

ATINER CONFERENCE PAPER SERIES No: ECO2013-0790

Athens Institute for Education and Research

ATINER



ATINER's Conference Paper Series

ECO2013-0790

**Analyzing the Effect of Government
Intervention on Private Donations**

**Luis Nunes
PhD Student
University of Minho
Portugal**

Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209
Email: info@atiner.gr URL: www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm

Printed in Athens, Greece by the Athens Institute for Education and Research.
All rights reserved. Reproduction is allowed for non-commercial purposes if the
source is fully acknowledged.

ISSN 2241-2891
24/12/2013

An Introduction to ATINER's Conference Paper Series

ATINER started to publish this conference papers series in 2012. It includes only the papers submitted for publication after they were presented at one of the conferences organized by our Institute every year. The papers published in the series have not been refereed and are published as they were submitted by the author. The series serves two purposes. First, we want to disseminate the information as fast as possible. Second, by doing so, the authors can receive comments useful to revise their papers before they are considered for publication in one of ATINER's books, following our standard procedures of a blind review.

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

This paper should be cited as follows:

Nunes, L. (2013) "Analyzing the Effect of Government Intervention on Private Donations" Athens: ATINER'S Conference Paper Series, No: ECO2013-0790.

Analyzing the Effect of Government Intervention on Private Donations

**Luis Nunes
PhD Student
University of Minho
Portugal**

Abstract

A possible crowding-out effect of government social expenditure on private donations has been thoroughly discussed in several papers with no solid conclusion. This paper tries to shed some light on the matter by proposing a theoretical analysis of the relationship between government intervention and the individual decision of transferring income. Furthermore, the paper attempts at providing a comprehensive understanding of several empirical studies on the matter. Moreover, we explore various elements that enrich individual decision-making process, particularly social and cultural environment which may be relevant for a more complete analysis on a possible crowding-out effect of government social expenditure on private donations. Thus, considering the set of choices of an individual with altruistic preferences this paper intends to comprehend how the level of government social expenditure may affect the individual decision to donate part of his income. Finally, the paper tries to analyze the individual decision to give regarding social income distribution inequalities, evaluating the individual tolerance and possible response to different levels of social income distribution inequality.

Keywords: crowding-out effect; altruistic preferences; government intervention; social income distribution

Corresponding Author:

Introduction

The role of charitable contributions, particularly in OECD countries, is stressed by many studies (Alesina and Angeletos, 2003; Alesina and La Ferrara 2005; Bekkers and Wiepking, 2011) and the complexity behind *giving* should alert economic literature to address such phenomena more comprehensively in order to integrate pertinent empirical findings of other social sciences studying this subject. This paper regards such effort fundamental to shed some light on the interaction between governmental social expenditures and welfare programs and the private contributions to charity.

A relevant, but not too extensive, literature review shows that most theoretical economic literature of the early 1980's and 1990's has analyzed private donations as contributions to the provision of a public good and possible substitute for government intervention, as for the empirical literature, particularly in the US, Canada, UK and the Netherlands, it has considered charity as an ordinary consumption good analyzing price and income effects of government spending. However, both seem to fail in providing a solid *crowding-out* mechanism concerning the individual decision to transfer income and government policies design to address social income disparities.

In fact, despite the intense academic discussion regarding a possible *crowding-out effect* of government social expenditure on private donations the theoretical debate is still searching for a mechanism to explain the interaction between these two variables. A theoretical analysis of the relationship between government intervention and the individual decision of transferring income should be comprehensive and take into account different individual preferences in order to capture the mechanism through which private income transfers are affected by a more centralized decision process of income redistribution.

Therefore, section 3 of the paper explores various empirical findings that enrich individual decision-making process, particularly social and cultural environment which may be relevant for a more complete analysis on a possible *crowding-out effect* of government social expenditure on private donations. Hence, considering the set of choices of an individual with altruistic preferences this paper intends to comprehend how the level of government social expenditure may affect the individual decision to donate part of his income.

Furthermore, section 4 of the paper tries to analyze the individual decision to donate regarding social income distribution inequalities, evaluating the individual tolerance and possible response given different levels of social income distribution inequality reflected on different individual welfares. For the analysis we emphasize the awareness of need, impure altruism in the sense of Andreoni (1990) and the benefits and costs of giving.

