



ZEF Bonn

Zentrum für Entwicklungsforschung  
Center for Development Research

Universität Bonn

*ECONOMIC THEORIES ON MOTIVATIONS FOR VOLUNTEERING*  
– A *CROSS-COUNTRY ANALYSIS*

Susanne Ziemek\*

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Comments are welcome!

[\\*s.ziemek@uni-bonn.de](mailto:s.ziemek@uni-bonn.de)

## **I Introduction**

The institution volunteerism represents an insufficiently explored research area. Given the potentials ascribed to volunteerism from the sides of academics, policy makers and practitioners, such as its capacity to build social capital, mitigate unemployment problems, or support public social welfare functions,<sup>1</sup> the question regarding what induces individuals to volunteer has not been adequately addressed in the literature. While theoretical motives underlying volunteer contributions have been identified, little is known about these motivations and their determinants in an empirical context.

The path to overcome this missing link between economic theories and empirical insights of volunteer motives is two-fold. On one hand, existing theories on volunteerism, such as the public goods-, private consumption- and investment model, need to be operationalized to allow for an empirical verification of model implications. On the other hand, the latent construct 'volunteer motivation' has to be captured and the classification of volunteers into the theoretically proposed motivational groups needs to be verified. This paper is a first attempt to fill this lacuna.

Regarding the operationalization of the theories, the study points to the fact that predictions of volunteer behavior differ according to the underlying motivational framework used. The theories propose that, depending on the motive for volunteering, volunteers will react quite differently to changes in the level of contributions by others. The degree to which the models imply substitutability between own donations and donations by others can therefore be regarded as an indicator through which the models can be distinguished.

In terms of capturing volunteer motives empirically, micro-level data on volunteers, collected through surveys in Bangladesh, Ghana, Poland and South Korea, are used as a basis. Given that a volunteer's motivation can be fully explained by the three core motivations identified in the theories, the operationalized variables allow for a classification of volunteers according to their degree of each motivation.

Through regression analysis it then becomes possible to investigate to what extent volunteer motives are indeed affected by the level of contributions by others and if changes in motives are compatible with model implications. The inclusion of socio-demographic, institutional and country effects as explanatory variables controls for other influences on volunteer motives.

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<sup>1</sup> See e.g. Badelt (1985), Romero (2000), Gaskin et al. (1996), Robinson and White (1997).

Section 2 of this paper introduces the economic theories of volunteer motives in more detail and deduces model implications. Section 3 defines the operationalization of the concept ‘motivation’ and presents the conceptual framework for this study. It is depicted how operationalized motivational variables enable an empirical test of the models on the basis of derived model implications. An overview of the data and methodology is given in Section 4. Section 5 presents the empirical analysis and Section 6 concludes.

## II Economic Theories of Volunteer Motives

Actors in a neoclassical framework are assumed to be well-informed, rational individuals who seek to maximize their utility. Yet, the behavior of volunteers, who voluntarily give their time for the public benefit without receiving a monetary recompense, appears to stand in stark contradiction to these a priori economic assumptions. Why would individuals who are bound by time and money constraints donate their services without an apparent *quid pro quo*?

Generally, economic theorists have identified four core models to explain volunteer behavior.<sup>2</sup> The difference between them lies in the underlying assumption regarding *what motivates volunteers to give*. The four basic models and their underlying motivation are depicted in Table 1.

**Table 1: Models Explaining Volunteerism**

<i>Model</i>	<i>General Motivation</i>
a) Public Goods Model	To increase the supply of the public good
b) Private Consumption Model	Joy from the act of volunteering; ‘warm-glow’ utility
c) Impure Altruism Model	Synthesis of Models a) and b)
d) Investment Model	To gain labor market experience, skills, and contacts

Source: Roy and Ziemek (2000).

The following analysis will focus on the three benchmark models a), b) and d), as the impure altruism model merely presents a synthesis of models and does not provide new theoretical insights. Each of the three models will be briefly presented and an operationalization of these models for purposes of empirical verification will be established.

<sup>2</sup> See e.g. Andreoni (1990), Freeman (1996), Menchik and Weisbrod (1987). Of course, the economic literature is not restricted to these four models. Other, quite relevant models, such as the ‘demonstration effect’ model, in which voluntary action can be explained by the incentive to set an example for others, have been developed (Stark 1995). However, the following analysis is limited to the public goods-, private consumption-, and investment model as they represent a good framework for explaining the differing effects of donations by others on own volunteer behavior.

