligan, 2010) the effectiveness of public administrations refers to the attitude of public administrations to fulfill the needs of citizens. Its judgment must rely on the evaluation of the effects (outcomes) that public policies generate on social and economic conditions. In this perspective, the perceptions of citizens and of other relevant stakeholders could be useful indicators of citizens' satisfaction with reference to public action. In the Italian context, the recent "Brunetta Reform" (Law No. 15/09 and Decree No. 150/09) introduced the concept of "organizational performance" into the national law order. This concept takes into consideration, among other elements, ". . . the implementation of policies on the final satisfaction of the needs of the society" (article 8, paragraph 1, letter a), Decree No. 150/09).

ENVIRONMENTAL FACTORS
- Cultural heritage of the country, etc.

PUBLIC NEEDS

SOCIAL, ECONOMIC AND POLITICAL ADVANTAGES
- social development (regeneration of depressed regions)
- tourist attractiveness and economic growth of a country
- public image of the government

OBJECTIVES

INPUT → PROCESS → OUTPUT   OUTCOME ← → TRUST

FACTORS (ELEMENTS) OF CULTURAL POLICIES
- Government spending on culture
- Price levels of cultural goods and services
- Number of cultural organizations financed by public authorities
- Distribution of political responsibilities between central and local government

FIGURE 2 Public value chain of cultural policy field (color figure available online).

TABLE 1
The Countries Involved

Albania	Finland	Lithuania	Serbia
Armenia	France	FYR Macedonia	Slovakia
Austria	Georgia	Malta	Slovenia
Azerbaijan	Germany	Moldova	Spain
Belgium	Greece	Netherlands	Sweden
Bulgaria	Hungary	Norway	Switzerland
Croatia	Iceland	Poland	Turkey
Czech Republic	Ireland	Portugal	Ukraine
Denmark	Italy	Romania	United Kingdom
Estonia	Latvia	Russia	

represents the "public value chain" to which we refer in this article for the analysis of cultural policy field performance.

The next section describes the data sample and provides useful information about the statistical techniques adopted.

METHODOLOGY

Data Sample

We analyzed a sample of 39 European countries. We gathered data for every variable used in this article with reference to these countries. Table 1 shows the list of countries involved.[10] Data about social variables (*Soc_Welfare* and *Educ_Degree*) and some economic variables (in particular, *Number_Tour* and *Tour_Exp*) were taken from the Eurostat database.

- The level of social welfare was estimated using the percentage of the population at risk of poverty or social exclusion.

- The standard of education was represented by the percentage of people (out of the total population) with a university qualification.
- Tourist intensity was estimated using the number of tourists officially reported for each country involved.
- Tourism expenditure was estimated using data on consumption by tourists when they visited one (or more) of the countries concerned.[11]

The economic variable used to estimate the level of tourism competitiveness (*Comp_Tour*) was the "Travel & Tourism Competitiveness Index." This index was taken from *The Travel & Tourism Competitiveness Report 2011* by Blanke and Chiesa (2011) for the World Economic Forum 2011.[12]

The political variable that reflected the judgment of public opinion on government (*Public_Image*) was measured using the Government Effectiveness index formulated by Kaufman et al. (2009) as part of the Worldwide Governance Indicators (WGI) project of the World Bank. This index was founded on the perceptions of many subjects (outside observers, citizens, etc.) with reference to ". . . the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies" (Kaufman et al., 2009, p. 6).[13] All the data referred to 2009. Various data sources were available for the variables regarding the cultural policy factors ("cultural" variables) and context condition factors ("control" variables). See Table 2.

The *Cult_Gov_Exp* variable measured annual average per capita public spending for the decade 1999–2008.[14] The *Price_Level* variable was expressed through the so-called "Cultural Price Index on Goods and Services—Public Arts Service Price" (CUPIX PASP). This index, formulated as part of the Council of Europe activities, measures average prices associated with many (public) cultural services (in particular, art museum tickets, music lessons, and opera tickets) in the European Union. The variable was expressed in terms of euros at constant 2008 prices.

The *Public_Instit* variable was estimated using data on the number of (public or private) cultural organizations[15]

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[10]We also included Armenia, Georgia, and Azerbaijan. Though Caucasian countries, they are generally considered European countries. These countries are described as "Other European countries" by the official European Union website (http://europa.eu).

[11]It has been considered only the consumption related to visits of at least a night.

[12]In the report, the level of tourism competitiveness of the investigated countries was between 1 and 7.

[13]The "Government Effectiveness" assigns to each of the countries and territories surveyed a value between −2,5 and +2,5. For additional information regarding the index construction, see Kaufman et al. (2009).

[14]Data on annual per capita public spending on culture are expressed at actual values.

[15]The cultural organizations considered for the definition of the variable are numerous. We referred, among others, to museums, archaeological sites, archives, art galleries, theatres, academies (art, music, and theatre), libraries, etc.