Finally, some policy implications are suggested in section 5, particularly regarding the awareness of need and the individual response to known social income inequalities. In this section we also stress the egalitarian warm glow giving, resulting from an individual indifference towards others' welfare.

Literature Review

Economic literature has addressed the possible crowding-out effect of government intervention on private donations with many different conclusions, particularly regarding empirical studies, whereas a significant number of theoretical papers have suggested a partial crowding-out effect of government social expenditures on charitable contributions. Assuming that individuals regard government expenditure as a perfect substitute for charity, David and Scadding (1974) suggest a complete crowding-out of private donations as a result of increasing government spending, Abrams and Schmitz (1978) argue that a partial crowding-out effect occurs, suggesting that microeconomic investigation using less aggregative data may unveil different types of effects for particular private donations, Roberts (1984) suggests that government income redistribution policy crowds-out individual contributions, emphasizing empirical evidence that the significant growth in public transfers during the 1930's actually changed the nature of individual donations, since private antipoverty efforts were progressively replaced by private contributions to nonprofit organizations with religious, educational or cultural purposes [Roberts; 1984:141-147].

Relevant contributions to this discussion have also been made by Peltzman (1980) and Becker (1983), particularly regarding the role of political power of pressure groups and the collective process of decision. Alesina and Angeletos (2003) and Alesina and La Ferrara (2005) develop a similar approach, but more focused on the relationship between the government income redistribution policy and social tolerance to inequality.

Some authors (see Hochman and Rodgers, 1969; Andreoni, 1988) stress the inefficiencies of *pure altruism* regarding the provision of public goods, especially due to the free-riding phenomena, proposing an impure altruism or a *warm-glow* approach to giving¹, resulting in a partial crowding-out effect of government intervention on private contributions to the public good. On the other hand Sen (1977), Collard (1978), Laffont (1975) and Margolis (1982) emphasize ethical principles, group values and the internalization of social welfare as relevant variables for individual behavior regarding giving.

Among empirical studies the results are less consensual. Although some papers stress the existence of a partial crowding-out effect others fail to identify such causality between government intervention and private charitable contributions. In one of the first empirical studies on the subject Reece (1979) argues that government spending does not change households' behavior regarding contributions to nonprofit organizations, whereas Kingma (1989) concludes that government spending crowds-out private contributions to the provision of public goods². In another paper, at a significance level of 5 percent, Lindsey and Steinberg (1990) find the relationship between

¹See Hochman, H. and Rodgers, J. (1973); and Andreoni (1990).

²Kingma's study attempted at measuring the effect of changes on aggregate funds to a particular nonprofit organization regarding private contributions to that same organizations. The example used in Kingma's study was the public radio.

government spending and private donations not statistically significant. Moreover, Schiff (1985) finds a small crowding-out effect at the federal level and a crowding-in effect at the local level as well as a crowding-in effect for federal noncash transfers.

Concerning government direct transfers, such as grants, Payne (1998) suggests that government grants clearly crowd out private donations to non-profit firms. Regarding government provision of services such as education and health some authors (Brooks, 2000) are more cautious, emphasizing the small degree of crowding-out effect, despite the statistically significant results (for a significance level of 1 percent) mainly for social/human service provisions and health services.

More recently, Andreoni and Payne (2011) conclude that in Canada government grants to nonprofit organizations largely crowd-out charitable contributions due to less fundraising activities of the organizations themselves. According to the authors this result is not attributable to individual donations, but to the donations from other organizations and contributions from special fundraising activities, such as galas and sponsorship.

As mentioned previously, other authors prefer to analyze the tolerance to income inequality of individuals to justify different degrees of government intervention with respect to income redistribution policy (Alesina and Angeletos, 2003) stressing that different beliefs regarding social mobility influence the redistributive policy chosen democratically. These authors compare income tax levels in the US and Western Europe¹ and the different perceptions of social mobility. Inequality is more tolerable in the US than in Europe, therefore the redistributive role of government is less important in the US than in Europe. Thus, the authors also conclude that there are less incentives for social mobility in Europe.

