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XXII
CONFERENZA

RENT SEEKING, GOVERNMENTS, NONPROFIT AND CRIMINAL HUBS.
STRUCTURAL POLICIES FOR LESS DEVELOPED AREAS.
THE CASE OF CALABRIA.

FRANCESCO FORTE, COSIMO MAGAZZINO, MICHELA MANTOVANI, BRIAN SKEPYS

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ABSTRACT: *The study concerns the allocation of 546 projects of the Structural Funds for cultural development in the region of Calabria (POR 2000-2006) with a center right government from 2000 until spring 2005 and central left government from April 2005 to the end of the allocation process. By statistical tests including regressions and independent-samples t-test we have considered at the municipal level, and at the individual project level for the municipalities that received funds whether the funds allocation and expenditure followed the official objective of valorization of the cultural good and of promotion of cultural services particularly in relation to the promotion of tourism or were fragmented by the pressure of various kinds rent seeking. The empirical analysis shows that the variables relating to cultural sites, education sites and sites with tourism or tourism potentialities had no significance or even negative influence while rent seeking variables relating to non profits, to construction interests, to employment of people in services and to criminal hubs may explain both the fragmentation of the projects and the difference between allocations and payments relating to the allocation of the funds. On the other hand the presence of cultural sites is not significant in the allocation of funds to the criminal hubs so that does not seem that the Regional administrations used these funds for an active policy of cultural enhancement of the communities of these hubs to offer them new opportunities.*

KEYWORDS: *rent seeking; cultural goods; tourism; public expenditure; Southern Italy.*

JEL Classification: *H4; R1; Z1.*

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Introduction

In the economic literature there is a widespread consensus on the fact that the European and Italian public interventions for the development of Southern Italy have, in a large part, failed to reduce the disparities between Centre-North and South, and on the fact that the Regional funds did not obtained their objectives. This has happened both because a share of them, due to the complexity of the procedures and to other factors, was not expended before the time limit and was diverted to other end and because the share that was spent with the regular procedures of the Regional funds was not allocated properly. On these themes see: SVIMEZ (2009), Viesti (2009), Viesti and Prota (2009), Giannola and Imbriani (eds., 2003), Lo Cicero and Reganati (2003), Viesti (2003).

In the specialized economic literature on cultural goods and on tourism there are several contributions that emphasize the importance of the cultural goods as attractors of flows of tourism. See, for instance: Goldoni, Rispoli, and Troncon (eds., 2006), Colbert (2000), Kotler and Scott (1998), Nantel and Colbert (1992), Grossi and Debbia (eds., 1998), Diggles (1986), Hirshmann (1983). More generally, see Forte and Mantovani (2004).

On the specific theme of this research, the Regional funds policies in the area of cultural goods and the development of tourism in Southern Italy, the literature is not equally developed. See however Spadaro (ed., 2010), Mantovani (2010), Ferrari and Cariola (2001).

On the other hand there is a rich literature on rent-seeking which allows to study the deviations of the expenditure for the regional funds for the cultural goods as attractors of tourism in this perspective. See for all Cogleton, Hillman, and Konrad (eds., 2008).

This study examines the allocation of the Regional Operation Program (POR) 2000-2006, under the Community Support Framework (CSF) 2000-2006 in the region of Calabria, specifically for the funds devoted to the cultural sector development. The purpose of these funds is to create projects for local growth and employment. We aim to ascertain which variables have determined the highly fragmented allocation of the funds, whether they are for cultural objectives and promotion of tourism or for other reasons. To do this, we will employee statistical analysis on variables thought to impact the allocation of development funds.

The study is divided in to two parts. Part A provides background information on the POR 2000-2006 in Calabria. Part B employees statistical analysis to determine any factors that impacted the allocation of the funds.

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50% of these funds come from the European level. It is financed for a share of 60% by the European Regional Development Fund (ERDF), which finances productive investment and infrastructure projects in European Union countries, 20% by the European Agriculture Guidance and Development (EAGGF), 20% comes from the European Social Fund (ESF), and 0.94% from Financial Instruments for Fisheries Guidance (FIFG). Italy funds the remaining 50%, which is comprised of about 80% by the Central Government and the remaining 20% by the Regions and local programs. To receive project funding, private entities must present projects of which they finance at least 50%. Public entities as for the public service projects are not be obliged to co-financing. However, they often present projects that are supposed to complement other projects undertaken by them on their separate budgets.

The projects financed by the Calabria's POR are divided into six categories, which are referred to as "Axes":

Axis 1 - Enhancement of natural and environmental resources.
Axis 2 - Use of local cultural and historical resources.
Axis 3 - Human resource development.
Axis 4 - Expansion and enhancement of local systems development.
Axis 5 - Improving the quality of cities, local institutions and social life.
Axis 6 - Strengthening of networks and service nodes.

Our research focuses on Axis 2, which is directed to the enhancement of cultural and historical resources. In this Axis there are three "measures" which provide a sub classification of the different kinds of projects, according to their nature and to the type of entities undertaking them.

Measure 2.1 - Interventions for the preservation and enhancement of cultural heritage.
Measure 2.2 - Public services for the enhancement of cultural heritage.
Measure 2.3 - Developing entrepreneurial initiatives in the field of cultural heritage.

Measures 2.1 and 2.3 are managed by the Regional Department of Tourism because the regional government considers cultural heritage as a great importance in terms of increasing tourism in Calabria, which is still very modest compared to the other regions. Measure 2.1 is reserved to projects of public entities, and Measure 2.3 consist of privately managed projects.

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Part A – The POR in Calabria

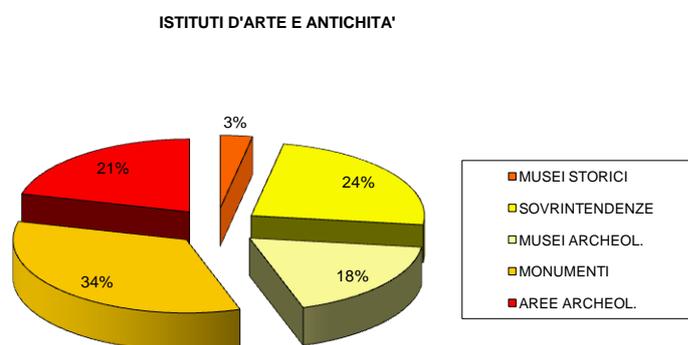### Overview of the Cultural Heritage Development in Calabria

Cultural Resources: Archeological Sites, Museums, Monuments, Ethnic Minorities, and Craft Activities

In the region of Calabria, the Ministry of Heritage and Culture (MIBAC) maintains 57 archeological sites on over 4,000 hectares of land with nine managing superintendants. In most cases, the sites are neither valued nor protected. There are 19 museums that house art, history, and important monuments. Of these only five require an admission fee, and the National Archeological Museum of Reggio Calabria has historically maintained the highest number of visitors.

In some areas there are ethnic minorities (i.e. Albanians, Hellenistic, Occitan, and Gypsies) who have retained important features of their cultures of origins. It is also worth to note the existence of ancient craft traditions regarding the restoration buildings, music productions, and artistic objects of the pastoral farming tradition (in particular the ceramic traditions of Squillace and Seminara).

Figure 1 shows the resources allocated for cultural heritage preservation by their managing institutions.

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Figure 1

ISTITUTI D'ARTE E ANTICHITA'

Source: *POR Calabria* (2009)

The majority of institutions are in the provinces of Cosenza and Reggio Calabria with 14 and 12, respectively.

Historical Centers, Historical Towns, Villages, and Defensive Systems

In Calabria all 27 historical centers (historically significant towns) are not preserved or enhanced, 9 of which remain unidentified and uncategorized. In the remaining 18 historically significant towns, historical buildings and ruins are intact, although often times only partially.