TABLE 2
Cultural and Control Variables

Variable	Year	Data source
Cultural variables		
Cult_Gov_Exp	Average 1999-2008	*Council of Europe, Compendium of Cultural Policies and Trends in Europe* (2009)
Price_Level	2008	*Council of Europe, Compendium of Cultural Policies and Trends in Europe* (2009)
Public_Instit	Last available data gathering (between 2000 and 2009)	*Council of Europe, Compendium of Cultural Policies and Trends in Europe* (2009)
Pol_Gov_Resp	Last available data gathering (between 2005 and 2009)	*Council of Europe, Compendium of Cultural Policies and Trends in Europe* (2009)
Control variables		
Cult_Herit	2009	UNESCO
%Cult_Workers	2009	*Council of Europe, Compendium of Cultural Policies and Trends in Europe* (2009)
Ed_%Gov_Exp	2008	Eurostat
%Int_Users	2008	*International Telecommunication Union, World Telecommunication/ICT Development Report and Database (Internet Users)*; Eurostat (Population)
Urban_Pop	2009	*United Nations, World Urbanization Prospects*
%Unempl	2009	Eurostat

receiving public funding. The *Pol_Gov_Resp* variable enabled us to identify the level of government (state, regions/districts/provincial administrations, and municipalities) which had the greatest responsibilities in cultural fields in financial terms. To be precise we defined a discrete variable that could take three distinct values: "1" = "State," "2" = "regions/districts/provincial administrations"; "3" = "municipalities." The artistic and cultural heritage (*Cult_Herit*) was measured by the number of sites and monuments which UNESCO considered "world heritage."

The *%Cult_Workers* variable provided a measure of the number of workers (as a percentage of total people in employment) in the cultural sector (we did not consider the distinction between public and private sectors). The *%Ed_Gov_Exp* variable measured annual public spending on education as a percentage of total public spending in the same year. The *%Int_Users* variable was calculated by the ratio of the total number of Internet users to the total population. Finally, the *%Urban_Pop* and *%Unempl* variables referred, respectively, to the number of people living in urban areas (as defined by national statistical offices) and the percentage of people unemployed.

Statistical Methodology

We used statistical techniques to achieve the objectives of the research. First, we did a bivariate correlation analysis. On the one hand this analysis allowed us to choose the "cultural variables" that seemed to be able to explain the evolution of the social, economic, and political variables better (in other words we tried to find a set of variables significantly related to the indicators *Soc_Welfare, Educ_Degree, Tour_Comp, Number_Tour, Tour_Exp*, and *Public_Image*).

On the other hand it enabled us to highlight possible "multicollinearity" problems in our models.[16] Second, we conducted a regression analysis to obtain useful information on the intensity and "sign" of the relationship between the social, economic and political variables ("dependent" variables) and the "cultural" and "context" ones ("independent" variables). On the basis of the bivariate correlation analysis results only the independent variables that seemed significantly related to the social, economic, and political ones were taken into consideration in defining the regression models. The statistical analysis results are discussed in the next section.

RESULTS

Bivariate Correlation Analysis

Table 3 shows the results of the correlation bivariate analysis.[17] Only some of the independent variables ("cultural" and "control") were significantly related to the dependent ones. Going into detail, the cultural variables annual per capita public spending (*Cult_Gov_Exp*) was highly correlated to five dependent variables (significant correlations were not found for the *Number_Tour* variable).

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[16]The bivariate correlation analysis was realized using "nonparametric" techniques (we used the "Spearman's Rho" index). This choice seems to be preferable when data samples are not so great.

[17]For simplicity, Table 2 shows only the correlation indices between dependent and independent variables. As regards to the correlations between the independent variables (useful for evaluating the "multicollinearity" problems), please refer to Appendix A. We expressed the variables *Number_Tour, Tour_Exp* and *Cult_Gov_Exp* in logarithmic terms.

TABLE 3
Bivariate Correlation Analysis. The Relationships Between "Dependent" and "Independent" Variables

	Soc_Welfare	Educ_Degree	Tour_Comp	Number_Tour	Tour_Exp	Public_Image
Cultural variables						
Cult_Gov_Exp	−0.744***	0.555**	0.862***	0.200	0.522**	0.892***
	(n = 26)	(n = 29)	(n = 37)	(n = 27)	(n = 26)	(n = 37)
Price_Level	−0.485*	0.528**	0.887***	0.530**	0.754***	0.803***
	(n = 24)	(n = 27)	(n = 35)	(n = 25)	(n = 25)	(n = 35)
Public_Instit	0.221	−0.180	0.035	0.365	0.279	−0.149
	(n = 16)	(n = 18)	(n = 26)	(n = 17)	(n = 17)	(n = 26)
Pol_Gov_Resp	0.030	−0.289	0.185	0.245	0.223	0.009
	(n = 24)	(n = 27)	(n = 35)	(n = 25)	(n = 24)	(n = 35)
Control variables						
Cult_Herit	0.005	−0.050	0.508**	0.804***	0.697***	0.267
	(n = 27)	(n = 31)	(n = 39)	(n = 27)	(n = 26)	(n = 39)
%Cult_Workers	−0.456*	0.531**	0.311^	−0.165	0.104	0.571**
	(n = 27)	(n = 30)	(n = 30)	(n = 27)	(n = 26)	(n = 30)
Ed_%Gov_Exp	−0.336	0.584**	0.340^	−0.101	0.083	0.638***
	(n = 25)	(n = 27)	(n = 27)	(n = 25)	(n = 24)	(n = 27)
%Int_Users	−0.741***	0.745***	0.825***	0.197	0.494*	0.925***
	(n = 27)	(n = 31)	(n = 39)	(n = 27)	(n = 26)	(n = 39)
Urban_Pop	−0.429*	0.394*	0.643***	0.408*	0.569**	0.590***
	(n = 27)	(n = 31)	(n = 39)	(n = 27)	(n = 26)	(n = 39)
%Unempl	0.512**	−0.135	−0.386*	−0.266	−0.369^	−0.387**
	(n = 26)	(n = 30)	(n = 38)	(n = 27)	(n = 26)	(n = 38)

