



# NOTA DI LAVORO

11.2010

---

**Loving Cultural Heritage  
Private Individual Giving and  
Prosocial Behavior**

---

By **Enrico Bertacchini** and **Walter Santagata**, Department of Economics "Cognetti de Martiis", University of Torino

**Giovanni Signorello**, Department of Agricultural Economics and Resource Valuation, Environmental Valuation Laboratory (Envalab), University of Catania

## GLOBAL CHALLENGES Series

Editor: Gianmarco I.P. Ottaviano

### Loving Cultural Heritage. Private Individual Giving and Prosocial Behavior

By Enrico Bertacchini and Walter Santagata, Department of Economics “Cognetti de Martiis”, University of Torino

Giovanni Signorello, Department of Agricultural Economics and Resource Valuation, Environmental Valuation Laboratory (Envalab), University of Catania

#### Summary

The aim of this paper is to analyse patterns of private individual giving to Cultural Heritage institutions in Italy. Based on the emerging economic literature on pro-social behavior, we carried out a Contingent Valuation survey to assess individuals' willingness to donate to museums and heritage organizations according to different conditions and set of incentives. Our findings reveal that intrinsic motivations and accountability of the recipient institutions may be more effective drivers for eliciting charitable giving than the usually proposed fiscal incentives. The results provide avenues for future empirical research and policy suggestions for fund raising cultural institutions.

**Keywords:** Charitable Giving, Cultural Heritage, Contingent Valuation, Pro-social Behavior

**JEL Classification:** D11, D12, H4, Z1

*The idea of this research project has originated within the Cultural Economics Committee of the Italian Ministry of Cultural Heritage. We would like to thank the Associazione Civita of Rome, which supported the research.*

*Address for correspondence:*

Giovanni Signorello  
Department of Agricultural Economics and Resource Valuation  
Environmental Valuation Laboratory (Envalab)  
University of Catania  
Catania  
Italy  
E-mail: g.signorello@unict.it

# Loving Cultural Heritage

## *Private individual giving and prosocial behavior*

E. Bertacchini\*, W. Santagata\*, G. Signorello\*\*

\* *Department of Economics “Cognetti de Martiis”, University of Torino*

\*\* *Department of Agricultural Economics and Resource Valuation, Environmental Valuation Laboratory (Envalab), University of Catania*

### *Abstract*

The aim of this paper is to analyse patterns of private individual giving to Cultural Heritage institutions in Italy. Based on the emerging economic literature on pro-social behavior, we carried out a Contingent Valuation survey to assess individuals' willingness to donate to museums and heritage organizations according to different conditions and set of incentives. Our findings reveal that intrinsic motivations and accountability of the recipient institutions may be more effective drivers for eliciting charitable giving than the usually proposed fiscal incentives. The results provide avenues for future empirical research and policy suggestions for fund raising cultural institutions.

JEL Codes: D11, D12, H4, Z1

Keywords, Charitable Giving, Cultural Heritage, Contingent Valuation, Pro-social Behavior

### *Acknowledgments*

The idea of this research project has originated within the Cultural Economics Committee of the Italian Ministry of Cultural Heritage. We would like to thank the Associazione Civita of Rome, which supported the research.

## **1. Introduction**

The aim of this paper is to analyse the motivations behind individual giving for cultural heritage. Even if donations for culture generally rank low in the priorities of donors, they represent a crucial funding source in a context of general decrease of availability of resources to arts and culture. Hence, from a policy viewpoint, it becomes essential to find out the incentives and contexts that stimulate private giving.

Yet, in the last decades the cultural policy agenda has mainly focused on tax policy. Lowering the price of giving follows a rational economic logic that assumes a negative relation between the monetary cost of giving and the supply of charitable acts by individuals.

However, even economists have begun in the last decades to recognize and study the determinants of prosocial behavior other than the pure monetary and price incentives (i.e. Titmuss, 1974; Andreoni, 1988; Rose-Ackerman, 1996; Frey, 1997; Frey and Oberholzer-Gee, 1997; Benabou and Tirole, 2006). Pro-social motivations, such as altruism, moral codes of conduct and civic responsibility, may represent driving forces for engaging in the voluntarily contribution of collective goods. At the same time,

reputational concerns may substitute monetary incentives with social forms of compensation and equally generate virtuous dynamics in prosocial behavior. These findings, have so far found little reflex in the cultural policy debate.

In this paper we focus on the demand side of charitable giving in order to provide a more comprehensive framework of the determinants of private donations to cultural heritage and to assess their implications for cultural policy. We argue that in order to tailor more effective fundraising strategies for cultural heritage we need to address intrinsic, extrinsic and reputational motivations. Based on this broader approach, we present the results of a recent contingent valuation survey carried out on a sample of Italian population to provide empirical evidence of voluntary donations and to investigate factors and conditions influencing individual giving to preserve cultural heritage.

It is finally worth to notice that individual giving for charity is both a universal value driven by ethics and moral rules, and a phenomenon influenced by local culture and institutional factors. This means that every theory of giving must contain general explanations and take account of local cultural conditions. In this sense, the exploration of the Italian case is a contribution both to the general theory and to the influence of local contexts.

The paper is organized as follows: Section 2 shows the main limits of private individual donations as a funding strategy for arts and culture; Section 3 describes the general model of private donations; Section 4 gives details on the survey design and implementation; Section 5 discusses the main results while Section 6 concludes with policy recommendations.

## **2. Individual giving to cultural heritage: residual choice, misplaced emphasis**

Charitable giving to cultural heritage seems to suffer from two main drawbacks. The first one relates to the limited appeal of cultural heritage for attracting donations as compared to other sectors. The second is a misplaced emphasis in cultural policy, whereby introducing tax incentives seems to be the preferred mechanism of policymakers in search for easy fundraising and popularity.