Another significant of historical goods are "defensive systems" of various historical systems including towers, castles, city walls, and etc. Most of them date around the ninth century and are located on hilltops. There are 147 castles, 196 towers, and 43 fortified structures official registered.
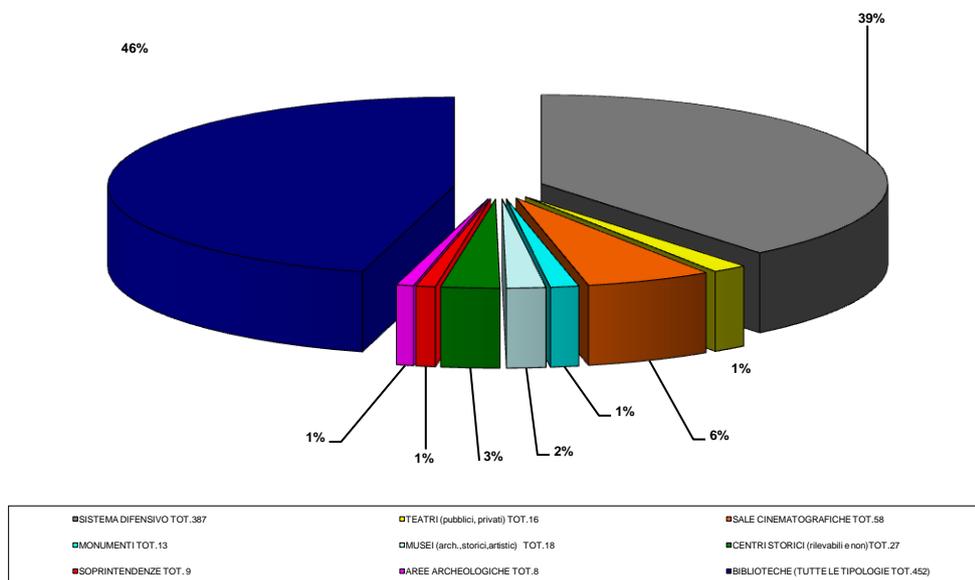
Ownership of the Types of Cultural Heritage

Of the 35 theater in Calabria 80% are privately owned. Management is conducted by cooperatives (50%), associations (20%), and private companies (30%).

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Figure 2 shows the percentile distribution of cultural heritage.

Figure 2

PERCENTUALE BENI CULTURALI PRESENTI IN CALABRIA SUDDIVISI PER CATEGORIA

■ SISTEMA DIFENSIVO TOT.387	▫ TEATRI (pubblici, privati) TOT.16	■ SALE CINEMATOGRAFICHE TOT.58
■ MONUMENTI TOT.13	■ MUSEI (arch.,storici,artistic) TOT.18	■ CENTRI STORICI (rilevabili e non)TOT.27
■ SOPRINTENDENZE TOT. 9	■ AREE ARCHEOLOGICHE TOT.8	■ BIBLIOTECHE (TUTTE LE TIPOLOGIE TOT.452)

Source: *POR Calabria* (2009)

Cultural tourism in Calabria

Cultural tourism is very important for the national Italian economy, but up to this point it has had a very limited role in Calabria. Yet, its monuments and archeological sites are an important part of the cultural heritage of Italy, and they are regarded as extremely important at the international level. Calabria has seven archaeological parks: Sybaris, Capo Colonna, Solacium, Locri and Monasterace in addition to two major monuments.

POR 2000-2006 Program Objectives for the Cultural Sector

Priority II for Cultural Heritage Objectives

Axis II program is ingeniously constructed by four goals, seven programs strategies for each goal and six specific action, each articulate in a number

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of sub actions. As one can see from the description of this complex construct, there is practically no specifically defined priority. The goals are as follows:

a) Construction of networks for the enjoyment of cultural and historical heritage, in accordance with already planned network initiatives, and to identify meaningful property at the regional level on which to focus project resources in order to conserve, protect, and enhance.

b) Generate managerial services of both public institutions and private entrepreneurs to meet the demand of residents and tourist for cultural heritage resources.

c) Qualify and support the training of technical and scientific figures tied to the heritage and cultural tourism sector, primarily for cultural management (organization of cultural institutions and utility companies) and management services for the dissemination of local knowledge (tour services).

d) Develop companies and organizations (public and private, profit and non-profit, cultural foundations) relating to the conservation, enhancement, and management of the development of services that combine the benefits of tourism with cultural resources.

Program Strategy

To further complicate the picture each of the four goals has to be implemented by five directives of the program's realization:

a) Concentrating resources around cultural emergencies, identified as key exploitable resources, while preserving and restoring heritage buildings, archeological site, and geographical landscapes.

b) Enhance regional cultural identities through the wide range of arts, entertainment, and culture for social and economic development.

c) Provide the region with infrastructure resources, such as physical resources, techniques, methods of intervention, advanced services, and other "horizontal" factors such a knowledge and training of cultural heritage.

d) Create an interconnected function system to strengthen the cultural whole (the network of archeological areas, coastal castles, regional libraries, etc.).

e) Fostering entrepreneurship in innovated private management services that specialize in the integration between tourism and cultural heritage. It is specifically aimed at current seasonal tourism resorts.

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Specific Actions of the POR

Moreover, the POR as a whole is articulated in six specific actions. The POR was operationally divided in the following specific actions:

a) Enhancement of the archeological heritage of Ancient Greece.
b) Establish of a networked system of archeology of the Magna Graecia region for the management, enhancement, and protection of archaeological sites and archaeological museums. In particular, the enhancement of the archaeological site of Sybaris is of primary importance.
c) Create theme parks related to archaeological sites through the construction of adequate facilities for their use.

These actions can be accomplished through:
1. Feasibility studies and implementation projects.
2. Rehabilitation of archeological sites and the restoration of museums and artifacts.
3. Assistance for the construction of infrastructure and facilities.
4. Architectural Heritage and Landscape.

d) Recovery, development, and reutilization of the most valuable elements of architectural and landscape heritage (both public and private) for the purpose of establishing infrastructure and equipment aimed at improving and promoting architectural heritage for culture, tourism, local craft, and publishing.
e) Redevelopment of historic centers through the recycling of abandoned buildings for the purpose of cultural tourism, and promoting news business activities in the sector of cultural heritage.
f) Construction of multipurpose centers for the integration of cultural activities and entertainment. These centers must be located in buildings restored as part of the architectural heritage priority.
g) Protection of the landscape through projects aimed at recovery and enhancement of the landscape in both areas of high valued cultural heritage and in areas with projects planned by the regional ecological network.

This measure supports the implementation of initiatives of national im-

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portance and visibility, supported by partnerships of public and private agencies that promote cultural heritage regional and local identities, to attract flows of cultural tourism. The initiatives will be aimed at the promotion of cultural heritage through:

1. Promotion and implementation of innovative initiatives that enhance the cultural heritage and local identities.
2. Events of significant cultural and anthropological value.
3. Preserving ethnic minorities who have maintained important features of the cultures of origin.
4. Activities related to the ancient tradition of craft production, music, the production of objects of culture of pastoral farmers, and local foods.
5. Preserving oral traditions.
6. Promotion and creation of cultural networks.

The measure supports the implementation of innovative integrated projects promoted by networks of public and private actors aimed at the exploitation of cultural heritage (tangible or intangible) of specific themes or geographical areas. The projects are integrated with activities of study, research, information, training, promotion and experimentation for the involvement of younger individuals.

Project funds for development of entrepreneurial initiatives are granted within the limits of the *de minimis* rule.

Given the complexity of the construct (the detailed and ambiguous way in which the sub objectives actions are presented and the lack of strict priorities among them), this construct was bound to lend a fragmented implementation with a dispersion of funds and initiatives an to offers great opportunities for rent seeking.

Implementation of the Program

Participation in the POR and performance rate
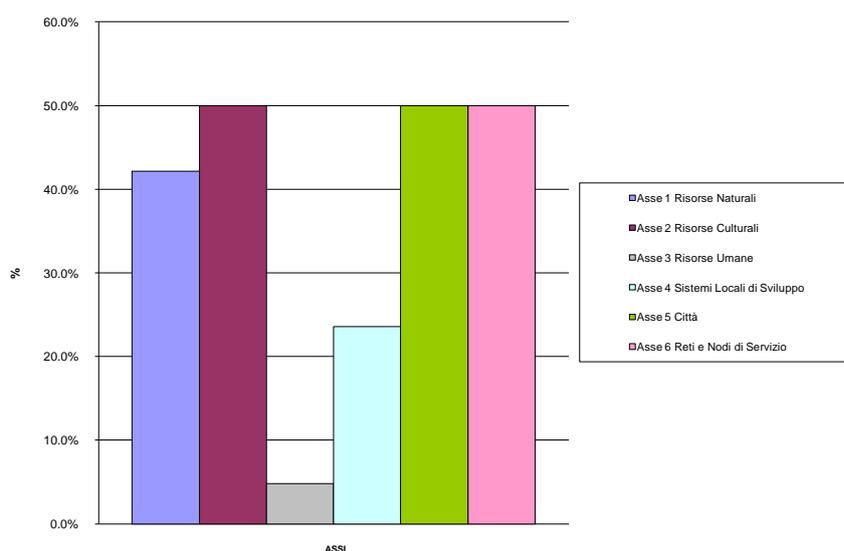
The results from the last program (POR 29/02/2008) to Calabria show highly unsatisfactory achievement considering the projects realized as percentage of the available resources. This is evident from Figure 3, which covers the 2007 data reported in August 2008. A year after the expiration of the programs, the three Axes relating to culture had a relatively higher achieve-