Note: $p < 0.10$; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Similar remarks could be made regarding the *Price_Level* variable. It appeared to be statistically correlated to all the dependent variables. Thus, the *Cult_Gov_Exp* and *Price_Level* variables seemed to be the main "factors" of cultural policies in the countries concerned. This belief was corroborated, however, by the fact that there were no significant correlations between dependent variables and the "other" cultural dimensions (we referred to *Public_Instit* and to *Pol_Gov_Resp*). In this perspective we could say that choices made in the field of public funding of cultural organizations as well as in that of the distribution of "cultural" responsibility among various levels of government did not seem elements closely linked to the public value creation process.

With reference to the "control" variables, it is possible to observe that the cultural heritage was positively related to all the economic indexes used. Therefore, this variable had a very important role in determining the degree of "attractiveness" of the country for tourists. We noticed also that the development of the cultural sector (measured by the *Cult_Workers* variable) appeared to be related to some social, economic, and political variables. Higher percentages of cultural workers were related to lower percentages of the population at risk of poverty or social exclusion, to higher levels of education and tourism competitiveness as well as a better image of the country.

Before moving on to the definition of regression models it should be kept in mind that some of the independent variables that appeared significantly related to the dependent

ones were also closely interlinked. As it is known this circumstance might generate "multicollinearity" problems and so might alter the results of the regressions. We observed the main criticisms[18] with reference to three variables. In particular, we referred to annual public spending on education (*%Ed_ Gov_Exp*), the percentage of Internet users (*%Int_Users*), and, finally, the urban population percentage (*Urban_Pop*).[19] In this perspective we excluded these indicators from the regression models.

Regression Analysis

At this point in the discussion it is possible to estimate the regression models. In particular, we specified six linear regression equations. The values of the dependent variables were based on the values assumed by the independent variables that appeared to be significantly related to the first ones. The models are shown in Table 4.

Table 5 shows the results[20] of the regression analysis.[21]

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[18]In this article, we considered "critical" the relationships between independent variables that had Spearman's Rho > |0.45|.

[19]With reference to the study of the relationships between independent variables, the bivariate correlation analysis is described in the Appendix A.

[20]Table 5 shows the values of the standardized parameters (Beta) of the regression.

[21]For a descriptive analysis of the variables used in the regression models, see Appendix B.

TABLE 4
The Regression Models

Models	Equations
Model 1	$Soc\_Welfare = \alpha + \beta_1 * Cult\_Gov\_Exp + \beta_2 * Price\_Level + \beta_3 * \%Cult\_Workers + \beta_4 * \%Unempl + \varepsilon$
Model 2	$Educ\_Degree = \alpha + \beta_1 * Cult\_Gov\_Exp + \beta_2 * Price\_Level + \beta_3 * \%Cult\_Workers + \varepsilon$
Model 3	$Tour\_Comp = \alpha + \beta_1 * Cult\_Gov\_Exp + \beta_2 * Price\_Level + \beta_3 * Cult\_Herit + \beta_4 * \%Cult\_Workers + \beta_5 * \%Unempl + \varepsilon$
Model 4	$Number\_Tour = \alpha + \beta_1 * Price\_Level + \beta_2 * Cult\_Herit + \varepsilon$
Model 5	$Tour\_Exp = \alpha + \beta_1 * Cult\_Gov\_Exp + \beta_2 * Price\_Level + \beta_3 * Cult\_Herit + \beta_4 * \%Unempl + \varepsilon$
Model 6	$Public\_Image = \alpha + \beta_1 * Cult\_Gov\_Exp + \beta_2 * Price\_Level + \beta_3 * \%Cult\_Workers + \beta_4 * \%Unempl + \varepsilon$

Note: α = Constant; $\beta_{1,\ldots n}$ = Regressor parameters; ε = Error.

TABLE 5
Regression Analysis

	Soc_Welfare (Model 1)	Educ_Degree (Model 2)	Tour_Comp (Model 3)	Number_Tour (Model 4)	Tour_Exp (Model 5)	Public_Image (Model 6)
Cultural variables						
Cult_Gov_Exp	−0.686**	0.119	0.390*	–	0,059	0.554**
Price_Level	−0.073	0.409*	0.408*	0,140	0.367**	0.236^
Control variables						
Cult_Herit	–	–	0.213	0.756***	0.621***	–
%Cult_Workers	−0.029	0.436*	0.039	–	–	0.249*
%Unempl	0.118	–	−0.108	–	−0.315**	−0.105
No. of obs.	24	26	26	25	25	26
F	7.597**	7.763**	9.249***	21.927***	26.339***	18.727***
Rsquare	0.615	0.514	0.698	0.666	0.840	0.781