Among the different recipient sectors, private support to arts, culture and cultural heritage organizations ranks low in the amount of charitable donations. According to some rough estimate, internationally perhaps 10% of private philanthropy flows to culture (Inkei, 2001). In United States, in 2007 out of 307 billion dollars, only 4,8% of the total amount has been directed to organizations in arts, culture and humanities (Giving Usa Foundation, 2008). In a similar vein, in Italy out of 5,5 billions euro of charitable giving estimated in 2007<sup>1</sup>, arts and culture organizations ranks equally low as a recipient sector. For instance, recent surveys on donors' behavior in Italy<sup>2</sup> reveal that the share of donations directed to arts, culture and cultural heritage institutions range between 1 to 3,2%.

---

<sup>1</sup> *Il Sole 24ore*, 24 dicembre 2007

<sup>2</sup> See i.e. Tomorrow SWG, *Il monitor delle donazioni*, Milano, maggio 2007; Doxa, *Comportamenti di donazione degli italiani*, Roma, ottobre 2006

Donating for culture seems therefore a residual choice, coming behind other sectors such as religious organizations, health, education or human services. In the competitive market for charitable giving potential donors' preferences are likely to be directed towards sectors for basic needs fulfillment rather than to the production of collective goods like arts and cultural heritage preservation. For instance, people may have more direct experience of health disease or feel a stronger personal sense of belonging to religious values.

Moreover, it seems there has usually been a misplaced emphasis on fiscal incentives, which in contrast have failed in matching the set of unobservable priorities of potential donors in cultural activities. As noted by Schuster (2006), the main approach in the cultural policy agenda has centered in tax incentives to donors, as a measure to lower the price of giving and thus stimulate the voluntarily contribution of resources to the collective good. However, so far there has not been clear evidence that tax exemption-based support policy has induced private donations to culture. First, the economic effect of tax incentives on donations is dubious, as some empirical studies show that giving is moderately price elastic while others inelastic (Steinberg, 2003). Second, from a policy-making viewpoint, there is concern that the induced private contribution by fiscal incentive is far less than the foregone tax (Feld et. al., 1983). This is mainly because part of the total contribution provided under the tax incentives scheme would have been donated even without any fiscal support policy.

Both the residual choice of donors and the misplaced emphasis in fiscal policies for donations ask for a reassessment of the analysis of individual motivations and institutional incentives that drive donors' behavior. For the sake of our analysis we focus on Italy, because it is an appropriate example where donations to cultural heritage represent a residual choice and are affected by a misplaced emphasis in tax incentives as a way to stimulate them.

The country is very rich of museums and heritage sites (more than 3500). Most of them are public institutions and the system is highly centralized leaving a modest financial autonomy to public museums. Further, public funds, both at the local and state level, are limited. Fundraising activity attracting donors is not fully developed, except for a tax rebate of 19% for the private contribution either to the acquisition, preservation and restoration of artworks and buildings or for the organization of art exhibitions.

However, this fiscal scheme seems to not attract many contributors. For instance, the total collected funds in 2008 accounted for 20 millions Euros and only about 1% or 2% of donations through this mechanism comes from individual giving<sup>3</sup>.

At the same time, voluntarily contributions in donation boxes at the entrance of museums are not implemented; neither membership nor other auxiliary services are fully used for collecting funds. Given the almost complete lack of individual giving to cultural heritage and the underdeveloped fundraising mechanisms, it is therefore interesting to explore how novel fundraising strategies may be implemented starting from the potential donors' needs and motivations.

---

<sup>3</sup> Data from the Italian Ministry of Cultural Heritage, 2005-2007, Rome

### 3. Motivations for giving to Cultural Heritage

The preservation and valorization of cultural heritage is commonly seen as a public good and therefore private donations to cultural heritage represent a form of pro-social behavior to achieve that goal. Following the current literature on donations and philanthropy (Andreoni, 2008; Bekkers and Wiepking, 2007; Benabou and Tirole, 2006; Vesterlund, 2006), we adopt a framework where agents' pro-social behavior reflects an endogenous mix of motivations, which must be inferred from their choices and the context.

#### *Intrinsic Motivations*

Intrinsic motivations are those arising from within the person. According to Deci (1975), a performed activity is driven by intrinsic motivations when one receives no apparent reward except the activity itself. Social psychologists and scientists have long recognized that joy of giving, moral codes of conduct and civicness may be driving forces for engaging in prosocial behavior such as the voluntarily contribution to collective goods (Batson 1998; Mansbridge, 1998). By contrast, standard economic theory has found more puzzling and challenging to understand why in many circumstances people act unselfishly without engaging in free riding behavior.

Since 1970, Richard Titmuss (1970) showed that in specific transactions, namely blood donations, individual's sense of civic duty is more effective than monetary rewards in providing higher blood quality and better supply. Albeit highly debated, this seminal insight provided one of the first contributions for introducing intrinsic motivations within the standard economic framework of human behavior.

From an economic viewpoint, there can be three main possibilities to address the complex psychological process defining intrinsic motivation in private giving (Andreoni, 1988). First, agents may care in a pure altruistic way about the overall level of public good to which their actions contribute. In this familiar public good provision model, intrinsic motivations reflect the individual willingness to contribute according to the preferences for the public good. A second possibility to frame intrinsic motivations is considering forms of impure altruism. For instance, agents may obtain some internal satisfaction – a “warm glow” - from the act of giving, in addition to what they care about the overall level of public good (Andreoni, 1990). Third, intrinsic motivations may also be taken into account by assuming moral constraints, ethical codes and principles of reciprocity or interdependent preferences of individuals (Sugden, 1984).

Looking at individual donations to cultural heritage, a mix of the three explanations can be assumed to be the main source of intrinsic motivation. In summary, we expect the willingness to donate to cultural heritage is positively related to:

- the past cultural heritage consumption, whose *addiction effect* lowers the cost of accessing culture; the more the consumption, the highest are the direct benefits deriving from contributing to the preservation of cultural heritage;
- the willingness to enhance the existence and option values of cultural heritage at the advantage of both present and future generations;
- the extent an individual is affected by warm glow effect, which may be positively related to past experience of donations, as the experience of moral satisfaction in the past may induce people to replicate new acts of giving;

- the sense of civicness and belonging to a community; the more an individual is embedded in a community that historically have practiced charitable giving the more may be willing to donate as a form of indirect gift and reciprocity.