ment in comparison with the other axes, but they are still quite low. Axis II has an achievement ratio of 50% like Axis V (Social and City Life), and Axis VI (Networks). The program for natural and environmental resources (Axis I), for which Calabria has a natural vocation, has a ratio of only 45%. Local systems for development (Axis IV) had a ration lower than 25% and human resources lower than 5%.
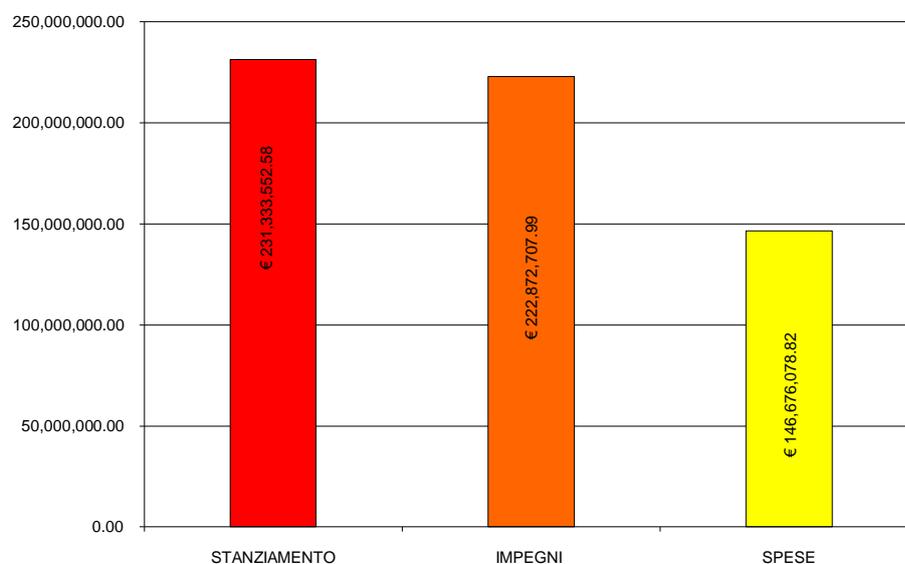
Figure 3

Source: *Regione Calabria*

Figure 4 shows the breakdown of resource use and its expenditure.

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Figure 4

Source: *Regione Calabria*

The implementation of the program has resulted in about 600 projects with an average amount of 338.000 euro per project in contrasts with a stated aim of addressing the few important cultural initiatives.

There were only 3 projects exceeding 5 million Euro. They were for the two archeological parks of Solacium in Crotone and the plaster cast and picture gallery in Catanzaro. In the 3 to 5 million Euro category there were four projects for the restoration of historic buildings and the structural adjustment of the National Museum of Cosenza, and there was an appropriation of 3 million Euro for the promotion of demo-ethno-anthropological heritage.

Only 25 projects approved had budgets from 1 to 3 million Euro for the promotion and preservation of ethno-anthropological in municipalities, and there were two projects for the preservation of Albanian tradition and the creation of network designed to enhance minority languages.

Most projects were in the range of 0 and 250 thousand Euro for interventions as library systems, consolidation of buildings and churches, a the promotion of crafts in the process of "extinction" such as tailors, carpenters, goldsmiths. Projects with a budget of 500 thousand Euro were almost exclusively dedicated to construction and restoration of buildings.

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Accepting the requests of a myriad of small entities rather than focusing the concentration of funds on large and challenging projects attributed to the modest impact on tourism.

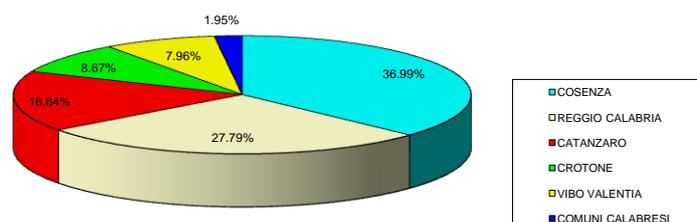*Province Project Variation*

Projects were divided into provinces as shown bellow:

Cosenza: 209 projects
Reggio Calabria: 157 projects
Catanzaro: 94 projects
Crotone: 51 projects
Vibo Valentia: 45 projects.

The remaining projects were cross-provincial projects, so they cannot be attributed to any one province. Figure 5 shows the division of projects by province.

Figure 5

Source: *POR Calabria*

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Part B - Statistical Analysis and Results

This section will employ statistical analysis in order to shed light on possible variables that impacted the POR 2000-2006 Asse II fund allocation. The dependent variables considered are the number of projects and the amount of Euro allocated. The primary independent variables considered are organized criminal presence, major cultural institutions, nonprofit institutions, and regional government municipality connection.

Tested projects were funded exclusively from the POR 2000-2006 and were considered "Non Continuous" projects, which means they had a specific end date. This specification allowed for simplified testing and analysis.

Statistical Methodology

Bivariate Correlations and Independent Two-Sample t-tests: Levels of Analysis, Variables, and Testing

Testing was comprised of Bivariate Correlations and Independent Two-Sample t-tests, which compare variable means of two data categories. All statistical significances were taken at a 95% confidence level.

In order to attain a thorough statistical depiction of the fund allocation, correlations and t-tests were organized into two primary levels of analysis. The first is the municipal level. Each case corresponded with one of the 409 Calabrian townships eligible to receive development funds. This type of research allows as to know which factors have determined the allocation of the funds among all the municipalities and why some municipalities got projects and others did not. The second is the project level. This level considered each individual project approved under the POR 2000-2006 Axis II category, which came to 306 cases.

The variables considered were Population[1], number of Cultural Sites[2], number of Nonprofit Institutions[3], project Imports, project Payments, number of Projects[4], Percent Vote to the winning presidential party in the 2000 and 2005 regional elections[5], Criminal Presence[6], Chiaravalloti Region-

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[1] ISTAT DAWINCI Database.
[2] Forte and Mantovani (2004).
[3] ISTAT DWCIS Database.
[4] POR 2000-2006 Project Database. Region of Calabria Website.
[5] Ministero dell'Interno Election Archives.
[6] Gratteri and Nicaso (2007).

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al Government Connection[7], and Loiero Regional Government Connection[8]. The dependent variables of the analysis were Imports, Payments, and Projects. Imports was the initially awarded amount, and Payment was the final amount of Euro allocated.

Grouping categories considered at the municipal and project levels included Criminal Hubs, Cultural Hubs, Chiravallotti Connected Municipalities, and Loiero Connected Municipalities. This means each project and municipality held a value of either "yes" or "no" for each category. For example, every municipality was either a Ciminal Hub or a Non Criminal Hub, and every project was either in a Criminal Hub or in a Non Criminal Hub.

At the project levels a general group of testing was conducted on the entire group of cases then the same set of testing was applied to categorized groups (Construction and Service Projects). Determining Construction and Service Projects required an analysis of each project description. If a project required construction labor it was deemed a Construction Project, and if a project was of non-physical construction nature (ie festivals, promotional activities, etc.) it was deemed a Service Project.

Regressions: Variables and Testing

A variety of regression techniques were used. First, we ran a *Stepwise* regression, always concentrating on the per-capita amounts, i.e. on the municipalities that received funds. Stepwise methods provide ways to automate the process of model selection. They work either by subtracting predictors from a complicated model, or by adding predictors to a simpler one according to some pre-set statistical criteria. Stepwise methods cannot consider the substantive or theoretical implications of their choices, nor can they do much troubleshooting to evaluate possible weakness in the models produced at each step. They produce badly biased models in many instances due to over-fitting. Despite their well-known limitations, stepwise methods meet some practical needs and have been widely used.

Afterwards, we ran a GLM model. Nelder and McCullagh (1989) describe a class of *Generalized Linear Models* (GLMs) that extends linear regression to permit non-normal stochastic and non-linear systematic components. GLMs encompass a broad and empirically useful range of specifications that includes linear regression, logistic and probit analysis, and Poisson models.

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[7] "LaVoce" Magazine (2000).
[8] Region of Calabria Website. Giunta Page.

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GLMs offer a common framework in which we may place all of these specification, facilitating development of broadly applicable tools for estimation and inference. In addition, the GLM framework encourages the relaxation of distributional assumptions associated with these models, motivating development of robust *quasi-maximum likelihood* (QML) estimators and robust covariance estimators for use in these settings.