Note: $p < 0.10$; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

The models were all statistically significant (Model 3, Model 4, Model 5, and Model 6 for $p < 0.001$; Model 1 and Model 2 for $p < 0.01$). The *Rsquare* indices were all rather high (they lay between 0.840 of Model 5 and 0.514 of Model 2). All the main tests of "robustness" of the models seemed to be satisfactory.[22]

In all models there were significant variables. For the cultural variables we noticed that *Cult_Gov_Exp* was statistically significant in three out of five models. To be precise this variable appeared to be positively correlated to the degree of tourism competitiveness (Beta = 0.390, $p < 0.05$) and more intensely with the government's "image" and reputation (Beta = 0.554, $p < 0.01$). Conversely, *Cult_Gov_Exp* seemed to be negatively related (Beta = −0.686, $p < 0.01$) to the level of social welfare (*Soc_Welfare*). In other words, higher levels of poverty and social exclusion were registered more frequently in countries that spent the least on cultural activities.

What is more, the results obtained regarding the pricing policies variable (*Price_Level*) are particularly interesting. In fact, this variable appeared to be positively correlated, among other things, to the level of tourism competitiveness (Beta = 0.408, $p < 0.05$) and expenditure (Beta = 0.367, $p < 0.01$). It is possible to notice that price levels did not have a negative effect on the dependent variables concerned. These results were consistent with the opinions set out in part of the existing literature (Prieto-Rodriguez & Fernandez-Blanco, 2006; Choi, 2009; Zieba, 2009; Nicolau 2010). They believed cultural tourism was not negatively affected by pricing policies. In other words, an increase in the price of cultural goods and services did not usually mean a reduction in the level of tourism competitiveness and/or the level of tourist expenditure.

As regards the control variables, countries with greater cultural heritages had a greater flow of tourists. In Model 4 the *Cult_Herit* variable is the only one that had a positive effect (Beta = 0.756, $p < 0.001$) on the trend of tourist flows (*Number_Tour* variable). This variable also has a positive effect on tourism expenditure (Beta = 0.621; $p < 0.001$). At the same time the number of cultural workers—representative, as stated before, of cultural sector development—seemed to have a positive effect both on the standard of education (Beta = 0.436, $p < 0.05$) and government image (Beta = 0.249; $p < 0.05$). These results were consistent with existing literature.

[22]More exactly:

- There were no particular problems of multicollinearity (the Variance Inflation Factors — VIF — never exceed the value of 2.5);
- The scatter plot of standardized residuals respect to the dependent variables of each model does not show the presence of groups of observations with different variances. Therefore, it is possible to accept the assumption of "homoscedasticity" of the regression models.

CONCLUSION

The article had two main objectives: first, it determined the factors which contribute by means of cultural policies to the public value creation process in a European context. Second, it analyzed if there were connections between these factors and some particular social, economic, and political variables, without disregarding each country's context.

The research was carried out in 39 European countries using statistical methods (e.g., regression analysis). Considering that the small size of the sample and its geographical focus (Europe) require attention to the interpretation of the results, especially in comparisons with other geographical contexts (e.g., Australia, Japan and North America), the research yielded the following main results:

- Government spending in the cultural field (promotion and improvement of artistic and historical heritage) seemed to be a very important factor in the public value creation process. In fact, the highest levels of public spending in the cultural field were found in countries with the highest social well-being indicators. Moreover, it is interesting that the countries with the highest levels of cultural public spending had economic benefits as well because they were more appealing to tourists. Finally, the promotion and improvement of the artistic and historical heritage could contribute among other things to improving the country's image.
- Pricing policies seemed not to produce adverse repercussions on the social, economic, and political variables analyzed. Actually, demand for cultural goods and services was not flexible to price differences in the 39 countries examined.
- The association between the large number of public/private organizations to be funded and the distribution of political responsibility between central and local government in the cultural policy field, on one hand, and social, economic, and political outcomes, on the other hand, seems not to be statistically significant.

These results have various policy implications. In particular, political leaders have to notice that the destination of public funds for cultural activities can be a "good investment" considering the social, economic, and political advantages connected with public spending. However, policy makers have often to face an increasing scarcity of resources when they define cultural strategies. Analyzing the amount of public cultural spending of European countries, we can see different situations. In particular, Norway and Denmark were among the most sensitive countries with reference to the promotion and improvement of artistic and historical heritage. The two countries invested on average about 410 and 352 euros, respectively, per inhabitant. Armenia and Albania, however, were among the least inclined countries to invest in culture (on average a mere 5 euros per inhabitant).

The analysis of public spending data was even more meaningful if those data were associated with artistic and historical heritage data about each country. In fact, the countries with a broad cultural heritage[23] ("rich" countries) should invest much more than "poor" countries. Actually, it can be seen easily from Figure 3 that rich countries (primarily Italy and Spain, but also France, Germany, and the United Kingdom) did not invest the most per inhabitant.