### *Extrinsic Motivations*

Extrinsic motivations refer to the set of economic incentives and conditions coming from outside the person. Individuals' rational decision is in fact based on a cost-benefit assessment of their engagement in pro-social activity.

The main class of extrinsic motivation is made of monetary rewards and other forms of economic incentives, such as tax rebates. The basic idea is that such forms of economic compensation lower the opportunity cost of engaging in prosocial behavior and thus increase the overall supply of contributions to cultural heritage.

This argument follows the basic and strong assumption that extrinsic and intrinsic motivations are independent and usually the formers reinforce the latter in acting prosocially. For this reason, the additional monetary compensation and tax rebate proposed by the policy makers are commonly assumed to increase the supply of donations.

Yet it is necessary to understand which is the optimal level of monetary compensation that will make extrinsic incentives work. For instance, if individuals perceive a tax rebate too small, the opportunity cost of contributing still outweighs the sum of monetary rewards and potential benefits expected from the public good. In this case, the economic incentive is ineffective.

Moreover, scholars have also reported in some circumstances phenomena of motivational crowding out, whereby extrinsic incentives, such as monetary compensation and rewards, may crowd out spontaneous prosocial acts, lowering the overall amount of contribution. For instance, Frey and Oberholzer-Gee (1997) report a field experiment where direct monetary compensation by the government reduced people's acceptance of a noxious facility. The main explanation for this phenomenon is that monetary compensation generated a sort of *bribe effect* and crowded out the intrinsic sense of civic duty among citizens.

In our knowledge, motivational crowding out of intrinsic motivations to donate by monetary compensation has never been documented in charitable giving and this possibility has still to be tested through empirical evidence.

### *Reputational Motivations*

Reputational motivations stem from the search for social recognition. In general, for cultural and historical reasons, giving to charitable organizations is viewed as a positive act in many societies. Therefore, beyond intrinsic and extrinsic motivations, donations may be driven by reputational concerns. For instance, Glazer and Konrad (1996) stress this point by presenting a model where the main driver for monetary giving is social signaling of status, such that donations by rich people substitute in specific cases the conspicuous consumption of luxury private goods.

In more general terms, reputational concerns for giving do not only raise for signaling social and wealth status, but simply for obtaining public praise, pursuit of distinction and image rewards. These factors depend more on social pressure and norms (Benabou and Tirole, 2006).

Because acquiring reputation through giving follows a social signaling motive, this behavior is ultimately affected by the visibility of the act. If the donation is anonymous or not easy to detect, then it is hard to gain reputation. As a consequence, anonymous donations are those considered the most valuable. Arguably, it is for this reason that charitable and non-profit institutions make ample use of donors' desire to demonstrate their generosity and selflessness, with displays ranging from lapel pins and T-shirts to plaques in opera houses or museums and buildings named after large contributors. Furthermore, even if there exist mechanisms of visibility, reputational concerns work better if potential donors expect their action is visible by a clearly defined reference peer group. For instance, Glazer and Konrad (1996) report that the high level of non anonymous contributions to American universities made by alumni may also be caused by the desire to signal one's status and obtain public praise by the group of former classmates.

In the context of giving to cultural heritage and museums, affluent donors may be motivated to give in order to signal their own social status if mechanisms of publicity and visibility are available. However, it is not clear in this context if image motivation and the quest for public praise have an effect on medium and small contributors. Indeed, being enlisted in a public list of donors or similar mechanisms of ex-post publicity might not represent a sufficient social reward.

## **4. Survey design and implementation**

There is a growing empirical literature on patterns of charitable giving. From a methodological viewpoint, it is possible to group empirical studies in three categories at least. In the first category there are studies which use data set of actual and past donations to charities in order to assess the determinants of private giving (Smith et al., 1995; Buraschi and Cornelli, 2002). In the second category there are studies which use laboratory and field experiments to test how people react in their giving practices according to different set of incentives and contexts, with a special emphasis on the effects of matching gifts on charitable giving (Karlán and List, 2007; Rondeau and List, 2006; Landry et al., 2006). Finally, in the third category there are studies that employ contingent valuation survey to estimate donation, and investigate motives and attitudes behind this behavior (Santagata and Signorello, 2000; Thompson et al., 2002).

In this paper we use contingent valuation for our empirical analysis. The main reason for analysing hypothetical donations instead of examine real donation data in Italy is due, as noted before, to the limited number of individual donations to cultural heritage.

Contingent valuation surveys based on charitable donation might be not full demand revealing due to potential free-riding, and might run the risk of "hypothetical bias". However, as Champ et al. (1997), and Champ and Bishop (2001) argued, donation vehicles are potentially more useful than is commonly recognized, especially in the field of cultural heritage. In fact, donation mechanisms offer practical advantages that may outweigh the drawback of potential free-riding: first, they can estimate an empirically testable lower bound on Hicksian surplus; second, they may be less subject to vehicle bias; third, donation mechanisms are more credible and more familiar than other mechanisms, as individuals normally have experience in donations; finally, as noted by Kahneman and Knetsch (1992), when in surveys individuals are asked for the willingness to pay, their responses include the purchase of moral satisfaction for contributing to



public goods. The latter is known as a bias in the measurement of the willingness to pay through contingent valuation, but in the case of analyzing donations it is in line with pro-social behavior based in intrinsic motivation.

In order to collect the data a Computer-Assisted Telephone Interviewing (CATI) was implemented. Data collection took place from April to May 2009 by a specialized polling and market research company. A probabilistic stratified sample of 1000 individuals over 25 who have visited at least one museum during the preceding 12 months was selected from telephone directories. The sample is representative of the Italian population of visitors to museums or heritage sites according to sex, age and geographic area.