Taken together, the GLM assumptions imply that the first two moments of may be written as functions of the linear predictor:

$$\mu_i = g^{-1}(\eta_i) \qquad [a]$$

$$V_i = (\phi / \omega_i) V_\mu (g^{-1}(\eta_i)) \qquad [b]$$

where is a distribution-specific variance function describing the mean-variance relationship, the *dispersion* constant is a possibly known scale factor, and is a known *prior weight* that corrects for unequal scaling between observations.

Crucially, the properties of the GLM maximum likelihood estimator depend only on these two moments. Thus, a GLM specification is principally a vehicle for specifying a mean and variance, where the mean is determined by the link assumption, and the mean-variance relationship is governed by the distributional assumption. In this respect, the distributional assumption of the standard GLM is overly restrictive. McCullagh (1983) offers a full set of distributional results for the quasi-maximum likelihood (QML) estimator that mirror those for ordinary maximum likelihood.

In particular, these estimators permit us to estimate GLM-like models involving mean-variance specifications that extend beyond those for known exponential family distributions, and to estimate models where the mean-variance specification is of exponential family form, but the observed data do not satisfy the distributional requirements (Agresti, 1990). Alternately, Gourioux, Monfort, and Trognon (1984) show that consistency of the GLM maximum likelihood estimator requires only correct specification of the conditional mean. Misspecification of the variance relationship does, however, lead to invalid inference, though this may be corrected using robust coefficient covariance estimation. In contrast to the QML results, the robust covariance correction does not require correction specification of a GLM conditional variance.

As a third method of estimate, we choose a Robust regression. An *Iteratively Reweighted Least Squares* (IRLS) procedure obtains robust regression estimates. The first iteration begins with OLS. Any observations so influential as to have Cook's distance D values greater than 1 are automatically set

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aside after this first step. Next, weights are calculated for each observation using a Huber function (which downweights observations that have larger residuals) and weighted least squares is performed. After several WLS iterations, the weight function shifts to a Tukey biweight (as suggested by Li, 1985), tuned for 95% Gaussian efficiency (Street, Carroll, and Ruppert, 1988; Hamilton 1992).

Finally, we estimated a quantile regression. As originally proposed by Koenker and Bassett (1978), quantile regression provides estimates of the linear relationship between *X* regressors and a specified quantile of the dependent variable *Y*. One important special case of quantile regression is the *Least Absolute Deviations* (LAD) estimator, which corresponds to fitting the conditional median of the response variable.

The data used are obtained by the official site of Calabria Region[9] and by portal www.quicalabria.it.

In Table 1 we show a brief explanatory data analysis for per-capita amounts.

Table 1 – Per capita amounts, POR Calabria 2000-2006.

Descriptive Statistics: variable amounts_pc	
Mean	263.8494
Median	95.0588
Variance	672403.7
Skewness	10.29227
Kurtosis	126.3039

Source: our calculations.

We constructed a Regression dataset with a large number of variables. We choose the log-linear functional form, and our dependent variable is the natural logarithm of per-capita amounts (*lnamounts_pc*), and it represents POR funds that has been assigned to each municipal, divided for residential population. The focus on the amount per-capita in municipalities that received projects allows us to examine which priorities if any have been pursued in allocating the funds among them; *Projects* is the number of approved projects; *Nonprofit* is the number of nonprofit organizations; *Votes* is the electoral flows; *Province* is a dummy variable, that is equal to 1 if municipal is a Province, and equal to 0 otherwise; *Health structures* is a dummy variable,

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[9]See:
http://www.regione.calabria.it/calabriaeuropa/index.php?option=com_content&task=view&id=120&Itemid=253.

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that is equal to 1 if in the municipal area insists at least one hospital, a nut-house or a fitness centre, and equal to 0 otherwise; *University* is a dummy variable, that is equal to 1 if in the municipal area there is an academic institution, and equal to 0 otherwise; *Nursery* is a dummy variable, that is equal to 1 if the municipality has got a nursery, and equal to 0 otherwise; *Primary school* is a dummy variable, that is equal to 1 if in the municipal area there is at least one primary school, and equal to 0 otherwise; *Secondary school* is a dummy variable, that is equal to 1 if in the municipal area there is at least one secondary school, and equal to 0 otherwise; *Senior high school* is a dummy variable, that is equal to 1 if in the municipal area there is at least one senior high school, and equal to 0 otherwise; *T&C* is a dummy variable, that is equal to 1 if in the municipal area there is at least one theatre or a cinema, and equal to 0 otherwise; *Touristic attractors* is a dummy variable, that is equal to 1 if in the municipal area there is at least one disco, acquapark, wine-tasting shop, sport-centre, or a beach, and equal to 0 otherwise; *TV&R* is a dummy variable, that is equal to 1 if in the municipal area there is at least one local TV or radio station, and equal to 0 otherwise; *Soccer* is a dummy variable, that is equal to 1 if in the municipal area there is at least one professional soccer team, and equal to 0 otherwise; *A&C&A* is a dummy variable, that is equal to 1 if in the municipal area there is at least one hotel, camping or farm holidays, and equal to 0 otherwise; *A&P* is a dummy variable, that is equal to 1 if in the municipal area there is at least one airport or seaport, and equal to 0 otherwise; *L&P* is a dummy variable, that is equal to 1 if in the municipal area there is at least one library or local publisher, and equal to 0 otherwise; *Museums* is a dummy variable, that is equal to 1 if in the municipal area there is at least one museum, and equal to 0 otherwise; *Cultural Hubs* is a dummy variable, that is equal to 1 if the municipality might be considered as a cultural hub according to Forte and Mantovani (2004) and SISTAN classifications, and equal to 0 otherwise; *Criminal Hubs* is a dummy variable, that is equal to 1 if the municipality might be considered as a criminal hub according to Gratteri and Nicaso (2007) classification, and equal to 0 otherwise; *Councillor* is a dummy variable, that is equal to 1 if the municipality has been represented by a councillor as a member of Regional Government during the period 2000-2006, and equal to 0 otherwise.

Regression analysis was conducted only for cross-section containing municipals that received POR funds. As is shown in Table 2, first of all one notices that there are very few differences in the estimated coefficients among four estimation methods applied; in fact, the coefficients are very similar, while standard errors present slight variations. Second column represents the output of Stepwise Backward Robust OLS estimate. We

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choose the log-linear functional form, and our dependent variable is the natural logarithm of per-capita amounts (*lnamounts_pc*). In order to control for heteroscedasticity, we applied White correction.

Results and Analysis

The Need for Population Variable Control

Table E (in *Appendix*) shows the need for careful control of the population variable. These tests showed that Imports, Payments, Projects, and Non-profit Institutions were positively correlated with Population. Thus, in order to eliminate the bias caused by large population, the remaining tests were conducted exclusively in "per capita" terms for the variables mentioned above.

Nonprofit Institutions and Cultural Hubs

Statistical analysis showed that cultural sites were not major influencers of fund allocation. Table F tests 5-6 tested for correlations between Imports, Payments, and Projects per capita and number of Cultural Sites. There was no correlation between the variables. The lack of connection between Cultural Sites and fund allocation was further established with tests 7-11, which were a series of t-tests at both the municipal and project levels. The tests found that Cultural Hubs did not receive a significantly higher Imports, Payments, or Projects per capita, and that projects within Cultural Hubs did not receive significantly higher Imports or Payments than Non Criminal Hubs. The only variable that was statistically significant was Imports at the project level for construction related projects. This means that while it was originally planned for Cultural Hubs to receive significantly more Euro for construction related projects, in the end, perhaps due to errors in the conceptions of the projects, mismanagement, or lack of initiative in pursuing the given objectives, Cultural Hub construction projects received a statistically insignificant more amount of Euro than Non Cultural Hubs. This phenomenon is illustrated in Figure 6, which shows project Imports and Payments averages, and the relatively large discrepancy between Imports and Payments for Cultural Hubs is apparent.