## 2.1 Public Goods Model

In the public goods model, it is assumed that the reason for individuals to donate their time to privately provided public goods is to increase the total supply of the public good. Considering that public goods are, per definition, non-rival and non-excludable, this suggests that these individuals obtain utility from increasing the utility of others who will benefit from the consumption of the public good. This kind of behavior whereby individuals volunteer for the benefit of others without receiving something in return and without receiving any utility from their own giving *per se* is defined as purely altruistic.

From a non-economic perspective, altruism can be explained by e.g. ethic, moral or religious considerations.<sup>3</sup> From an economic perspective, the explanation for altruism in the context of economic rational behavior is oftentimes build on the assumption of interrelated utility functions. The preferences of altruistic individuals are therefore not only defined on own consumption levels but also on the consumption by other individuals.<sup>4</sup>

The following modeling framework establishes that preferences of an altruistic volunteer depend on private consumption and the aggregate supply of the public good.<sup>5</sup> For simplicity, the model considers an economy with only one private good and one public good. There are  $n - 1$  individuals and the public sector which contribute towards the provision of a public good. Each individual  $i$  is endowed with wealth,  $w_i$ , which he or she can allocate between the private good,  $x_i$  and private contributions to the public good,  $g_i$ . An individual's contributions,  $g_i$ , represent the monetary value of his or her voluntary labor donations. The price per unit of volunteer labor and of the private consumption good is normalized to one.

The total supply of the public good,  $G$ , is the sum of all contributions from individuals  $n - 1$  and the government sector, indicated by  $G = \sum_{i=1}^n g_i$ . It is assumed that private contributions by others and government contributions are perfectly substitutable; their sum is given by  $G_{-i}$  where  $G_{-i} = \sum_{j \neq i}^n g_j$  represent total contributions of everyone but person  $i$ .

Preferences of the altruistic volunteer are represented by the following utility function

$$(2.1) \quad U_i = U_i(x_i, G)$$

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<sup>3</sup>Badelt (1999: 445).

<sup>4</sup>On interrelated utility functions see e.g. Reece (1979), Schwartz (1970), Boulding (1962), Vickrey (1962), and Becker (1974). See Sugden (1984: 773-774) for a critique on using the interrelated utility function to explain altruism.

<sup>5</sup>Adapted from Andreoni's impure altruism model (1989, 1990).

$$\begin{aligned} \text{s.t.} \quad & x_i + g_i = w_i \\ & g_i > 0. \end{aligned}$$

The function is assumed to be strictly quasi-concave and increasing in both its arguments. It needs to be noted that the individual's own contribution,  $g_i$ , enters the function only as part of the public good,  $G$ . Hence, the individual derives his utility not from his own giving *per se*, but rather from the total supply of the public good.

As the altruistic individual is only interested in the aggregate provision of the public good, he or she will reduce own donations when contributions towards the public good by others increase and will increase own donations when contributions by others decrease, so that total contributions and the utility obtained from the public good will remain unchanged. The neutrality hypothesis states that purely altruistic individuals will reduce (increase) their own donations,  $g_i$ , one-to-one as donations by others,  $G_{-i}$ , increase (decrease).<sup>6</sup> This describes a situation of crowding-out.

## 2.2 Private Consumption Model

Contrary to the public goods model, in the private consumption model the contributor derives his or her utility from giving directly from the act of giving itself. Beginning with Olson (1965) and Becker (1974), economists have suggested that “people have a taste for giving: perhaps they receive status or acclaim, or they simply experience a ‘warm-glow’ from having ‘done their bit’” (Andreoni 1989: 1448).<sup>7</sup> It is the process of volunteering and the rewards associated with carrying out this activity that motivate the individual to give. In contrast, the outcome of their volunteer work and the necessity of their activity for the public as a whole does not influence their decision to volunteer. Badelt (1985: 50) calls this kind of motivation the ‘*Eigenvalue*’ of volunteering.

Preferences of a volunteer within the private consumption model can be expressed in a similar framework as the public goods model. The utility function takes the following form:<sup>8</sup>

$$(2.2) \quad U_i = U_i(x_i, g_i)$$

$$\begin{aligned} \text{s.t.} \quad & x_i + g_i = w_i \\ & g_i > 0, \end{aligned}$$

<sup>6</sup>See Andreoni (1989) for a deduction of this substituting behavior.