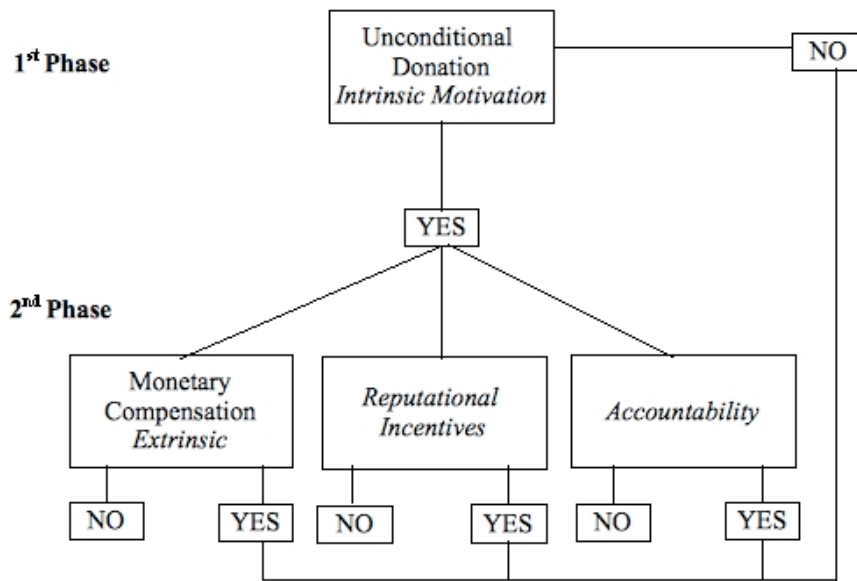
The questionnaire was designed following best practice guidelines, and comprised of three parts. The first part started by asking individual to choose within a list one museum or heritage site that she/he considers representative of the Italian cultural heritage in her/his local area. This variation across individuals in the good to be valued (or receiving donations) is the most significant feature of our application respect to the common contingent valuation studies where only a good is valued.

The first question was followed by a series of questions regarding individual experience on donations. The second part of the questionnaire included the contingent valuation scenarios and questions eliciting donations for each depicted scenario. In order to assess the role of different incentives for the donation to cultural heritage and museums, we constructed a simple framework articulated into two phases, as shown in Figure 1. In the first phase, respondents were asked to state their willingness to donate for selected cultural heritage institution in a neutral scenario. This would be considered as a form of pure prosocial behavior without any additional incentive. The answer to this question represent the baseline case for testing the effectiveness of additional incentives and contexts linked to the opportunity of giving. In the second phase, the individuals are asked if they would modify their stated amount facing three new independent scenarios, namely a) fiscal incentives (tax rebates), b) reputational incentives and c) transparency of the destination and efficient use of the funds donated. The same question is posed to those not willing to donate in the first phase in order to test if they are positively attracted by the changed conditions. All the questions concerning the three scenarios were randomized in each interview in order to avoid question order bias effects among the new scenarios.

As far as tax incentives are concerned, the standard fiscal scheme has been proposed. Actually, in Italy, the law allows tax rebates for individual charitable donations at a level of 19% of the amount donated. It is important to notice that, because of the very scarce number of individual donors to cultural heritage applying for this tax rebate, we assume that this proposed scenario represents a completely new context at the respondents' eyes as compared to the baseline neutral scenario.

In our experimental setting, we proposed an additional scenario with 50% of fiscal incentives in order to control for consistent economic behavior of respondents.

Figure 1 – Questionnaire Framework



For the scenario of reputational incentives, recipient institutions would publicize donations through mechanism of social signaling and visibility according to the amount given (a public list of donors, placing donors recognition plaques).

Finally, the last scenario refers to the accountability in the management and destinations of the donations, such that donors would receive clear and detailed information about how and for which projects their money would be used.

The respondents' willingness to donate a lump sum for preserving and improving their selected heritage good was elicited using the interval open-ended format, recently proposed by Håkansson (2008). In the interval open-ended elicitation format, respondents state their willingness to donate in the form of an interval rather than a point estimate as in traditional open-ended format. In this way, it is possible to capture potential donation uncertainty, more information about individuals' preferences, and identify upper and lower boundary of estimates.

Further, respondents were asked a series of follow up questions to identify the motives for donating or not to the good they choose and to inquire about preferred modes of donation.

The third part of the questionnaire concluded with standard socio-economic questions<sup>4</sup>.

<sup>4</sup> Questions on gender and age were posed at the beginning of the interview in order to fit sampling criteria.

*Table 1 - Description and value of the sample socio-economic variables*

<b>Variables</b>	<b>Description</b>	<b>Mean</b>	<b>S.D.</b>
Sex	Male=1 Female=0	0,43	0,495
Age	Categorical Variable:1(25-44 years), 2(45-64), 3 (65+)	1,89	0,706
North	Residents in North Italy=1 Other=0	0,46	0,499
Centre	Residents in Centre Italy=1 Other=0	0,2	0,4
Education	Years of education	14,04	3,352
Job	Employed=1 Other=0	0,58	0,494
Visits	Number of Visits to Museums and Heritage sites in the last 12 months	3,03	1,625
PastDonation	Having donated in the past 3 years Yes=1 No =0	0,77	0,422
Numpastdon	Number of donations in the past three years	2,84	1,91
DonCulture	Having donated to Arts and Culture Institutions=1 Other=0	0,04	0,205
Heritage Importance	Importance of Cultural Heritage conservation for the respondent 1=low to 3= high	2,85	0,369
Visits	Number of visits to museums in the past 12 months	3,03	1,625
Voluntary Organization	Belonging to Voluntary Organizations Yes=1 No=0	0,34	0,473
ValuePastDon	Highest amount donated in the past 3 years (stated by the respondent)	100,20	413,199

Table 1 presents the main characteristics of the sample. As can be noted, the number of people engaged in prosocial activities is relevant. A great majority of the respondents (77%) has made on average 2,84 donations in the last three years and the highest amount donated is on average 100 Euros. However, as expected, a small number of respondents (4%) have donated to cultural organizations. Further, 34% of the sample belongs to a voluntary organization. Further, respondents consider the conservation of cultural heritage a relevant issue. This result may be partly explained by the fact that the respondents are interested in cultural heritage having been chosen among those who visited a cultural site at least once in the past year. For instance, the average number of visits to museums is about three times a year.