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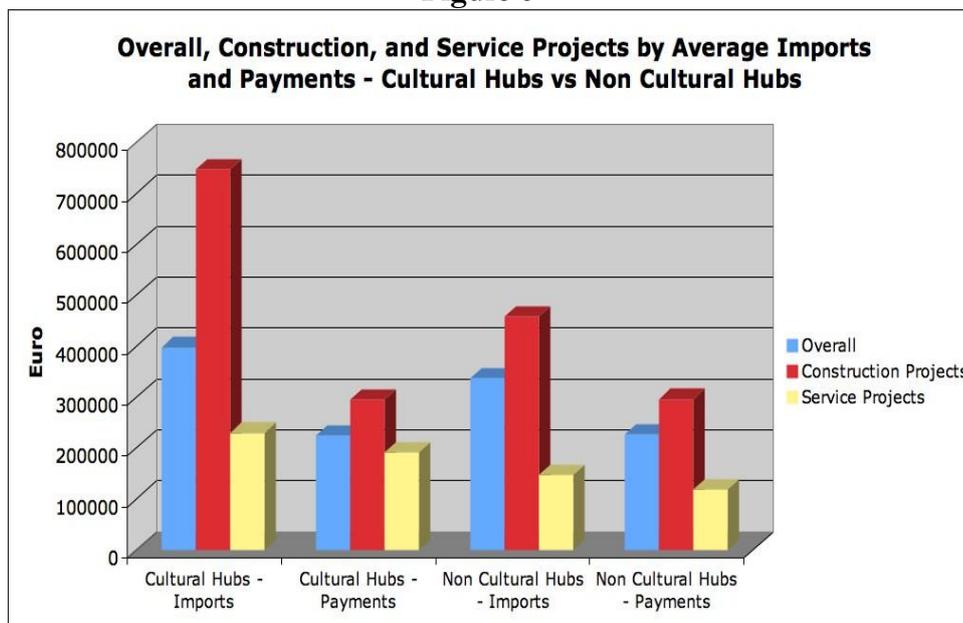
Figure 6

Source: POR Calabria Project Database

In general terms, it is important to note the differences in Imports and Payments per capita between Cultural Hubs and Non Cultural Hubs. Figure 7 shows that, on average, Non Cultural Hubs received 68% of the initial Imports in Payment while Cultural Hubs received only 45%. This confirms the point made above, in per capita terms, that Cultural Hub projects were more likely to end up not being fully funded due to incompetence and mismanagement.

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Figure 7
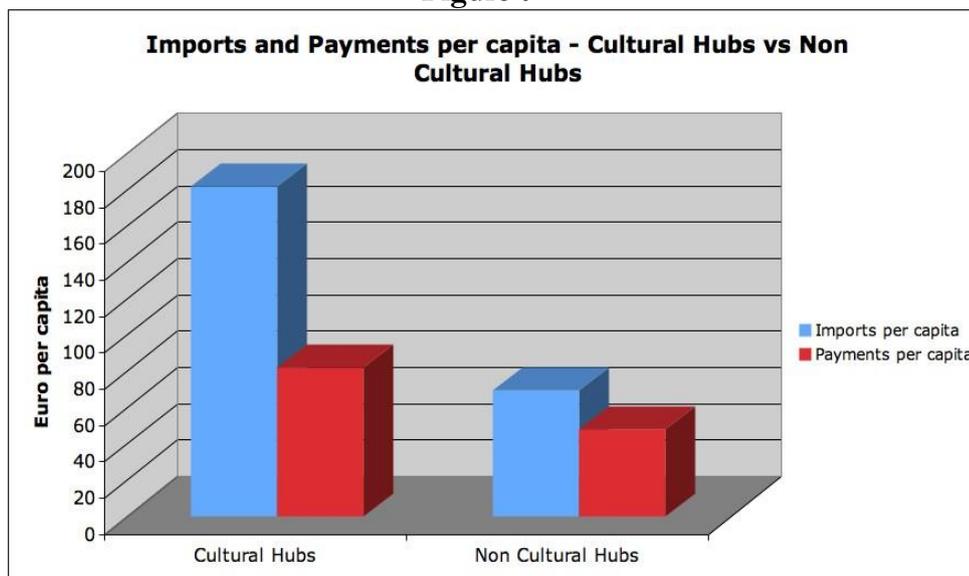
Source: POR Calabria Project Database

Nonprofit institutions, on the other hand, proved to be important to the allocation POR funds. Tests 12-14 show that Imports, Payments, and Projects per capita were all highly correlated with Nonprofits per capita.

About regression analysis, as expected, the number of total projects (*Projects*) is statistically significant, and this explanatory variable tends to have a positive influence on per-capita amounts of the individual municipalities. The presence of museums in the considered municipalities is not relevant for the allocation of funds per capita. Nor it is relevant the presence of important cultural hubs, identified by referring to the SISTAN definition integrated with Forte and Mantovani (2004) definitions which includes also the most important historical buildings and theaters. Also the presence of schools, whether of primary or secondary education does not seem relevant while the presence of high schools is relevant with a negative impact. It seems that because in these municipalities there is already some important public cultural institution they do not need attention as for the allocation of POR' s funds for culture. A similar consideration may explain the L& P's negative influence on the allocation of these funds. *Touristic attractors,* tend to have a negative impact on dependent variable, too. On the other hand one should notice that they are not significant in the LAD estimate. The variables TV&R, A&C&A and A&P too which may be relevant for tourism are not significant. On balance, one can argue that the presence of relevant

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tourism does not exert an appreciable influence on the allocation of Calabria's POR' funds for culture even if the development of tourism is among the official objectives of the program. The presence of an academic institution (*University*) increase the funds assigned. This result might evidence that were there is an University the capability of presenting projects suited approval tends to increase, likely because of the greater competence and intellectual prestige of their authors. On the other hand one must notice that in LAD estimate University is not significant and that in IRLS estimate the explanatory variable *University* doesn't have a statistical relevance This result implies that the presence of an University in a given town it is not important in the policy of the Region as for the allocation of the POR' cultural funds. As previously seen there is a strong correlation between the presence of non profits and the allocation of funds to the municipalities. Those with nonprofit institutions have been favored on those without them. However the variable Nonprofit shows a negative incidence on the per capita amount of the projects as for municipalities which received funds. One can explain this result arguing that the presence of nonprofit has helped the municipalities in obtaining some funds but that the competition between the different nonprofit organizations for to these public funds has reduced the success of them. A similar consideration may be done as for the criminal hubs. They have been preferred over the other municipalities but they are not significant as for the per capita allocation of the funds. The difference of this result with that relating to non profits may be explained considering that these criminal organizations are big oligopolies and not small imperfect competition enterprises as most of the Calabria's numerous non profits.

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Table 2 – Regression Analysis, POR-Calabria (2000-2006).

Dependent Variable: (lna- mounts_pc)	Stepwise Robust OLS[a]	Robust GLM[a]	IRLS	LAD with boot- strapping
Constant	3.4999*** (.1633)	3.4999*** (.1606)	3.4994*** (.1431)	3.6130*** (.2058)
Projects	.2931*** (.0678)	.2931*** (.0666)	.3744*** (.0575)	.3244*** (.0774)
Nonprofit	-.0131*** (.0029)	-.0131*** (.0029)	-.0132*** (.0025)	-.0137*** (.0774)
University	.5930** (.2712)	.5930** (.2666)		
Touristic attrac- tors	-.4752*** (.1804)	-.4752*** (.1773)	-.4399** (.2002)	
L&P	-.3128* (.1676)	-.3128* (.1647)	-.3705** (.1690)	-.3607** (.1907)
Senior high school	-1.0574*** (.1911)	-1.0574*** (.1879)	-1.0791*** (.1893)	-1.0711*** (.1840)
Number of obs.	210	210	209	210
F test	43.70 (.0000)		45.19	
Log-likelihood	-321.0666			
Pearson disper- sion		1.295		
R²	.5874		.5731	
R²_adj	.5834		.5604	
Pseudo R²				.3385
BIC	684.9101	-818.4658		
AIC	658.1332			
RMSE	1.1381		1.1462	
Ramsey OV test	2.03 (.1107)			
Mean VIF	2.52			
Skewness- Kurtosis test	.98 (.6129)	0.98 (.6129)	9.46 (.0088)	3.30 (.1920)
Shapiro-Francia test	(.6134)	(.6134)	(.0160)	(.0486)
Shapiro-Wilk test	(.5947)	(.5947)	(.0246)	(.0360)
IQR	1 mild outlier 0 severe out- lier	1 mild outlier 0 severe outlier	3 mild outliers 0 severe outlier	9 mild outliers 0 severe outlier
Link test	f.v. significant (f.v.)² not sig- nificant	f.v. significant (f.v.)² not sig- nificant		f.v. significant (f.v.)² not signifi- cant

a: White correction for heteroscedasticity applied. Significance levels: * 10%, ** 5%, *** 1%. Robust Standard Errors in parenthesis.

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According to the diagnostic checks, the goodness-of-fit is acceptable (the coefficient of determination and the adjusted coefficient both are >56%), while the F-stat reveals as the set of independent variables (jointly considered) significantly differs from zero, since we strongly reject the null hypothesis.