Considering the budgetary restrictions on public spending, many European countries seem to have taken the importance of involving private actors in the cultural interventions to raise financial resources. According to the data of the "Compendium of Cultural Policies and Trends in Europe" (2011), approximately 54 percent of countries investigated in this article introduced a law which provides tax deductions to the advantage of private sponsors. These laws appear to be particularly diffused within Mediterranean European countries (Albania, Croatia, France, Greece, Italy, and Spain).[24]

From a managerial point of view, the creation of public value by means of cultural strategies could be favored if the formulation and control of these strategies are well executed. With reference to the strategy formulation phase, the definition of the "cultural demand" of a territory seems to be particularly relevant. More specifically, it is necessary to evaluate what the need of culture is in order to define the effect of the supply of cultural goods and services on the expectations of potential consumers/users. In this case, external stakeholders' engagement could be useful to define outcomes and strategic objectives. From an organizational point of view, the diffusion of culture could be fostered by means of "museum systems" or "cultural districts."

In particular, museum systems are collaborative networks (Rhodes, 1990; Kickert, Klijn, & Koppenjan, 1997; Agranoff & McGuire, 1999, 2003) based on the mutual exchange and sharing of information, knowledge, and cultural relics between museums that have different characteristics (in particular, different size and supply of goods and services). Museum systems are created to power the cultural supply within a specific area. Cultural districts are territorial development models based on the integration of cultural heritage, infrastructures, and entrepreneurial actors in a geographical area. Generally, cultural districts are created by the initiative of a public administration which coordinates the district, defines strategies, and promotes the integration between actors.

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[23]We refer to the number of sites and monuments existing in the countries under investigation which UNESCO considers as "world heritage."

[24]Some experiences are very relevant. We refer, among the others, to the Greek Law n. 3525/2007, that provide tax exemptions for cultural sponsorships, and to the Italian Law n. 342/2000 that allow a deduction on donations and sponsorship. In Germany, instead, there are no laws to encourage private sponsorships of culture and the arts. However, we can find some previsions of tax breaks in a Directive of the Ministry of Finance of 1998.
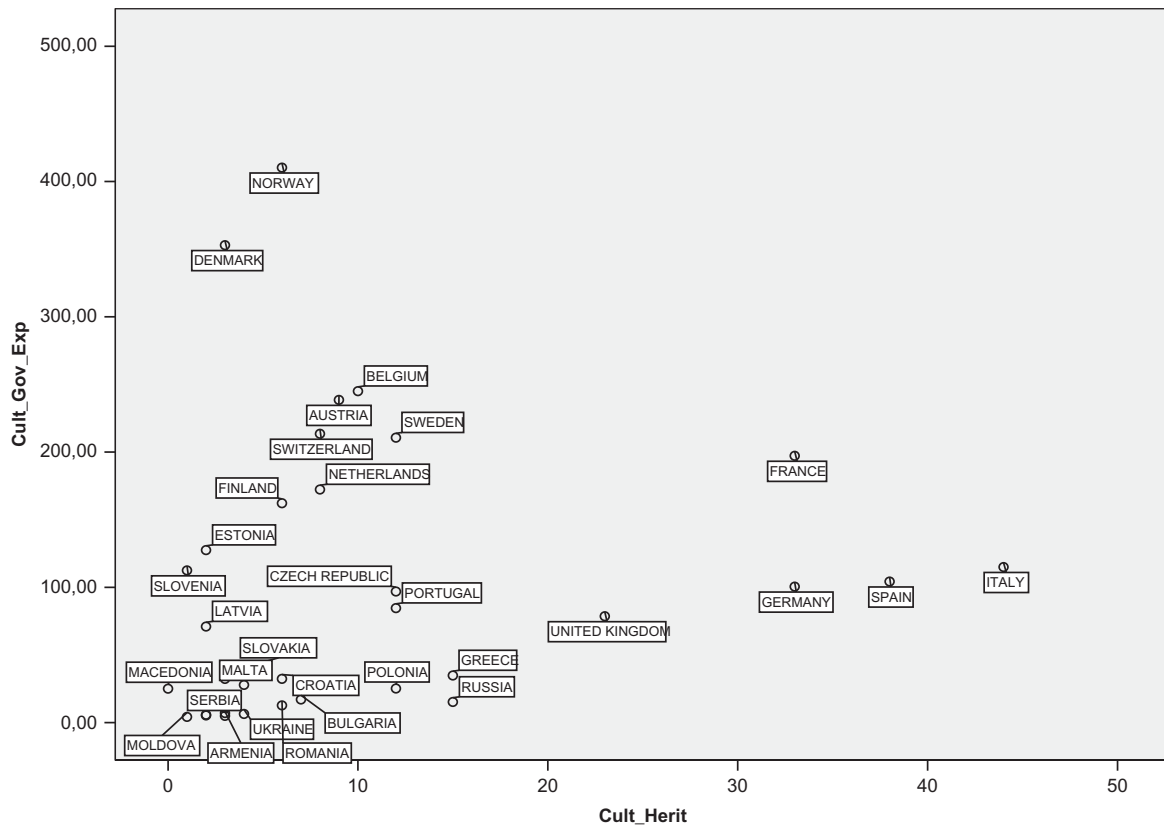
FIGURE 3   Cultural public spending and cultural heritage.

However, the diffusion of culture can be pursued through initiatives less complex than those already mentioned (museum systems and cultural districts). We refer, for example, to the free access to cultural heritage and museums, to the realizations of festivals, to the integration of cultural events with the culture of food and wine, and so on.