## **5. Results**

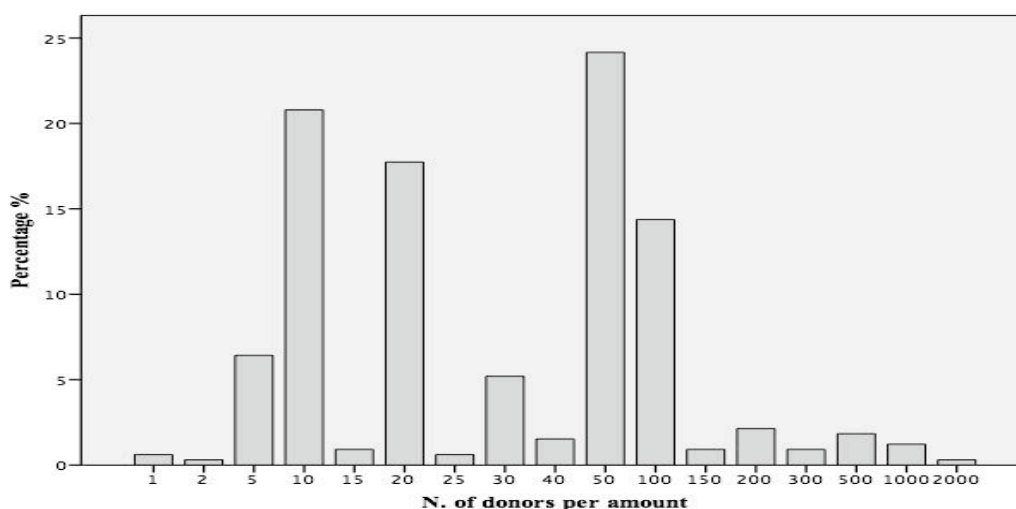
### *Intrinsic motivations and contributions to cultural heritage*

The 32,7% of the respondents, 327 out of 1000 individuals, was willing to donate for a leading Italian museum or heritage site located in the region of residence. The average

donation is € 70,81 with a median of € 30, a minimum of € 1 and a maximum of € 2000<sup>5</sup>. This result comes out from the basic scenario in which individuals are supposed to behave following exclusively intrinsic motivations, that is without any explicit form of incentives or other potential benefits.

A first glimpse at the distribution of the amounts donated (Figure 2) shows two peaks, respectively around 10-20 € and 50-100 €. This suggests the existence of two main classes of contributors. The former is characterized by small amounts, typical of those who spontaneously give in donation boxes at the entrance to museums when either or not an entrance fee is charged. Its main trait is likely to correspond to the use value for the consumer. The latter class is more likely to patronage behaviour aimed to the realization of passive use values of cultural heritage: existence, option, and intergenerational value.

*Figure 2 – Percentage of donors per amount of donation*



Further, Table 2 presents the number of contributors and the amount declared according to the main socio-demographic characteristics of the sample. Women are more likely to contribute than men and donate a greater amount. Occupied respondents have a higher propensity to donate and contribute a larger amount of money than unoccupied individuals. As for the age of donors, data show that young people are more willing to donate to cultural heritage. Nevertheless, the average amount increases with the age of donors. Similarly, there are relatively more donors from the South of Italy, but the amount per donor is sensibly less than that donated by contributors from North and Centre Italy. Educational level of donors positively affects both the propensity to contribute and the amount of donation.

<sup>5</sup> Throughout the analysis and the in econometric estimates we use only the upper bound of the monetary interval stated by the respondents.

Table 2 – Donations according to main socio-demographic variables

	<b>Donors</b>	<b>% of sample group</b>	<b>Mean</b>	<b>S.D</b>
<b>Sex</b>				
Male	126	29,23%	63,37	94,71
Female	201	35,33%	75,47	200,85
<b>Region</b>				
North	138	29,74%	78,2	200,843
Centre	59	29,50%	77,14	155,17
South	130	38,69%	60,08	132,17
<b>Job</b>				
Unoccupied	124	29,59%	64,17	114,689
Occupied	203	34,94%	74,86	193,64
<b>Age</b>				
25-44	126	40,78%	53,5	125,53
45-64	146	29,80%	68,71	136,21
65+	55	27,36%	116,02	285,13
<b>Education</b>				
Low School	34	25,00%	27,74	28,39
Undergraduated	141	29,50%	63,8	146,05
Graduated	152	39,38%	86,94	200,64
<b>Total Sample</b>	<b>327</b>	<b>100%</b>	<b>70,81</b>	<b>168</b>

Within the group of donors, additional questions in the survey reveal that anonymous mechanisms<sup>6</sup> of donations account for 61% of donors. One explanation for this evidence may be that the majority of pure prosocial donors prefer not to reveal their identity. Another possibility is that the choice of anonymous mechanisms of donation is related to smaller amounts of contribution. In our case, while we cannot test the first hypothesis, for the latter the correlation between the amount donated and the mechanism of publicity is positive ( $\rho = 0,241$ ) and significant at 0,01% level.

Further, it can be noted that 78% of the donors' sample is motivated by passive use values of cultural heritage (existence, intergenerational and option values), 17% is motivated by use-value reasons (i.e. improving the quality of visitors' services, acquiring new artworks), while only a small fraction (1%) expressly justify its contribution with the "joy of giving". These results confirm that the main intrinsic motivational drivers are not directly connected with the direct use of cultural good, but with preferences for the public good characteristics of cultural heritage.

<sup>6</sup> For anonymous mechanisms of donations we adopt the criterium of traceability of donors' contribution. Anonymous mechanisms we proposed are: 1) in a donation box and 2) through sms messages. Non anonymous methods we proposed are 1) bank and postal transfers and 2) membership and patronage schemes.

As for the non-donors, we explore the motivation of their refusal. The majority (47%) of those not willing to contribute to cultural heritage declare they have priorities for contributions in other charitable sectors and 25 % state that it is unfair to contribute beyond the public support.