However, as some authors emphasize (Schokkaert and Van Ootegem, 1998), most economic literature, particularly empirical studies, neglects individual preferences variation and focuses on price and income elasticities, considering donations as any other consumption good. These authors stress the relevant contribution of Long (1976), who concludes that individual contribution increases according to the relationship proximity (family, friends, co-workers), and Amos (1982), who argues that ethical motives are more important than political, religious or social motives.

To conclude this section, it must be said that non-economic academic literature has tried to address the complexity of the individual choice when it come to giving. As a matter of fact increasing sociological, anthropological and psychological studies have given more attention to individual preferences variation, contributing to relevant developments as to comprehend how private donations behave regarding several variables and subject to different social environments.

¹Empirical paper based on data collected by the *World Value Survey*.

Giving: An Individual Choice

It is important to stress the fact that a possible crowding-out effect is not independent of the motives behind the decision of giving and to understand this reasoning it is fundamental to consider the complexity of individual preferences and utility regarding others' welfare and perhaps regarding the actual collective welfare. Moreover, government macroeconomic policies, particularly the provision of services, publicly designed welfare programs through government redistribution policies as well as social security schemes may be considered a clear interference on the individual perception of social income inequalities and, therefore, affect the amount and the beneficiaries of private donations.

Thus, to comprehend the effect of government social spending on the amount of charitable contributions it is relevant to analyze the motives behind private donations. These income transfers may be individually or collectively motivated. If a significant number of individual motives converge to a collective trend, then a theoretical analysis should attempt at formulating hypothesis and making simulations in order to accomplish a more comprehensive study regarding the decision of giving.

Recent empirical studies care more for a comprehensive analysis of the individual choice to transfer income to other individuals. This set of empirical findings should not be ignored by economic literature, since it may contribute significantly to the analysis of a possible crowding-out effect of government spending on private donations.

Bekkers and Wiepking (2011) extensive overview emphasizes eight principal motives that influence people to make charitable contributions: *awareness of need; solicitation; costs and benefits; altruism; reputation; psychological benefits; values; and efficacy* [Bekkers and Wiepking; 2011: 927-943]. However, the main difficulty with studies focused mainly on individual preferences is to measure separately and accurately the impact of each of these motives, since some of them may be tangible or intangible whereas others are clearly intangible.

Despite the relevance of all eight motives, this paper will focus on the awareness of need, costs and benefits, and impure altruism in the sense of Andreoni (1990). In terms of the awareness of need it results from a social interaction where income inequalities may lead to specific contributions, depending on the individual tolerance to such inequalities (see Alesina and Angeletos, 2003). Moreover, Carter and Castillo (2002) argue that proximity between individuals may also increase private donations, which may signal that the awareness of need is, indeed, relevant (see also Wagner and Wheeler, 1969).

Concerning costs and benefits they are generally associated to the specific decision to donate to a particular association, fund, cause, group, or individual. Thus, the amount donated may be regarded as a cost itself for the donors (Sargeant and Jay, 2004; Wiepking and Breeze, 2011), which is in accordance with the hypothesis that requests for larger donations are less successful

(Andreoni and Miller, 2002). As for benefits many authors stress the role of gifts, lotteries, discounts and services (Alpizar et al, 2007; Landry et al, 2006; Buraschi and Cornelli, 2002).

Finally, altruism materially reflects the care for the welfare of other individuals or groups. Altruism may be *pure* or *impure*, depending on the motives behind giving. If an individual donates only to increase the welfare of the beneficiary it is called the *pure* altruism. Notice that *pure* altruism leads to a complete crowding-out of government intervention on private donations, as many theoretical papers have stressed (David and Scadding, 1974; Abrams and Schmitz, 1978; Kingma, 1989). Alternatively, if an individual gives because he benefits or expects to benefit from his choice it is called *impure* altruism, as giving may be a necessary *warm glow* sentiment for the donor (Andreoni, 1990), resulting in a partial crowding-out effect of government intervention on private donations, as already mentioned in previous section.