With reference to the control of cultural strategies, it is important to improve the diffusion of performance management tools such as key performance indicators. An interesting application of them is documented in Del Vecchio and Heller (2003), with reference to the municipality of Trieste (Italy). The "Arts and Cultural Strategy 2010–2014" of the Adelaide City Council (Australia) contains many examples of key performance indicators to control cultural strategies. Moreover, 12 important cities in the world (Berlin, Istanbul, Johannesburg, London, Mumbai, New York, Paris, São Paulo, Shanghai, Singapore, Sydney, and Tokyo) collaborated in the development of cultural performance indicators in a research project. An output of the project is the "World Cities Culture Report 2012" which contains various types of cultural data, from "cultural infrastructure and output indicators" to "cultural consumption and participation indicators." These measures could foster benchmarking between cities and improve performance of cultural strategies.

Overall, our findings do not seem to be conclusive. In fact, the analysis is about a limited number of countries (n. 39) in a specific geographical area (Europe). However, the research represents the real attempt to give a true and fair view of the possible advantages coming from the activation of cultural policies in an international (European) context. Moreover, it is interesting to emphasize that the literature on the subject mainly refers to theoretical observations. Nevertheless, this research provides some empirical evidence. On the other hand, the lack of data referring to an international context has led many researchers to relate their analysis to limited geographical areas (cities, regions, specific countries, etc.).

In the future the results of this research could be expanded on in a larger number of countries in different areas. However, this aim could be realized only if there were an intensification of activity recording in an international context.

REFERENCES

Adelaide City Council. (2010). *Arts and Culture Strategy 2010–2014*, Adelaide City, SA, Australia.

Agranoff, R., & McGuire, M. (1999). Managing in network settings. *Policy Studies Review*, *Spring*, 18–41.

Agranoff, R., & McGuire, M. (2003). Inside the Matrix: Integrating the Paradigms of Intergovernmental and Network Management. *International Journal of Public Administration*, *26*(12), 1401–1422.

Bassett, K. (1993). Urban cultural strategies and urban regeneration: A case study and critique. *Environment and Planning*, *25*(12), 1773–1778.

Benhamou, F. (2001). *L'economia della cultura*. Bologna: Il Mulino.

Bianchini, F. (1989). Cultural policy and urban social movements: The response of the new left in Rome (1976–85) and London (1981–86). *In* P. Bramham, I. Henry, H. Mommas, & H. van der Poel (Eds.), *Leisure and urban process*. London: Routledge.

Bianchini, F. (1990). Urban renaissance? The arts and the urban regeneration process. *In* S. MacGregor, & B. Pimlott (Eds.). *Tackling the inner cities*. Oxford, UK: Clarendon Press.

Bianchini, F., & Parkinson, M. (Eds.). (1993). *Cultural policy and urban regeneration: The West European experience*. Manchester: Manchester University Press.

Bille-Hansen, T. (1997). The willingness-to-pay for the royal theatre in Copenhagen as a public good. *Journal of Cultural Economics*, *21*, 1–28.

Blanke, J., & Chiesa, T. (2011). *The Travel & Tourism Competitiveness Report 2011*. New York: World Economic Forum.

BOP Consulting. (2012). The World Cities Culture Report 2012. The Mayor of London. Retrieved from http://www.worldcitiesculturereport.com.

Borgonovi, E. (2004). *Principi e sistemi aziendali per le amministrazioni pubbliche*. Milan: Egea.

Bouckaert, G., & Halligan, J. (2008). *Managing performance. International comparisons*. New York: Routledge.

Bramwell, B., & Rawling, L. (1996). Tourism marketing images of industrial cities. *Annals of Tourism Research*, *23*(1), 201–221.

Choi, A.S. (2009). Willingness to pay: How stable are the estimates? *Journal of Cultural Economics*, *33*, 301–310.

Dalle Nogare, C., & Galizzi, M.M. (2011). The political economy of cultural spending: Evidence from Italian cities. *Journal of Cultural Economics*, *35*(3), 203–231.

Del Vecchio, M., & Heller, L. (2003). Il controllo delle politiche culturali in un comune: riflessioni e indicazioni a partire dal caso di Trieste. *Azienda Pubblica*, *16*(3), 201–228.

Dooren, W.V., Bouckaert G., & Halligan J. (2010). *Performance management in the public sector*. New York: Routledge.

Fisher, M., & Worpole, K. (Eds.). (1991). *City centres, city cultures* (2nd ed.). Manchester, UK: Centre for Local Economic Strategies.

Fouchet, R., & Guenoun, M. (2007). Performance management in intermunicipal authorities. *International Journal of Public Sector Performance Management*, *1*(1), 62–82.

Frey, B.S. (2000). *Arts and economics*. Berlin: Springer.

Griffiths, R. (1993). The politics of cultural policy in urban regeneration strategies. *Policy and Politics*, *13*(1), 39–46.

Griffiths, R. (1995). Cultural strategies and new modes of urban intervention. *Cities*, *12*(4), 253–265.

Hatry, H.P. (2006). *Performance measurement. Getting results*. Washington, DC: The Urban Institute Press.