In order to better analyse the determinants of donations due to individuals' intrinsic motivations we run a 2 steps model (Heckman, 1979) where we test the significance of the main characteristics of the respondents. This involves estimating a probit model of the form

$$G_i = \beta Z_i + u_i \quad (1)$$

in the first step, where  $G_i$  is a dummy variable equal to 1 if the respondent makes a donation and 0 otherwise. In the second step the regression

$$(Amount \mid G_i > 0) = \gamma X_i + \theta \lambda_i + e_i \quad (2)$$

is estimated using a two-stage least squares, where  $\gamma$  is a vector of coefficients,  $\theta$  is a scalar coefficient and  $\lambda_i$  is the Heckman correction term (inverse Mills ratio) required for consistent estimation. As for the explanatory variables, the same socio-demographic variables have been used in both stages to test the propensity to donate and the amount contributed. However, taking into account past experience of donations we expect that the dummies *PastDonation* and *DonCulture* are more likely to affect only the decision to donate at all, while the highest stated amount donated in the past (*ValuePastDon*) is expected to affect the second stage of the model.

The econometric estimates (Table 3) confirm the expected results on donors' behavior based on intrinsic motivations. First, individual education increases the probability to donate and the amount contributed. Educational level is indeed usually considered as a proxy variable for cultural consumption, which in turn determines a greater consideration for culture and cultural heritage. Second, past experiences of giving - and especially donation to culture and arts organizations - matter in determining the willingness to donate. However, the level of past contributions seems to not affect the amount donated. Third, the greater is the importance given by respondents to the conservation of cultural heritage the higher is the probability to donate and the larger is amount contributed.

Table 3 – 2 Steps Heckman model

Variables	Parameter Estimates	
	Sample size	
	N=1000	N=327
	Step 1	Step 2
<i>Dependent Variable</i>	<i>Willingness to donate Yes=1 No=0</i>	<i>Amount contributed</i>
Constant	-1,804*** (-4,26)	-559,77** (-3,03)
Age	-0,211** (-3,13)	4,91 (0,26)
Sex	-0,080 (-0,91)	-30,68 (-1,31)
North	-0,204** (-2,13)	-15,231 (-0,57)
Centre	-0,216* (-1,80)	-18,105 (-0,54)
Job	-0,045 (-0,46)	19,302 (0,80)
Education	0,032** (2,27)	8,78** (2,27)
DonCulture	0,545** (2,73)	-
PastDonations	0,398** (3,69)	-
Importance	0,376** (2,86)	88,87** (2,07)
Voluntary Organization	-0,077 (-0,85)	-
Visits	-0,33 (1,18)	8,435 (0,25)
ValuePastDon		0,02 (1,46)
Inverse Mills Ratio		206,47** (2,76)
Log Likelihood	-597,17	-2120,4
McFadden Pseudo R2	0,055	
Adjusted R-squared		0,0047
Chi-squared	69,72	37,18

t-ratios in parentheses  
 \* significant at  $\alpha=0,10$   
 \*\* significant fat  $\alpha=0,05$   
 \*\*\* significant at  $\alpha=0,01$

### *The role of extrinsic and reputational motivations*

The second step of the analysis deals with the additional effect of extrinsic and reputational incentives on the donation choice expressed by the individuals. In order to have a comprehensive and simultaneous understanding of the characteristics of the respondents and to understand how the individuals are attracted by different incentives, we identified a variable representing the most significant choice of donation for each individual among the different scenarios, namely pure prosocial behavior, fiscal incentive (tax rebates 19%) and reputational mechanism. In other words, when the individual willingness to donate is positive for two or more scenarios, the highest willingness to donate will be taken as representative of the best choice. Consequently, the respondent can be classified according to the following choices: being a non-donor, a pure prosocial donor (reacting just to intrinsic motivations) and a donor reacting either to reputational incentives or monetary compensation (tax rebates 19%). Table 4 illustrates the descriptive statistics of the four options.

*Table 4 – Donors' behavior according to the best choice variable*

CHOICE	Mean (€)	Total donors	Initial non-donors	Total Amount Donated (€)
Pure Prosocial	71,96	260	0/260	18.709
Reputational Incentives	330,03	36	10/36	11.880
Fiscal Incentives 19%	68,89	92	51/92	6.338
No Donation	0	612	612/612	0

One of the most evident results is that 260 individuals are pure prosocial donors and their average donation is 71,96 €. This means that about 80% (260 out of 327) of those who were initially willing to contribute has not accepted to change his amount according to new incentives.

Only 92 respondents have chosen monetary compensation as the most significant choice in terms of amount donated, while those who reacted most to reputational incentives are just 36. The introduction of new incentives (fiscal rebate at 19% and reputational mechanisms) attracts as well contributors from those initially stating their non-willingness to donate. In general, the amount of new contributors generated by monetary and reputational incentives is respectively 8,2% and 1,5% of the initial non-donors.

Looking at the average amount donated by the different classes of donors two considerations are at stake. First, the donors responding to reputational incentives contribute the highest amount, equal to an average of 330,03 €. Second, the average donation by those reacting most to monetary compensation is the lowest one and in particular below the average amount donated by the pure prosocial group. Arguably, this latter result is due to the fact that a large number of donors reacting most to the tax rebate were initial non-donors and their willingness to donate stimulated by the fiscal incentive is still lower than that of pure prosocial donors.



### *New Contexts*

After the analysis of the standard incentives to donate we consider two additional scenarios to better understand the role of fiscal incentives and accountability affecting the willingness to donate.

*Table 5 – Donors behavior according to the best choice variable with new contexts*

CHOICE	Mean	Total Donors	% Initial Non Donors in the group	Total Amount Donated (€)
No Donation	0	473	100%	0
Fiscal Incentives 19%	68,12	32	56,25%	2.180
Fiscal Incentives 50%	146,4	166	36,75%	24.302
Reputational Incentives	542,62	16	31,25%	8.682
Transparency/ Accountability	123,48	191	60,73%	23.585
Pure Prosocial	60,16	122	0,00%	7.340

Table 5 shows how the patterns of donors' behavior change according to the old and new proposed scenarios.