From a microeconomic perspective this paper will focus mainly on these three motives to analyze possible interactions between government social expenditures and private contributions to charity. In fact, in the following section we will attempt at modeling the *awareness of need, costs and benefits, and altruism* as part of an individual decision

Modeling Government Intervention and Private Donations

Given the relevant empirical findings and the various theoretical contributions mentioned in the previous two sections we will attempt at modeling the interaction between two agents, both contributors and receivers of charity and consumers of public goods and services provided by government. As mentioned previously for the sake of simplicity we will take into account the agent's awareness of need, degree of altruism and the benefits and costs of giving regarding the individual decision to transfer income to another agent. Notice that these benefits and costs are not exactly the ones stressed on the empirical literature presented in previous section.

In the model we separate the provision of public goods and the government social expenditure in order to address social income inequalities, such as the implementation of income redistribution policies through social security schemes. Moreover, we decided not to include a variable regarding the solicitation motive, because we assume that the beneficiaries will always ask for donations¹ and the donators will respond to their awareness of need for a given degree of altruism and inequality perception.

Given the following strictly quasi-concave utility function:

$$U_i = f(x_i, g, \alpha_i c_{i,j}), \text{ for } j \neq i$$

¹This is an assumption to simplify the model, since many empirical studies suggest that solicitation is clearly important for giving (see Bryant et al, 2003), despite the studies that argue that people try to avoid solicitation to donating (see Diamond and Noble, 2001).

Where agent i derives utility from private consumption x_i , consumption of public goods and services, g , and private contributions to another agent $c_{i,j}$, weighted by an altruistic parameter, α_i .

Similarly the utility derived by agent j will be:

$$U_j = f(x_j, g, \alpha_j c_{j,i}), \text{ for } i \neq j$$

Assuming the Ricardian Equivalence, then the total amount of government spending will be financed only through taxes paid by both agents. Thus, total government spending, G , will be equal to the total amount of taxes, T :

$G = T$, such that the total amount of fiscal revenue is given by $T = t_i y_i + t_j y_j$

If we separate government spending into the provision of public goods and services, g , and social income redistribution through subsidies, s , as well as a residual government waste, ρ , we will have:

$$G = g + s + \rho$$

And we may also account for the different weights of each governmental expenditures:

$$G = (1 - \sigma_i - \sigma_j - \rho)(t_i y_i + t_j y_j) + (\sigma_i + \sigma_j)(t_i y_i + t_j y_j) + \rho(t_i y_i + t_j y_j) = T$$

Where, $\sigma_i + \sigma_j + \rho < 1$.

Thus, we get the amount of g separately from the amount spent on income redistribution policies.

Indeed, $g = (1 - \sigma_i - \sigma_j - \rho)(t_i y_i + t_j y_j)$, where t_i and t_j are the income tax levels for agent i and agent j , respectively. As for σ_i and σ_j they denote the share of governmental expenditure regarding direct income transfers to agent i and agent j , respectively.

Moreover, agent i budget constraint is given by:

$$x_i + G_i + c_{i,j} = y_i + c_{j,i} + s_i$$

Where y_i denotes agent's i income and $G_i = t_i y_i$ is the amount of taxes paid, for a given individual income and tax rate. Whereas $c_{j,i}$ is the amount of private contributions received from agent j and $s_i = \sigma_i(t_i y_i + t_j y_j)$ is the total amount of governmental subsidies transferred to agent i .

Finally, $c_{i,j}$ reflects exogenous private contributions based on social and cultural values or principles, or merely an individual concern regarding another individual welfare¹.

Rearranging the agent's budget constraint we will get:

$$x_i = y_i - t_i y_i + c_{j,i} - c_{i,j} + \sigma_i (t_i y_i + t_j y_j)$$

Or,

$x_i = (1 + \sigma_i t_i - t_i) y_i + \sigma_i t_j y_j + \beta_i$, where β_i denotes the net benefits of giving for agent i.