Heilbrun, J., & Gray, C.M. (2001). *The economics of art and culture*. Cambridge: Cambridge University Press.

Herbert, D.T. (2002). Literary places, tourism and the heritage experience. *Annals of Tourism Research*, *28*(2), 312–333.

Hinna, L. (2006). La valutazione e il controllo strategico. *In* L. Hinna, M. Meneguzzo, R. Mussari, & M. Decastri. *Economia delle aziende pubbliche*. Milan: McGraw-Hill.

Hood, C. (1991). A public management for all seasons. *Public Administration*, *69*, 3–19.

Huges, H. (2000). *Arts entertainment and tourism*. Oxford, UK: Butterworth-Heinemann.

Jørgensen, T.B. & Bozeman B. (2002). Public values: An inventory. *Administration & Society*, *39*, 354–381.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2009). Governance matters VIII. Aggregate and individual governance indicators 1996–2008, Policy Research Working Paper no. 4978, June. Washington, DC: The World Bank.

Kickert, W.J.M., Klijn, E.H., & Koppenjan, J.F.M. (1997). *Managing complex networks. Strategies for the public sector*, London: Sage.

Lim, H. (1993). Cultural policies for re-vitalising the city: A review and evaluation. *Regional Studies*, *27*, 589–595.

Lister, D. (1991). The transformation of a city: Birmingham. *In* M. Fisher & U. Owen (Eds.), *Whose cities?* Harmondsworth, UK: Penguin.

Meneguzzo, M. (2005). Creazione di valore e sviluppo del capitale sociale: la sfida per il sistema della PA Italiana. *Rivista Italiana di Ragioneria e di Economia Aziendale*, *11–12*, 705–720.

Mohr, L.B. (1999). The qualitative methods of impact analysis. *American Journal of Evaluation*, *20*(1), 70–83.

Montgomery, J. (1990). Cities and the art of cultural planning. *Planning Practice and Research*, *5*(3), 17–24.

Moore, M.H. (1995). *Creating public value: Strategic management in government*, Cambridge, MA: Harvard University Press.

Murphy, P. (2001). The cultural economy of cities. Paper presented at the International Conference on the Culture and Economy of Cities, Seoul, South Korea, October 11–12.

Mussari, R. (1999). *La valutazione dei programmi nelle aziende pubbliche*. Torino: Giappichelli.

Newcomer, K. (2007). Measuring government performance. *International Journal of Public Administration*, *30*(3), 307–329.

Nicolau, J.L. (2010). Culture-sensitive tourists are more price sensitive. *Journal of Cultural Economics*, *34*, 181–195.

Onesti, T., & Angiola, N. (Eds.). (2009). *Il controllo strategico nelle amministrazioni pubbliche*. Milan: FrancoAngeli.

Pearce, P.L. (1982). *The social psychology of tourist behaviour*. Oxford, UK: Pergamon.

Poister T.H. (2003). *Measuring performance in public and nonprofit organizations*. San Francisco: Jossey-Bass.

Pollitt, C., & Bouckaert, G. (2000). *Public management reform: A comparative analysis*. Oxford: Oxford University Press.

Poria, Y., Butler, R., & Airey, D. (2001). Tourism subgroups: Do they exist? *Tourism Today*, *1*(1), 14–22.

Poria, Y., Butler, R., & Airey, D. (2006). Tourist perceptions of heritage exhibits: A comparative study from Israel. *Journal of Heritage Tourism*, *1*(1), 51–72.

Prieto-Rodriguez, J., & Fernandez-Blanco, V. (2006). Optimal pricing and grant policies for museums. *Journal of Cultural Economics*, *30*, 169–181.

Pulido-Fernandez, J.I., & Sanchez-Rivero, M. (2010). Attitudes of cultural tourists: A latent-segmentation approach. *Journal of Cultural Economics*, *34*, 111–129.

Radin, B.A. (2006). *Challenging the performance movement: Accountability, complexity, and democratic values*, Washington, DC: Georgetown University Press.

Rhodes, R.A.W. (1990). Policy networks: A British perspective. Journal of Theoretical Politics, *2*(3), 293–317.

Richards, G. (2002). Tourism attraction systems: Exploring cultural behaviour. *Annals of Tourism Research*, *29*(4), 1048–1064.

Richards, G. (2007). Globalisation, localisation and cultural tourism. *In* M. Smith & L. Onderwater (Eds.). *Destinations revisited. Perspectives on developing and managing tourist areas*. Arnhem: ATLAS Reflections.

Rogers, R., & Fisher, M. (1992). *A new London*. Harmondsworth, UK: Penguin.

Russo, A.P., & Van der Borg, J. (2002). Planning considerations for cultural tourism: A case study of four European cities. *Tourism Management*, *23*, 631–637.

Silverberg, K.E., Backman, S.J., & Backman, K.F. (1996). A preliminary investigation into the psychographics of nature-based travelers to the southeastern United States. *Journal of Travel Research*, *35*(2), 19–28.

Sofield, T.H.B., & Li, F.M.S. (1998). Tourism development and cultural policies in China. *Annals of Tourism Research*, *25*(2), 362–392.

Talbot, C. (1999). Public performance: Towards a new model? *Public Policy and Administration*, *14*(3), 15–34.