Adding two new conditions has many effects on the structure of donors' choices. The two added scenarios are clearly appealing, collecting 166 preferences for fiscal incentives at 50% and 191 preferences for more transparency and accountability.

As a consequence, the number of initial non-donors decreases from 627 to 473. At the same time, almost half of pure prosocial donors have moved to the new scenarios, attracted by the new favourable conditions. In any case, pure prosocial donors still represent a good share of the total donors: they are 122 and the average amount they stated to donate is 60,16 €

Moreover, considering monetary compensation, fiscal incentives at 19% are not any more attractive. The new fiscal scheme at 50% accounts for 83% of all those respondents who express fiscal incentive as the best choice for donation. Reputational incentives confirm their elitarian profile with a small group of 16 people but with the highest average of contribution (542,62€). The condition for transparency and accountability provides the most interesting result, especially for the Italian case where the citizens' trust on institutions is generally low (Eurobarometer, 2009). Crucially, 191 individuals have chosen this possibility with an average donation of 123,48€. Transparency and accountability conditions are also the main attractors of initial non-donors as compared to other scenarios. Crucially, we suggest interpreting this result as a form of crowding-in of latent pro-social donors. Transparency and accountability conditions do not expressly represent an incentive for giving, such as fiscal or reputational mechanisms, but can nevertheless increase the return of pro-social actions by donors moved by intrinsic motivations. In this context, the lack of transparency and accountability of recipient institutions represent an additional cost for pure prosocial donors.

## 6. Conclusion and policy implications

This paper explored three main issues. The first was whether or not there is room for donations to cultural heritage moved simply by intrinsic motivations and what are the main socio-economic determinants of such pure prosocial behavior. The second issue was the role of extrinsic and reputational incentives in enhancing contribution to cultural heritage. Finally, the third issue aimed to provide some insights in new contexts and conditions that can affect donors' behavior, namely the level of monetary compensation and the issue of accountability of the recipient institution.

The main empirical results of the survey reveal the strategic role of intrinsic motivations as the principal determinants of the choice to giving. Taking into account the contexts of choice, the accountability undoubtedly appears to be the key circumstance fitting with the greater mobilization of latent donors and is able to enhance giving for culture in Italy. Furthermore the results show some significant suggestions for the contemporary policy making. The current political debate concerning private donations to culture and cultural heritage has mainly focused on fiscal incentives. This research however suggests decision makers should count on a more elaborate and comprehensive framework of incentives.

First, in order to strengthen intrinsic motivations (civicness, universal value of cultural heritage, ethic motivations) medium and long-term policies are at stake. Such policies should be mainly directed to the educational system, the enhancement of cultural consumption habits and to collective events like "Telethon" or awareness campaigns, which increase the attention to cultural heritage preservation. Similarly, new strategies should be developed to enhance the accountability of recipient institutions in order to increase the confidence of pro-social donors.

Second, because patronage behavior refers to small group of donors but can still play a relevant role in funding cultural heritage, new niche policies can be proposed to foster publicity mechanisms of great donors. This is particularly relevant in Italy where there is generally lack of these mechanisms for individual donors.

Finally, standard fiscal policies do not seem very effective in enhancing donations, unless through an exceptional increase of the tax rebate. This points out the necessity for policy-makers to find appropriate and minimal tax rebate levels which maximize the number of people willing to contribute or to increase their donation above that given through intrinsic motivation. However, increasing too much fiscal incentives seems hard to be realized mainly because of the high costs in foregone taxes and because of the immoderate importance that would be given to private donations for the support of cultural heritage institutions.

## References

- Andreoni, J. (1988), Privately Provided Public-Goods in a Large Economy- the Limits of Altruism, *Journal of Public Economics* Vol. 83 57-73
- Andreoni, J. (1990), Impure Altruism and Donations to Public Goods: A Theory of Warm Glow Giving. *The Economic Journal* Vol. 100 464-477
- Andreoni, J. (2008), Charitable Giving, in Durlauf S.N. and Blume L.E. (eds.) *New Palgrave Dictionary of Economics*, Palgrave Macmillan
- Brown, T. C., Champ P.A., Bishop R. C. and McCollum D. (1996), Which Response Format Reveals the Truth about Donations to a Public Good, *Land Economics* 72(2), 152–166.
- Batson, Dan (1998). Altruism and Prosocial Behavior. In D. Gilbert, S. Fiske and G. Lindzey (eds.), *Handbook of Social Psychology* vol II. McGraw Hill.
- Bekkers, R. and Wiepking P. (2007), Generosity and Philanthropy: A Literature Review. Report commissioned by the John Templeton Foundation. *SSRN Working Paper*, 1015507
- Benabou, R. and Tirole J. (2006), Incentives and Prosocial Behavior, *American Economic Review* Vol 96(5) pp. 1652-1678
- Buraschi, A. and Cornelli F. (2002), Donations, *CEPR Discussion Paper* No. 3488
- Champ, P.A., and Bishop, R.C. (2001), Donation Payment Mechanisms and Contingent Valuation: An Empirical Study of Hypothetical Bias, *Environmental and Resource Economics*, 19:383-402
- Champ, P.A., Bishop, R.C., Brown, T.C. and McCollum, D.W. (1997), Using Donation Mechanisms to Value Nonuse Benefits from Public Goods, *Journal of Environmental Economics and Management* 33:151-162
- Deci, E. L. (1975). Intrinsic Motivation. *New York: Plenum Press*.
- Eurobarometer (2009). *Standard Eurobarometer 71. Public Opinion in the European Union*
- Feld, A., O'Hare, M., Schuster, J.M.D. (1983), Patrons despite themselves: Taxpayers and Arts Policy. A twentieth Century Fund Report, *New York University School of Law, New York*.
- Frey, B and Oberholzer-Gee F. (1997), The Cost of Price Incentives: An Empirical Analysis of Motivation Crowding-out. *American Economic Review* Vol. 87 (4).
- Giving USA Foundation (2008). Giving USA 2007: The annual report on Philantropy for the year 2007.
- Glazer, A. and Konrad K.A. (1996), A Signaling Explanation for Charity. *American Economic Review* Vol.86 (4)
- Håkansson, C. (2008), A new valuation question: analysis of and insights from interval open-ended data in contingent valuation, *Environmental and Resource Economics*, Volume 39, Number 2 pag. 175-188
- Heckman, J. (1979), Sample selection bias as a specification error, *Econometrica*, 47, 153–61