<sup>7</sup>Different types of ‘warm-glow’ giving have also been acknowledged by other economists. See e.g. Arrow (1975), Sen (1977), Collard (1978), Roberts (1984, 1987), Lucas and Stark (1985), Sugden (1982, 1984), Margolis (1982) and Posnett and Sandler (1986).

<sup>8</sup>Adapted from Andreoni (1989: 1450ff).

where utility depends on private consumption,  $x_i$ , and voluntary contributions,  $g_i$ , measured in monetary units. The function is again assumed to be strictly quasi-concave and increasing in both arguments. The price of the private consumption good and individual  $i$ 's labor donation is normalized to one. In this framework,  $g_i$  directly enters the volunteer's utility and can be regarded as a normal consumption good. On the other hand, the total supply of the public good,  $G$ , does not enter the utility function as the individual is not interested in the aggregate level of the public good.

Within this modeling framework, an individual's decision to contribute is independent of the level of contributions by others, i.e. own contributions are no longer a perfect substitute for donations by others. Therefore, the amount of contributions by individual  $i$  should not be directly influenced by changes in the supply of the public good and crowding out will not be a concern in this model setting. Rather, since individual donations are treated as normal utility-bearing goods, the amount volunteered should vary directly with the wealth of an individual and should vary inversely with the price of volunteering.<sup>9</sup>

### 2.3 Investment Model

The investment model refers to the direct quid pro quo which the volunteer can obtain through volunteer work. One return is the potential increase in the volunteer's labor market value as a result of voluntary activity. This could be achieved through human capital accumulation as the volunteer may receive training and acquire new skills, through the acquisition of useful contacts<sup>10</sup>, or through the opportunity to signal one's ability to prospective employers (Montgomery 1992, Duncan 1999).<sup>11</sup> All these measures will enable the volunteer to find, get, and perform jobs that have higher pay than those jobs which the volunteer would be able to acquire without his or her volunteer experience. Since present resources and returns are forgone for future returns, volunteering on the basis of exchange considerations can be regarded as investment behavior.

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<sup>9</sup> Using the net wage as a proxy for the price of volunteering, Menchik and Weisbrod (1987) and Schiff (1990) estimate a negative price elasticity of demand (Duncan 1999: 227). Brown and Lankford (1992: 327) find a positive effect of income on volunteer time for men. Further empirical evidence in support of private consumption is cited by Jakob (1991: 29) who finds from biographies of volunteers that individuals frequently start volunteering in times when uncertainty, orientation and crises are predominant, suggesting that volunteering is being utilized as a tool for overcoming this reorientation.

<sup>10</sup> Empirical findings indicate that volunteers tend to have more social contacts as compared to non-volunteers (see e.g. Wuthnow 1998: 25). These social ties can be used as a means to get better jobs.

<sup>11</sup> The potential of human capital accumulation or -preservation through engagement in volunteer work has been of high interest in public policy debates where volunteering is being discussed as a possible tool to improve job market re-entry chances of the unemployed, see e.g. Badelt (1999), Erlinghagen (2000).

A model capturing the investment mechanism has been developed by Menchik and Weisbrod (1987). Within the model it is assumed that volunteering can raise future earnings by increasing the volunteer's labor market value. An individual will be motivated to supply volunteer labor when the expected value of future income gained through volunteer experience, net the opportunity cost of volunteering, is positive.<sup>12</sup> In general, those individuals who have higher potential earnings from volunteering will provide volunteer labor.

One limitation of the defined model formulation is the negligence of contextual variables, particularly concerning the amount of contributions by others, either from private or public sources, on the individual's volunteer labor supply decision. While the authors investigate the tradeoff between an individual's voluntary contributions and the level of government spending empirically, this relationship is not integrated into their theoretical framework. These effects, however, are assumed to play a significant role in defining the decision-making process of the investment motivated volunteer. Private contributions by others and government spending levels towards the public good or service are hypothesized to influence the volunteer's own level of time contributions. Two possible effects can be identified in this respect.