Talbot, C. (2010). Performance in government: The evolving system of performance measurement, monitoring and management in the UK. *Report for the World Bank, ECD Working Paper Series, 24*, 2010. Washington, DC: The World Bank.

Valotti, G. (2005). *Management pubblico. Temi per il cambiamento*. Milan: Egea.

Van Dooren, W., Bouckaert, G., & Halligan, J. (2010). *Performance management in the public sector*. New York: Routledge.

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

Watkins, H., & Herbert, D. (2003). Cultural policy and place promotion: Swansea and Dylan Thomas. *Geoforum*, *34*, 249–266.

Wharton, C., Fenwick, J., & Fawcett, H. (2010). Public policy in the party city: The spectacle of culture, gender, and locality. *International Journal of Public Administration*, *33*(14), 779–789.

Whitt, J.A. (1987). Mozart in the metropolis: The arts coalition and the urban growth machine. *Urban Affairs Quarterly*, *23* (1), 15–36.

Wu, W. (2004). Cultural strategies in Shanghai: Regenerating cosmopolitanism in an era of globalization. *Progress Planning*, *61*, 159–180.

Zieba, M. (2009). Full-income and price elasticities of demand for German public theatre. *Journal of Cultural Economics*, *33*, 85–108.

Zukin, S. (1995). *The cultures of cities*. Cambridge, UK: Blackwell.

APPENDIX A

Bivariate Correlation Analysis. The Relationships Between the "Independent" Variables

	Cult_Gov_Exp	Price_Level	Public_Instit	Pol_Gov_Resp	Cult_Herit	%Cult_Workers	Ed_%Gov_Exp	%Int_Users	Urban_Pop	%Unempl
Cult_Gov_Exp	1.000 (n = 38)	0.324* (n = 35)	0.035 (n = 26)	0.152 (n = 36)	0.414* (n = 37)	0.353^ (n = 28)	0.559** (n = 26)	0.878*** (n = 37)	0.628*** (n = 37)	−0.391* (n = 37)
Price_Level	−	1.000 (n = 35)	0.093 (n = 25)	0.174 (n = 33)	0.392* (n = 35)	0.110 (n = 26)	0.325 (n = 24)	0.775*** (n = 35)	0.610*** (n = 35)	−0.310^ (n = 35)
Public_Instit	−	−	1.000 (n = 26)	0.390* (n = 26)	0.512** (n = 26)	−0.277 (n = 17)	−0.350 (n = 16)	−0.129 (n = 26)	0.341^ (n = 26)	−0.115 (n = 26)
Pol_Gov_Resp	−	−	−	1.000 (n = 36)	0.442** (n = 35)	−0.225 (n = 26)	−0.484* (n = 24)	−0.045 (n = 35)	0.307^ (n = 35)	−0.425* (n = 35)
Cult_Herit	−	−	−	−	1.000 (n = 39)	−0.363* (n = 30)	−0.403* (n = 27)	0.205 (n = 39)	0.396* (n = 39)	−0.169 (n = 38)
%Cult_Workers	−	−	−	−	−	1.000 (n = 30)	0.543** (n = 27)	0.715*** (n = 30)	0.393* (n = 30)	−0.243 (n = 29)
Ed_%Gov_Exp	−	−	−	−	−	−	1.000 (n = 27)	0.632*** (n = 27)	0.539** (n = 27)	−0.170 (n = 26)
%Int_Users	−	−	−	−	−	−	−	1.000 (n = 39)	0.609*** (n = 39)	−0.351* (n = 38)
Urban_Pop	−	−	−	−	−	−	−	−	1.000 (n = 39)	−0.259 (n = 38)
%Unempl	−	−	−	−	−	−	−	−	−	1.000 (n = 38)

$^\wedge p < 0.10$; $^* p < 0.05$; $^{**} p < 0.01$; $^{***} p < 0.001$.

APPENDIX B

Summary Statistics. The Variables Used in Regression Analysis

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Soc_Welfare	27	11.60	46.20	23.10	8.50
Educ_Degree	31	10.00	31.60	21.64	7.33
Comp_Tour	39	3.60	5.68	4.66	0.56
Tour_Exp	26	5.43	7.92	6.64	0.61
Number_Tour	27	2.54	4.67	3.6	0.56
Public_Image	39	−0.77	2.19	0.82	0.81
Cult_Gov_Exp	38	0.62	2.61	1.67	0.58
Price_Level	35	1.38	61.08	16.49	14.10
Cult_Herit	39	0	44	9.51	10.67
%Cult_Workers	30	0.004	0.032	0.017	0.006
%Unempl	38	3.2	32.2	10.37	6.11
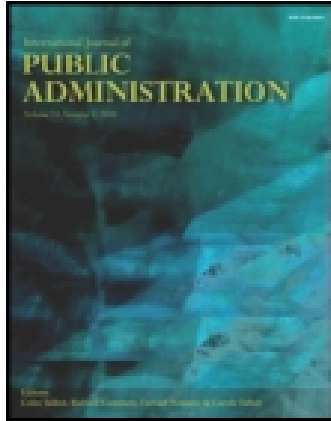
Cultural Strategies and Public Value Creation: Empirical Evidence

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