- Inkei P. (2001), Tax Incentives for Private Support to Culture. *Council of Europe Document DGIV/CULT/MOSAIC(2001)13* (Regional Observatory on Financing Culture in East-Central Europe, Budapest)
- Kahneman, D. and Knetsch L.J. (1992), Valuing Public Goods: The Purchase of Moral Satisfaction. *Journal of Environmental Economics and Management* 22, 57-70.
- Karlan, D. and List J.A. (2007), Does Price Matter in Charitable Giving? Evidence from a Large-Scale Natural Field Experiment, *American Economic Review* Vol 97(5) Pag. 1774-1793
- Landry, C., Lange, A., List, J.A., Price, M.K. and Rupp, N. (2006), Toward an Understanding of the Economics of Charity: Evidence from a Field Experiment. *Quarterly Journal of Economics*, 121(2): 747-782
- Mansbridge, J. (Ed.) (1998), Beyond Self Interest. *University of Chicago Press*
- Rondeau, D. and List J.A. (2008) Matching and challenge gifts to charity: evidence from laboratory and natural field experiments. *Experimental Economics* Volume 11, Number 3 / September, 2008
- Santagata, W. and Signorello G. (2000), Contingent Valuation and Cultural Policy Design: The Case of «Napoli Musei Aperti», *Journal of Cultural Economics*, n.24, 2000
- Schuster M. (2006), *Tax Incentives and Cultural Policy*. In Ginsburgh Victor and Throsby Davis (eds.) *Handbook of the Economics of Art and Culture*, Vol. 1. Elsevier
- Smith, V.H., Kehoe M.R. and Cremer M.E. (1995), The Private provision of Public Goods. Altruism and Voluntary Giving. *Journal of Public Economics* 58 pp. 107-126
- Steinberg, R. (2003). Economic theories of non-profit organizations : An Evaluation. In Anheier H. and Benner A. (eds.) *The study of the Non Profit Enterprise : Theories and Approaches*. Kluwer Academic/Plenum Publishers, New York. Pp 277-309.
- Sugden, R. (1984). Reciprocity: the supply of public goods through voluntarily contribution. *Economic Journal* Vol 92.
- Thompson, E., Berger M., Blomquist G. and Allen S. (2002), Valuing the Arts : A Contingent Valuation Approach. *Journal of Cultural Economics* Vol 26 pp 87-113.
- Titmuss, R. (1970). *The Gift Relationship*. Allen and Unwin. London
- Vesterlund L. 2006. Why do People Give? In *The Nonprofit Sector: A Research Handbook*, ed. WE Powell, R Steinberg, pp. 568-90. New Haven, CT: Yale University Press.

## NOTE DI LAVORO DELLA FONDAZIONE ENI ENRICO MATTEI

### Fondazione Eni Enrico Mattei Working Paper Series

Our Note di Lavoro are available on the Internet at the following addresses:

<http://www.feem.it/getpage.aspx?id=73&sez=Publications&padre=20&tab=1>  
[http://papers.ssrn.com/sol3/JELJOUR\\_Results.cfm?form\\_name=journalbrowse&journal\\_id=266659](http://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalbrowse&journal_id=266659)  
<http://ideas.repec.org/s/fem/femwpa.html>  
<http://www.econis.eu/LNG=EN/FAM?PPN=505954494>  
<http://ageconsearch.umn.edu/handle/35978>  
<http://www.bepress.com/feem/>

### NOTE DI LAVORO PUBLISHED IN 2010

GC	1.2010	Cristina Cattaneo: <u><a href="#">Migrants' International Transfers and Educational Expenditure: Empirical Evidence from Albania</a></u>
SD	2.2010	Fabio Antoniou, Panos Hatzipanayotou and Phoebe Koundouri: <u><a href="#">Tradable Permits vs Ecological Dumping</a></u>
SD	3.2010	Fabio Antoniou, Panos Hatzipanayotou and Phoebe Koundouri: <u><a href="#">Second Best Environmental Policies under Uncertainty</a></u>
SD	4.2010	Carlo Carraro, Enrica De Cian and Lea Nicita: <u><a href="#">Modeling Biased Technical Change. Implications for Climate Policy</a></u>
IM	5.2010	Luca Di Corato: <u><a href="#">Profit Sharing under the threat of Nationalization</a></u>
SD	6.2010	Masako Ikefuji, Jun-ichi Itaya and Makoto Okamura: <u><a href="#">Optimal Emission Tax with Endogenous Location Choice of Duopolistic Firms</a></u>
SD	7.2010	Michela Catenacci and Carlo Gipponi: <u><a href="#">Potentials and Limits of Bayesian Networks to Deal with Uncertainty in the Assessment of Climate Change Adaptation Policies</a></u>
GC	8.2010	Paul Sarfo-Mensah and William Oduro: <u><a href="#">Changes in Beliefs and Perceptions about the Natural Environment in the Forest-Savanna Transitional Zone of Ghana: The Influence of Religion</a></u>
IM	9.2010	Andrea Boitani, Marcella Nicolini and Carlo Scarpa: <u><a href="#">Do Competition and Ownership Matter? Evidence from Local Public Transport in Europe</a></u>
SD	10.2010	Helen Ding and Paulo A.L.D. Nunes and Sonja Teelucksingh: <u><a href="#">European Forests and Carbon Sequestration Services : An Economic Assessment of Climate Change Impacts</a></u>
GC	11.2010	Enrico Bertacchini, Walter Santagata and Giovanni Signorello: <u><a href="#">Loving Cultural Heritage Private Individual Giving and Prosocial Behavior</a></u>