Therefore, the utility function for agent i can be re-expressed as:

$$U_i = f \left[(1 + \sigma_i t_i - t_i) y_i + \sigma_i t_j y_j + \beta_i, (1 - \sigma_i - \sigma_j - \rho)(t_i y_i + t_j y_j), \alpha_i c_{i,j} \right]$$

Following the same steps we will get a similar utility function for agent j:

$$U_j = f \left[(1 + \sigma_j t_j - t_j) y_j + \sigma_j t_i y_i + \beta_j, (1 - \sigma_i - \sigma_j - \rho)(t_i y_i + t_j y_j), \alpha_j c_{j,i} \right]$$

Notice that for agent i:

$$\max_{c_{i,j}} U_i(x_i, g, \alpha_i c_{i,j})$$

We get the following result:

$$\frac{\partial U_i}{\partial x_i} \frac{\partial x_i}{\partial c_{i,j}} + \frac{\partial U_i}{\partial c_{i,j}} = 0 \text{ and, thus, } \frac{\partial U_i}{\partial x_i} \frac{\partial x_i}{\partial c_{i,j}} = \alpha_i$$

Therefore, if $\frac{\partial U_i}{\partial x_i} \frac{\partial x_i}{\partial c_{i,j}} < \alpha_i$, then agent i will increase $c_{i,j}$, whereas for

$\frac{\partial U_i}{\partial x_i} \frac{\partial x_i}{\partial c_{i,j}} > \alpha_i$ agent i will decrease private contributions.

Notice also that the crowding out effect is given by:

¹The discussion on impure altruism, social motives and ethical principles and consequent differences between Sen (1977), Margolis (1982), Laffont (1985) and Andreoni (1990) is not developed.

$$\frac{\delta c_{i,j}}{\delta \sigma_j} \text{ and } \frac{\delta c_{i,j}}{\delta t_i} \text{ as well as } \frac{\delta c_{i,j}}{\delta \sigma_i}$$

Thus, private contributions of agent i will depend on the government subsidies σ_j and σ_i as well as on the individual tax level t_i .

Awareness of need and individual perception of inequalities

«Enfin je me rappelai le pis-aller d'une grande princesse à qui l'on disait que les paysans n'avaient pas de pain, et qui répondit : Qu'ils mangent de la brioche».

Rousseau, Jean-Jacques in *Les Confessions* (1782)

Allowing for an endogenous weight attributed to the amount of private contributions reflecting a choice for utility ratio interdependence and capturing the individual awareness of need we may say that private contributions from agent i to agent j will be weighted as follows:

$$\alpha_i = \frac{U_i}{U_j^*}$$

Notice that U_j^* is an individual approximation of the actual U_j . A warm glow giving in the sense of Andreoni (1990) occurs when $U_i = U_j^*$, since it is assumed that the agent projects his own utility for an agent he does not know, reflecting a mirror image of an unknown individual welfare¹.

This approximation results from i 's perception and valuation of j 's behavior. Thus, U_j^* is j 's utility evaluated by agent i .

$$U_j^* = U_i(x_j, g, \alpha_i^{-1} c_{j,i})$$

Where,

$$x_j = f(\sigma_j, t_j, y_j, \beta_j) \text{ and } g = (1 - \sigma_i - \sigma_j - \rho)(t_i y_i + t_j y_j)$$

Moreover, we may say that:

$$\frac{\delta \alpha_i}{\delta U_i} > 0 \text{ and } \frac{\delta^2 \alpha_i}{\delta U_i^2} = 0$$

¹Inspired by Rousseau's quote in the beginning of this subsection we may call this the *Marie-Antoinette* assumption.

Suggesting that a marginal increase in U_i increases the altruistic weight α_i , and this increase is marginally constant as the second derivative implies. And,

$$\frac{\delta\alpha_i}{\delta U_j^*} < 0 \text{ and } \frac{\delta^2\alpha_i}{\delta U_j^{*2}} > 0$$

Suggesting that a marginal increase in U_j^* decreases the altruistic weight α_i and this decrease marginally increases as the second derivative implies.