Ramsey' RESET test controls whether non-linear combinations of the estimated values help explain the endogenous variable (Ramsey, 1969). The intuition behind the test is that, if non-linear combinations of the explanatory variables have any power in explaining the endogenous variable, then the model is mis-specified. Since we don't reject the null hypothesis that the model has no omitted variables, we might conclude that it is well-specified.

The mean Variance Inflation Factor is equal to 2.52. VIF gives a quick check for multicollinearity. 1/VIF tells us what proportion of an explanatory variable's variance is independent of all the other X variables. A low proportion indicates potential trouble. VIF values provide guidance but not direct measurements of the increase in coefficient variances. Nevertheless, Chatterjee and Hadi (2006) suggest a sort of "rule of thumb": if the mean VIF is considerably larger than 1, we could suspect for the presence of multicollinearity. With our mean VIF less than 3, and our largest VIF close to 5.5, our regression clearly doesn't meet both criteria.

Moreover, the pairwise correlation coefficients matrix patently shows us that – either we use Bonferroni-adjusted significance level or Sidak-adjusted significance level – exists only a troublesome correlation between amounts and payments, but this collinearity doesn't distort very deeply our estimate (Abdi, 2007).

Yet, if our model really is specified correctly, then if we were to regress *lnamounts_pc* on the prediction and the prediction squared, the prediction squared would have no explanatory power. This is what *linktest* does (Tukey, 1949; Pregibon, 1979).We find that the prediction squared does have explanatory power, so our specification is not as good as we thought. Although *linktest* is formally a test of the specification of the dependent variable, it is often interpreted as a test that, conditional on the specification, the independent variables are specified incorrectly.

Finally, we analyze the normality of residuals. We conducted three different test to check the Gaussian distribution of residuals: Jarque and Bera test (1987), Shapiro and Wilk test (1965), Shapiro and Francia test (1972). Since all these tests fail to reject the null hypothesis of normality, we are able to conclude in favor of normality assumption.

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Conclusions

The allocation of funds cannot be explained by variables relevant fir culture, education or tourism. Other variables connected to rent seeking are more significant

Our empirical analysis has shown that other reasons than the official one explain the allocation of the funds for the cultural project of Calabria's POR 2000-2006 and the payments out of the imports assigned. Indeed the funds were dispersed in a myriad of projects rather than concentrated in the most significant cultural sites. There is no significant statistic relation between the important cultural sites and the allocation of funds or their payment both in the allocation of funds among all the municipalities and for their per capita assignment in the municipalities that received funds. Further the regression with the presence of at least one museum is not significant, as for the allocation of funds per capita to the municipalities with projects approved. Also the presence of schools, whether of primary or secondary education does not seem relevant while the presence of high schools is relevant with a negative impact. It seems that because in these municipalities there is already some important public cultural institution they do not need attention as for the allocation of POR' s funds for culture. A similar consideration may explain the L& P's (libraries and publishers) the negative influence on the allocation of these funds. The presence of an academic institution (*University*) increase the funds assigned. per capita. This result might evidence that were there is an University the capability of presenting projects suited approval tends to increase, likely because of the greater competence and intellectual prestige of their authors. On the other hand one must notice that in LAD estimate University is not significant and that in IRLS estimate the explanatory variable *University* doesn't have a statistical relevance Touristic attractors*,* tend to have a negative impact on dependent variable, too. On the other hand one should notice that they are not significant in the LAD estimate. The variables A&C&A (hotels, camping, farm-holidays) TV&R (television and radio stations) ,and A&P (aero terminals and ports) too which are relevant for tourism are not significant On balance, one can argue that tourism does not exert an appreciable influence on the allocation of Calabria's POR funds for culture even if the development of tourism is among the official objectives of the program. There is a significant statistical relation between the presence of non profits in the different municipalities and the allocation of the projects both as for their imports and payments. But considering the municipalities that received funds the regression show a

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negative relation with the amount per capita. Likely the competition among the non profits has reduced the per capita amounts in their municipalities in the attempt of public authorities of accommodating most of them to the table of the beneficiaries. Thus one may argue that rent seeking organizations have been an important factor in the dispersion of funds, which also results in the deviation from their proper objectives of promoting the important cultural sites and of employing them in cultural projects that may function as attractor of tourism. Criminal hubs have been relevant as for the choice of the municipalities beneficiaries of the funds. Are not significant as for the per capita amount. Their influence has not been overriding. But it was also statistically significant a t-test between the allocation of construction projects in the criminal hubs as for their imports but not as for their payment. One may expect this discrepancy when the projects matter to the beneficiaries not for its result but for a construction business. On the other hand there is no relation between the presence of important cultural sites in the criminal hubs and the allocation of projects to them of. It appears that the Region has not promoted a cultural policy in favor of the criminal hubs. While there is no significant statistical relation between the municipalities of residence of the members of the Chiaravalloti's or Lojero's Junta, rent seeking appears to emerges as for the significant difference in the allocation of funds by the two Regional Governments. The centre right Government spent the funds for construction projects. This industry is the most important one in a region as Calabria and it is likely to exert a particular influence on a centre right political coalition. The centre left Government devoted the funds to service projects and the unemployment of unskilled labor and of generic intellectual labor is another characteristic of the Region in which the parties oriented to the left may have mast of their organized electorate. To sum up the funds dedicated for cultural heritage in Calabria in the POR have been wasted and have even harmed the cultural heritage, because as seen, in the statistical analysis, the unfinished construction projects are a percentage much higher in the cultural sites than in the other sites. On the other hand the ordinary expenses for cultural purpose have been reduced, given the existence of POR' *ad hoc* extra funding for them. Besides that, no appreciable cultural policy has been undertaken as for the criminal hubs.

The disappointing results of the allocation of Calabria's POR in the area of culture and disappointing situation of tourism and attendance at cultural sites

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The funds dedicated for cultural heritage in Calabria in the POR have been wasted and have even harmed the cultural heritage, because as seen , in the statistical analysis, the unfinished construction projects are a percentage much higher in the cultural sites than in the other sites . On the other hand the ordinary expenses for cultural purpose have been reduced, given the existence of POR' *ad hoc* extra funding for them. Besides that, no appreciable cultural policy has been undertaken as for the criminal hubs. Given that the criminal hubs with cultural sites received on average much less than the other criminal hubs.

In 2000, the year of initial funding, the Region filed a tourism quote of 139,600 visitors to its major monuments and archaeological sites. The largest share belonged to the province of Reggio Calabria with 62% (87,200) of admissions. The revenues were zero. In total, museums in Calabria attracted 239,000 visitors of which 59% were of free admissions and the paid admissions amounted to 322,000 Euro. This amounts to 1.3 Euro per museum visitor. Visitors around the entire nation were approximately 30 million, and there was gross revenue of 77 million Euro. This resulted in an average of 2.5 Euro per visitor. It is worthy to note that there was no museum network circuit in Calabria like the other regions of Italy.

In 2007, a year after the development plan expired, the number of visitors to the monuments and archaeological areas of Calabria had fallen dramatically to 87,600 (from 139,600 in 2000), with a loss of 37%. Reggio Calabria remained the most visited province with 55,700 visitors (from 87.2 thousand) with a loss of 36%. Zero revenue persisted throughout this period, and there still is no networked museum circuit. For museums the situation is worse in absolute numbers; the number of visitors has fallen to 212,100 (238,900) with a loss of 11%. Even the gross revenues decreased to 270,600 (322 600) with a loss of 16%. The average visitor left 1.2 Euro in 2007. On the other hand, however, the percentage of non-paying visitors increased from 59% to 61%.

On a positive note, the revenue in per unit sold of additional services and goods (bookshop, restaurant, guided tours, *etc.*) is higher than the national average. In fact there are gross receipts in the region of 240,400 Euro in 35,400 transactions. This is an average of 6.8 Euro, which is higher than the national average of 4.7 Euro. It is worth noting that from 20,000 visits only 1,800 Euro arose from the in-house cafeterias and 38,000 Euro from the restaurants. This means that visitors purchased items from the giftshops that were of a higher price on average to make up for the final revenues. There is evidence, in fact, of highly quality books being sold in the shops. This shows that visitors have spending power and that, if stimulated,

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will buy gift-shop items. It should be emphasized that this positive sector is managed by the private sector.

Going into detail, there is a concentration of visitors in the province of Reggio Calabria, with 208,839 visitors and 243,344 Euro of revenue, reflecting its role over the other Calabrian provinces by providing many artistic and cultural events. The State Museum that houses the Bronze Statues of Riace continues to be the most important. It may be the only thriving museum in the region.