Then, for $\alpha_i > 1$ if $U_i > U_j^*$ and agent i attributes a weight to his private contributions that will determine:

$$\frac{\delta U_i}{\delta x_i} \frac{\delta x_i}{\delta c_{i,j}} < \alpha_i \text{ and since } U_i(x_i, g, \alpha_i c_{i,j}) \text{ is a strictly quasi-concave function,}$$

$$\text{then } \frac{\delta U_i}{\delta c_{i,j}} > 0.$$

On the other hand if $\alpha_i < 1$, then $U_i < U_j^*$ and agent i attributes a weight to his private contributions that may determine:

$$\frac{\delta U_i}{\delta x_i} \frac{\delta x_i}{\delta c_{i,j}} > \alpha_i$$

$$\text{Thus, depending on } \frac{\delta U_i}{\delta x_i} \frac{\delta x_i}{\delta c_{i,j}} \text{ and on } \alpha_i \text{ we may have } \frac{\delta U_i}{\delta c_{i,j}} < 0.$$

Policy Implications

From the previous section we may argue that the interaction between government intervention and private donations will depend on the individual perception of how income redistribution policy effectively reduces social inequalities.

On one hand it may be said that private donations do not substitute government intervention, but they complement it at a *face-to-face level*. In fact, despite governmental welfare programs, individuals are faced with daily welfare disparities that they may soften through individual and voluntary income transfers.

Notice that, according to the model, $U_i \neq U_j^*$ projects an impact of private contributions on i's utility function, whereas the difference may be a result of insufficient government intervention regarding income redistribution policies. Therefore, as $U_i \rightarrow U_j^*$ the impact of private contributions on i's utility

softens, since they lack the main motivation, which is the approximation of utilities from the donor's perspective.

On the other hand, according to the model presented it is plausible that government intervention may partially substitute private donations if governmental welfare programs are effectively carried out from an individual perception. Thus, if social income inequalities are softened through effective redistribution policies private contributions to charity decrease.

Indeed, given $U_j^* = U_i(x_j, g, \alpha_i^{-1} c_{j,i})$ agent i will project j 's utility according to his preferences and given a tangible behavior, which is given by j 's private consumption, x_j , and the governmental provision of public goods and services, g .

Regarding x_j it has the following behavior:

$$x_j = f(\sigma_j, t_j, y_j, \beta_j)$$

With $\frac{\partial x_j}{\partial \sigma_j} > 0$; $\frac{\partial x_j}{\partial t_j} < 0$; $\frac{\partial x_j}{\partial y_j} > 0$; and $\frac{\partial x_j}{\partial \beta_j} > 0$, according to j 's budget constraint.

Thus, government intervention through subsidies, σ_j , and taxes, t_j , will affect j 's private consumption and influence i 's perception of j 's utility, U_j^* , which then is relevant to determine α_i the altruistic weight of private contributions.

Moreover, if $\sigma_i = \frac{t_i}{t_i + t_j}$, then government redistribution policy is ineffective for agent i , which makes β_i the only mechanism to alleviate possible utility disparities.

If $\sigma_i = \frac{t_i}{t_i + t_j}$ and $U_i > U_j^*$, then:

$$\frac{\partial U_i}{\partial c_{i,j}} > 0$$

However, the same result would be obtained whether $\sigma_i < \frac{t_i}{t_i + t_j}$ or $\sigma_i > \frac{t_i}{t_i + t_j}$.

Therefore, the fundamental variable for private contributions is not the disposable income effect of redistribution policy, but the effect on individual perception of comparative welfare that this policy may have.

Information asymmetry and individual preferences generalization

From the previous discussion it is assumed that agent i's knows x_j , but that may not be a realistic assumption. Moreover, x_j may be known, but its quantitative components may be occult, thus agent i projects j's utility without knowing the respective contribution of σ_j , y_j and β_j as well as t_j .

Furthermore, U_j^* is a mere individual perception of j's utility given i's preferences, which may lead to a misperception of the real U_j . However, α_i does not depend on how accurately i captures the actual U_j , but rather on the difference between U_i and the utility he would derive if he consumed x_j instead of x_i .

The paradox of egalitarian warm glow giving

If x_j is not known to agent i, then he cannot be aware of j's needs and, thus, he can only project his pattern of individual consumption, which is x_i . This leads us to a particular weighting regarding private contributions, which results of a complete absence of awareness of need of agent i with respect to agent j.

Attributing x_i to x_j without knowing j's actual private consumption results in $U_i = U_j^*$, which leads, indeed, to a warm glow effect of private contributions on i's utility function. This misperception of U_j , resulting from a simple assumption that $x_i = x_j$ without knowing j's consumption behavior may be referred as the Marie-Antoinette assumption and leads to a misperceived welfare equality that results in $\frac{\delta U_i}{\delta x_i} \frac{\delta x_i}{\delta c_{i,j}} < \alpha_i$ and $\frac{\delta U_i}{\delta c_{i,j}} > 0$, assuming $x_i = x_j$. Notice that this assumption may also reflect a warm glow giving scenario.

Concluding Remarks

According to the comprehensive analysis developed to understand the crowding-out effect of government social expenditures on private contributions we may conclude that it is difficult to identify a link or consistent mechanism of interaction between governmental policies and the individual decision of transferring income to other agents.

However, if such interaction mechanism exists it must operate through the individual perception of the welfare of other agents and particularly through the proximity and degree of altruism among individuals. Previous papers on the subject have tried to capture the crowding-out effect, whereas this paper has tried to explore motives that influence private donations and incorporate them in a theoretical model which pictures the individual set of choices in order to comprehend an interaction between government spending and donations.

Thus, the model is not conclusive concerning the crowding out effect, since private donations are not directly influenced by the amount of government spending, but on the individual perception of the welfare of those who may benefit from charity or governmental programs. This is an interesting contribution for the theoretical debate on the interaction between governmental redistribution policies and private contributions, since the giving decision depends on the effectiveness of the intervention.

In fact, the effectiveness of the redistribution policies affects the individual perception of social income inequalities, influencing the amount of private contributions for a given degree of altruism. Moreover, another contribution of this paper is that for the giving decision the utility of the beneficiaries will be weighted by the contributor, but according to his own preferences and not the actual preferences to whom he donates.

Furthermore, in the last section of the paper and based on the model developed we concluded that private donations do not substitute government intervention, but they complement it at a *face-to-face level*, since individuals are faced with daily welfare disparities that they may soften through individual and voluntary income transfers, despite the governmental programs.

Finally, despite the inconclusive result regarding an actual mechanism of crowding-out effect of government intervention on private donations, according to the model presented and discussed in section 4 and 5 of the paper it is plausible that government intervention may partially substitute private donations if governmental welfare programs are effectively carried out from an individual perception. Thus, if social income inequalities are softened through effective redistribution policies private contributions to charity decrease.

References

- Abrams, B. and Schmiz, M. (1978); The 'Crowding-Out' Effect of Governmental Transfers on Private Charitable Contributions; *Public Choice*, Vol. 33, No. 1: 29-39;
- Alesina, A. and Angeletos, G. (2003); *Fairness and Redistribution: US versus Europe*; Social Science Research Network Electronic Paper Collection;
- Alesina, A. and La Ferrara, E. (2005); *Preferences for Redistribution in the land of opportunities*; *Journal of Public Economics*, 89: 897-931;
- Alpizar et al (2007); Anonymity, reciprocity and conformity: Evidence from voluntary contributions to a natural park in Costa Rica; *Journal of Public Economics*, Vol. 92, No. 5 and 6: 1047-1060;