Trends of cultural tourism as for museums and archeological sites in Calabria in comparison to the trend of Italy from 2006 to 2007

In 2007, cultural heritage attracted 34,443,097 visitors in Italy and produced gross revenues of 106,033,174.64 Euro with an average of 3 Euro per visitor. The national figure in 2007 has remained stable from the previous year despite a slight decrease of 0.38% in the number of visitors and an increase in gross receipts, 1.55% (see Table B). The coexistence of these two slightly divergent trends shows an increase in fares and a focus on quality over quantity.

As for Calabria, over 2006 the region experienced a 6.7% decrease in visitors and a 3.1% decrease in gross revenue. There were approximately 300,000 visitors with around 271,000 Euro in gross revenue (see Tables C and D).

No visible effect so far of the POR' funding on Calabria' s archeological tourist sites

Despite the importance of Calabria's archeological sites, POR' efforts have failed and the number of visitors has declined from 139,600 (2000) to 87,600 (2007), a loss of flow equivalent to 37%. Even the archaeological sites at the national level had a slight loss of visitors from 16.8 million in 2000 to 16.3 million in 2007, a decrease of 2.9%%. However, the amount of revenue significantly increased to 34.2 million Euros from 28.2 million Euros, an increase of 17.5%.

The number of museum visitors in the region was 212,100 and the number of visitors to the archaeological sites was 87,600 in 2007. Cultural revenues in Calabria are generated by museums (70.8%) while the remaining 29.2% comes from monuments and archaeological areas, which shows a complete lack of income. Archaeological sites and parks of Calabria are all free admission except the archaeological park of Locri. Its impact on reve-

nues is not clear, as the cost of the ticket includes a visit to the National Archaeological Museum of Locri so revenues are included under "Museums".

It worth noting the in the few non-free admission institutions the number of free entries (108,000) is higher than paying entries (82,000). Politics of cultural heritage in the region is defined by "gratuity." But the visitors are few, and this highlights the lack of enhancement of this extraordinary heritage. It would be essential to make the range of cultural and archaeological better quality and more attractive[10].

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[10] The "free lunch" of cultural sites in Calabria is not copied in other regions of Italy, in which the majority of cultural sites require payment for admission. To put simply, their earnings are substantial. Lombardy, Emilia Romagna, Umbria, and Puglia all display this pay-dominate policy, and success in cultural heritage has followed suit.

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Appendix

Rent seeking, Governments, nonprofit and criminal hubs.

Structural policies for less developed areas. The case of Calabria.

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Table A – Payment Institutions Visitors and Revenues (2007

Region	Payment Institutions	Gratuitous Institutions	Total Institutions	Payment Institution Visitors (paying)	Payment Institution Visitors (non paying)	Total	Gratuitous Insitution Visitors	Total	Gross Revenues (Euro)
Piemonte	7	7	14	79.437	64.527	143.964	**65.798**	209.762	376.337,50
Lombardia	5	4	9	274.043	232.284	506.327	20.545	526.872	1.012.620,00
Veneto	1	2	3	75.076	64.606	139.682	29.759	169.441	304.881,00
Friuli Venezia Giulia	-	6	6	-	-	-	3.442.261	3.442.261	0,00
Liguria	1	2	3	8.542	11.728	20.27	5.047	25.317	31.433,00
Emilia Romagna	9	6	15	157.076	268.54	425.616	53.915	479.531	439.000,50
Nord	**23**	**27**	**50**	**594.174**	**641.685**	**1.235.859**	**3.617.325**	**4.853.184**	**2.164.272,00**
Toscana	6	13	19	176.015	58.68	234.695	184.801	419.496	811.543,78
Umbria	4	2	6	30.976	36.845	67.821	37.051	104.872	66.490,00
Marche	2	6	8	110.125	133.997	244.122	2.178	246.3	390.138,00
Lazio	20	27	47	1.323.990	945.183	2.269.173	2.834.299	5.103.472	6.931.747,00
Centro	**32**	**48**	**80**	**1.641.106**	**1.174.705**	**2.815.811**	**3.058.329**	**5.874.140**	**8.199.918,78**
Abruzzo	-	9	9	-	-	-	38.199	38.199	0,00

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Molise	1	3	4	5.817	6.017	11.834	9.262	21.096	11.004,00
Campania	17	18	35	2.524.375	1.323.818	3.848.193	1.136.760	4.984.953	23.479.050,81
Puglia	6	2	8	146.85	157.904	304.754	4.668	309.422	369.263,50
Basificata	1	4	5	5.936	10.844	16.78	85.639	102.419	13.897,75
Calabria	2	5	7	-	5.625	5.625	82.071	87.696	0,00
Sardegna	-	5	5	-	-	-	91.948	91.948	0,00
Mezzog.	**27**	**46**	**73**	**2.682.978**	**1.504.208**	**4.187.186**	**1.448.547**	**5.635.733**	**23.873.216,06**
Italia	**82**	**121**	**203**	**4.918.258**	**3.320.598**	**8.238.856**	**8.124.201**	**16.363.057**	**34.237.406,84**

Source: MIBAC

Table B – Museum and Archeological Site Visitors and Gross Revenues in Calabria (2007)

Region	Paying Visitors	Non Paying Visitors	Total Visitors	Gross Revenues (EURO)	Net Revenues (EURO)
Calabria	82.162	217.664	299.826	270.696,00	233.903,15
Totali	**16.246.943**	**18.196.154**	**34.443.097**	**106.033.174,64**	**91.356.128,45**

Source: MIBAC

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Table C – Museum and Archeological Site Visitors and Gross Revenues in Calabria (2006)

Region	Paying Visitors	Non Paying Visitors	Total Visitors	Gross Revenue (Euro)	Net Revenue (Euro)
Calabria	87.156	234.184	321.34	279.385,00	241.374,58
Totali	**16.464.517**	**18.110.074**	**34.574.591**	**104.411.476,90**	**90.456.090,87**

Source: MIBAC

Table D – Museum and Archeological Site Visitors and Gross Revenues in Calabria (2007)

Region	Paying Visitors	Non Paying Visitors	Total Visitors	Gross Revenues (EURO)	Net Revenues (EURO)
Calabria	82.162	217.664	299.826	270.696,00	233.903,15
Totali	**16.246.943**	**18.196.154**	**34.443.097**	**106.033.174,64**	**91.356.128,45**

Source: MIBAC

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Table E – Test Details for Variables Requiring Controlled Testing at the municipal Level

Test #	Level	Focus	Test	Variables Tested	Mean	Standard Deviation	Conditions	Significance
1	MUNICIPAL	Overall	Correlation	Import	263652.8773	829885.251	r(407)=.649, p<.001	**Yes**
				Population	4918.00978	12191.92501		
2	MUNICIPAL	Overall	Correlation	Payment	168793.3095	578977.2679	r(407)=.644, p<.001	**Yes**
				Population	4918.00978	12191.92501		
3	MUNICIPAL	Overall	Correlation	Nonprofits	15.84596577	53.43984376	r(407)=.947, p<.001	**Yes**
				Population	4918.00978	12191.92501		
4	MUNICIPAL	Overall	Correlation	Projects	0.750611247	1.834154683	r(407)=.773, p<.001	**Yes**
				Population	4918.00978	12191.92501		

Source: our calculations

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Table F – Test Details for Cultural Sites and Nonprofit Institutions

Test #	Level	Focus	Test	Groups	Variables Tested	Mean	Standard Deviation	Conditions	Significance?
5	MUNICIPAL	Overall	Correlation	N/A	Import per capita	76.65711571	349.0121898	r(407)=.051, p=.301	**No**
					Cultural Sites	0.083129584	0.361008915		
6	MUNICIPAL	Overall	Correlation	N/A	Payment per capita	50.17762088	169.7859754	r(407)=.023, p=.638	**No**
					Cultural Sites	0.083129584	0.361008915		
7	MUNICIPAL	Overall	Correlation	N/A	Projects per capita	0.000239162	0.000842168	r(407)=.012, p=.805	**No**
					Cultural Sites	0.083129584	0.361008915		
8	MUNICIPAL	Overall	T-Test	Cultural Hubs vs Non Cultural Hubs	Import per capita	181.914281	285.7447027	t(407)=1.559, p=.120	**No**
						69.80443568	351.9571151		
					Payment per capita	82.26193164	175.3676609	t(407)=.975, p=.330	**No**
						48.08879856	169.4410029		
					Projects per capita	0.000322192	0.000416972	t(407)=.508, p=.612	**No**
						0.000233756	0.000862651		
					Nonprofit per capita	0.003271259	0.001499017	t(407)=1.448, p=.149	**No**
						0.002803625	0.001569126		
9	PROJECT	Overall	T-Test	Cultural	Import	398116.772	571078.8585	t(132.16)=.849,	**No**

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				Hubs vs Non Cultural Hubs	Payment	337670.958 224841.5001 226596.0204	503184.6204 349274.6561 384277.9269	p=.397 t(304)=-.036, p=.971	**No**
10	PROJECT	Construction Projects	T-Test	Cultural Hubs vs Non Cultural Hubs	Import	746905.1822 459017.2351	687336.0564 584667.2318	t(161)=2.268, p=.025	**Yes**
					Payment	294799.0252 296150.6287	342191.7584 458249.1707	t(161)=-.015, p=.988	**No**
11	PROJECT	Service Projects	T-Test	Cultural Hubs vs Non Cultural Hubs	Import	229950.9314 147980.2261	417595.6796 239387.1805	t(78.483)=1.335, p=.186	**No**
					Payment	191111.9791 117866.9775	350663.8797 178729.7751	t(73.615)=1.447, p=.152	**No**
12	MUNICIPAL	Overall	Correlation	N/A	Import per capita	76.65711571	349.0121898	r(407)=.298, p<.001	**Yes**
					Nonprofits per capita	0.002832209	0.001567179		
13	MUNICIPAL	Overall	Correlation	N/A	Payment per capita	50.17762088	169.7859754	r(407)=.238, p<.001	**Yes**
					Nonprofits per capita	0.002832209	0.001567179		
14	MUNICIPAL	Overall	Correlation	N/A	Projects per capita	0.000239162	0.000842168	r(407)=.280, p<.001	**Yes**
					Nonprofits per capita	0.002832209	0.001567179		

Source: our calculations

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Table G – Test Details for Criminal Hubs

Test #	Level	Focus	Test	Groups	Variables Tested	Mean	Standard Deviation	Conditions	Significance?
15	MUNICIPAL	Overall	T-Test	Criminal Hubs vs Non Criminal Hubs	Import per capita	172.8762716 56.09990732	754.4533403 158.828391	$t(72.350)=1.307$, $p=.195$	**No**
					Payment per capita	87.24736896 42.2576747	321.1840591 113.3519006	$t(.002)=1.173$, $p=.244$	**No**
					Projects per capita	0.000369515 0.000211312	0.001737593 0.000467778	$t(407)=1.449$, $p=.148$	**No**
					Nonprofit per capita	0.00309197 0.002776711	0.001878108 0.001489781	$t(407)=1.552$, $p=.121$	**No**
16	PROJECT	Overall	T-Test	Criminal Hubs vs Non Criminal hubs	Import	405360.2 304096.3	662116.254 328603.592	$t(218.37)=1.688$, $p=.093$	**No**
					Payment	235716.2285 216771.6552	482070.12 226492.7	$t(211.906)=.438$, $p=.662$	**No**
17	PROJECT	Construction Projects	T-Test	Criminal Hubs vs Non Criminal hubs	Import	715273.54 385207.49	851021.34 362961.74	$t(71.7)=2.857$, $p=.006$	**Yes**
					Payment	348386.3 265367.778	650963.85 245162.76	$t(68.88)=.949$, $p=.346$	**No**
18	PROJECT	Service Pro-jects	T-Test	Criminal Hubs vs	Import	201021.73 143433.74	386828.66 151559.01	$t(141)=1.028$, $p=.306$	**No**

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Non Criminal hubs	Payment	161428.26	309001.67	t(141)=.9, p=.37	**No**
		120513.95	143095.92		

Source: our calculations

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Table H – Test Details for Chiravalloti Municipalities

Test #	Level	Focus	Test	Groups	Variables Tested	Mean	Standard Deviation	Conditions	Significance?
19	MUNICI-PAL	Overall	Correlation	N/A	Import per capita	76.6571157 1	349.012189 8	r(407)=.000, p=.996	**No**
					2000 Winning Party Vote	13.3138471 4	13.3138471 4		
20	MUNICI-PAL	Overall	Correlation	N/A	Payment per capita	50.1776208 8	169.785975 4	r(407)=-.005, p=.912	**No**
					2000 Winning Party Vote	13.3138471 4	13.3138471 4		
21	MUNICI-PAL	Overall	Correlation	N/A	Projects per capita	0.00023916 2	0.00084216 8	r(407)=-.032, p=.516	**No**
					2000 Winning Party Vote	13.3138471 4	13.3138471 4		
22	MUNICI-PAL	Overall	T-Test	2000 Government vs Non 2000 Government Municipalities	Import per capita	167.839635 9	320.669952 9	t(407)=.836, p=.404	**No**
						74.3718395 1	349.757957 4		
					Payment per capita	96.3263749 4	259.534848 2	t(407)=.870, p=.385	**No**
						49.0210105	167.252955 4		
					Projects	0.00024982	0.00037642	t(407)=.040,	**No**

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				per capita		3	1	p=.968	
						0.000238895	0.000850799		
				Nonprofits per capita		0.003309401	0.001674112	t(407)=.975, p=.330	**No**
						0.00282025	0.001564774		
23	PROJECT	Overall	T-Test	2000 Government vs Not 2000 Government Municipalities	Import	443840.68	693836.001	t(46.385)=.992, p=.361	**No**
						340176.78	490574.373		
					Payment	220925.98	450132.405	t(304)=-.095, p=.924	**No**
						226923.74	362442.18		
24	PROJECT	Construction Projects	T-Test	2000 Government vs Not 2000 Government Municipalities	Import	893725.96	1001117.65	t(13.75)=1.56, p=.141	**No**
						470339.73	551257.75		
					Payment	315106.46	687320.38	t(161)=.17, p=.865	**No**
						294124.62	413018.89		
25	PROJECT	Service Projects	T-Test	2000 Government vs Not 2000 Government Municipalities	Import	210566.83	272061.58	t(141)=.544, p=.587	**No**
						172984.72	333533.2		
					Payment	172091.65	261274.78	t(141)=.563, p=.575	**No**
						140605.37	262040.23		

Source: our calculations

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Table I – Test Details for Loiero Municipalities

Test #	Level	Focus	Test	Groups	Variables Tested	Mean	Standard Deviation	Conditions	Significance?
26	MUNICIPAL	Overall	Correlation	N/A	Import per capita	76.65711571	349.0121898	$r(407)=.057$, $p=.253$	**No**
					2005 Winning Vote	10.42941996	46.66447433		
27	MUNICIPAL	Overall	Correlation	N/A	Payment per capita	50.17762088	169.7859754	$r(407)=.026$, $p=.597$	**No**
					2005 Winning Vote	10.42941996	46.66447433		
28	MINICIPAL	Overall	Correlation	N/A	Projects per capita	0.000239162	0.000842168	$r(407)=.027$, $p=.590$	**No**
					2005 Winning Vote	10.42941996	46.66447433		
29	MUNICIPAL	Overall	T-Test	2005 Government vs Non 2005 Government Municipalities	Import per capita	62.72266221	61.86693222	$t(407)=-.128$, $p=.898$	**No**
						77.00635013	353.2399981		
					Payment per capita	43.96373551	56.5475456	$t(407)=-.117$, $p=.907$	**No**
						50.33335735	171.6923945		
					Projects per capita	0.000220236	0.000264138	$t(407)=-.072$, $p=.943$	**No**
						0.000239636	0.000851751		
					Nonprofits per capita	0.00339345	0.001566828	$t(407)=1.147$, $p=.252$	**No**
						0.002818143	0.001566567		
30	PROJECT	Overall	T-Test	2005 Gov-	Import	352020.5176	519751.9532	$t(304)=-.027$,	**No**

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				ernment vs Not 2005 Government Municipalities		354391.8711	523577.0347	p=.978	
					Payment	197861.4785	299529.4749	t(304)=-.526, p=.599	**No**
						230615.8142	385423.1785		
31	PROJECT	Construction Projects	T-Test	2005 Government vs Not 2005 Government Municipalities	Import	626591.95	766339.108	t(161)=.768, p=.444	**No**
						495439.5744	595270.7453		
					Payment	234569.73	381277.2516	t(161)=-.544, p=.587	**No**
						301691.8319	446048.5593		
32	PROJECT	Service Projects	T-Test	2005 Government vs Not 2005 Government Municipalities	Import	214734.8014	262330.2794	t(141)=.663, p=.528	**No**
						171643.1077	335718.9155		
					Payment	179507.3529	255335.3941	t(141)=.743, p=.459	**No**
						138526.0173	263161.6432		

Source: our calculations

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