- Amos, O. (1982); Empirical Analysis of motives underlying individual contributions to charity; *Atlantic Economic Journal*, 10: 45-52;
- Andreoni, James (1988); Privately Provided Public Goods in a Large Economy: The Limits of Altruism; *Journal of Public Economics*, 35: 57-73;
- Andreoni, James (1990); Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving; *The Economic Journal*, Vol. 100, Issue 401: 464-477;
- Andreoni, J. and Miller, J. (2002); Giving according to GRAP: An experimental test of the consistency of preferences for altruism; *Econometrica*, 93: 792-812;
- Andreoni, J. and Payne, A. (2011); Crowding-Out Charitable Contributions in Canada: New Knowledge from the North;
- Becker, Gary (1983); A Theory of Competition among Pressure Groups for Political Influence; *Quarterly Journal of Economics*, 98: 371-400;
- Bekkers, R. and Wiepking, P. (2011); A Literature Review of Empirical Studies of Philanthropy: Eight Mechanisms That Drive Charitable Giving; *Nonprofit and Voluntary Sector Quarterly* Vol. 40, No. 5: 924-973;
- Brooks, Arthur (2000); Is There a Dark Side to Government Support for Nonprofits?; *Public Administration Review*; Vol. 60, No. 3: 211-218;
- Bryant et al (2003); Participating in philanthropic activities: Donating money and time; *Journal of Consumer Policy*, Vol. 26, No. 1: 43-73
- Buraschi, A. and Cornelli, F. (2002); Donations; CEPR Discussion Paper
- Carter, M. and Castillo, M. (2002); *The Economic Impacts of Altruism, Trust and Reciprocity: An Experimental Approach to Social Capital*; research financed by the MacArthur Foundation;
- David, P. and Scadding, J. (1974); Private Savings Ultrarationality, Aggregation, and 'Denison's Law'; *Journal of Political Economy*, June: 225-250;
- Diamond D., and Noble, S. (2001); Defensive responses to charitable direct mail solicitations; *Journal of Interactive Marketing*, Vol. 15, No. 3: 2-17;
- Hochman, H. and Rodgers, J. (1969); Pareto Optimal Redistribution; *American Economic Review*, 59: 542-547;
- Hochman, H. and Rodgers, J. (1973); Utility Interdependence and income transfers through charity; in *Transfers in an Urbanized Economy* (ed. Kenneth E. Boulding), Belmont;
- Kingma, Bruce (1989); An Accurate Measurement of the Crowd-out Effect, Income Effect, and Price Effect for Charitable Contributions; *Journal of Political Economy*, Vol. 97, No. 5: 1197-1207;
- Laffont, Jean-Jacques (1975); *Macroeconomic Constraints, Economic Efficiency and Ethics: An Introduction to Kantian Economics*; *Economica*, New Series, Vol. 42, No. 168: 430-437;
- Landry et al (2006); Toward an understanding of the economics of charity: Evidence from a field experiment; *Quarterly Journal of Economics*, 121: 747-782;
- Lindsey, L. and Steinberg, R. (1990); Joint Crowdout: An Empirical Study of The Impact of Federal Grants on State Government of Federal Grants on State Government Expenditures and Charitable Donations; National Bureau of Economic Research, Working Paper No. 3226;
- Long, Stephen (1976); Social Pressure and Contributions to Health Charities; *Public Choice*, 31: 55-66;
- Margolis, Howard (1982); *Selfishness, Altruism and Rationality*; Cambridge University Press
- Payne, A. (1998); Does the Government crowd-out private donations? New Evidence from a sample of non-profit firms; *Journal of Public Economics*, 69: 323-345

- Peltzman, Sam (1980); The Growth of Government; Journal of Law and Economics, Vol. 23: 209-287;
- Reece, William (1978); Charitable Contributions: New Evidence on Household Behavior; American Economic Review, 69: 142-151;
- Russel, Roberts (1984); A Positive Model of Private Charity and Public Transfers; Journal of Political Economy, Vol. 92, No. 1: 136-148;
- Sargeant, A. and Jay, E. (2004); Fundraising management analysis, planning and practice; London: Routledge;
- Schiff, Jerald (1985); Does Government Spending Crowd Out Charitable Contributions?; National Tax Journal, 38: 535-546
- Sen, Amartya (1977); Rational fools: a critique of the behavioral foundations of economic theory; Journal of Philosophy and Public Affairs, Vol. 6: 317-344;
- Schokkaert, E. and Van Ootegem, L. (1998); Preference Variation and Private Donations; Center for Economic Studies, Katholieke Universiteit Leuven, Discussion Paper Series 98.08;
- Wagner, C. and Wheeler, L. (1969); *Model, need, and cost effects in helping behavior*; Journal of Personality and Social Psychology, 12:111-116;
- Wiepking, P. and Breeze, B., (2011); Feeling poor, acting stingy: the effect of money perceptions on charitable giving; International Journal of Nonprofit and Voluntary Sector Marketing, DOI: 10.1002/nvsm