*i) Signaling Effect:* In terms of private contributions by others, a positive dependence between volunteer  $i$ 's contributions and contributions by other volunteers can be intuitively established. In an environment characterized by competition on the job market and uncertainties about the qualifications of other job applicants, it will be the aim of the volunteer to retain a good bargaining position in terms of his or her labor market value in relation to other individuals. Volunteering in this scenario serves as a signaling advice of the volunteer through which he or she can signal to the (potential) employer that he or she is a 'good' type as opposed to a 'lemon'.<sup>13</sup> This implies that if many other competitors will signal their abilities by volunteering, volunteer  $i$  will also be enticed to do more of it by increasing his or her voluntary engagement.

*ii) Job-opportunity Effect:* Secondly, a positive influence of public spending levels on volunteer  $i$ 's contributions can also be established. High levels of government spending in a specific field, such as the education sector, will eventually lead to an expansion of job opportunities and labor demand in that sector. In an environment characterized by high public

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<sup>12</sup> For more details on the model formulation see Menchik and Weisbrod (1987) and Judd (1998).

<sup>13</sup> In a study investigating employers' hiring techniques, Miller and Rosenbaum (1996) find that academic records of job applicants play a secondary role in hiring decisions, but that employers frequently rely on other sources of information such as that obtained from social networks.

spending levels, area-specific skills and contacts will therefore be of a higher value as compared to an environment where job-opportunities are limited since the payoff from volunteering, measured by the probability of raising one's earnings by finding a new job or by advancing in an existing job will be higher. Accordingly, investment motivated volunteers will increase their voluntary engagement for a specific public good or service with increases in government contributions.

Based on the positive relationship between contributions by others, both private and public, and volunteer  $i$ 's own time donations, the investment motivation can be modeled in an analogous framework to the public goods- and private consumption motivation. Preferences of the investment motivated volunteer are presented in equation (2.3).

$$(2.3) \quad U_i = U_i(x_i, g_i(G))$$

$$\text{s.t.} \quad \partial g_i / \partial G > 0$$

$$x_i + g_i = w_i$$

$$g_i > 0.$$

The utility of the volunteer depends on private consumption,  $x_i$ , and on own contributions,  $g_i$ , which are a function of aggregate contributions to the public good,  $G$ . Given the stated constraints, each volunteer will choose his or her amount of voluntary labor supply in such a way as to maximize personal utility. Particularly, the volunteer's selected amount of voluntary contributions is expected to positively depend on the prevailing supply of the public good  $G$ .

## 2.4 Model Implications

The models provide three rationales for why volunteers decide to carry out volunteer work by identifying different sources of utility that can be derived from volunteering. Depending on the underlying motivation for volunteering, volunteers respond differently to changes in the amount of contributions by others, be it private or public sources. In the public goods model, a negative relationship between own and other's contributions became evident. The private consumption model defines a neutral relationship as a volunteer's motivation to donate is independent of the general level of contributions by others. Finally, for the investment model a positive relation was formulated as the investment motivated volunteer will increase own donations when private or public donations rise in order to maintain a sufficient signaling effect or due to an increase in job opportunities.

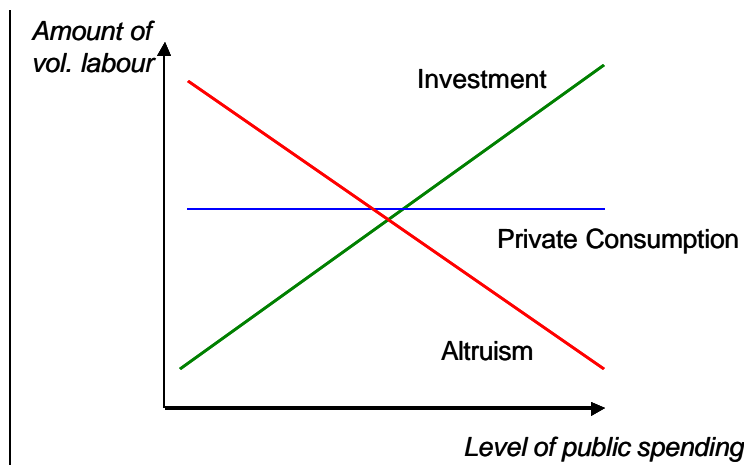
The variable 'donations by others' can therefore be regarded as an instrumental indicator which, on one hand, unifies the three models as the behavior of the volunteer in all three

scenarios depends on the magnitude of this variable, and on the other hand, helps to differentiate between the three models as the reactions of volunteers to changes in the magnitude of this variable differ across the three scenarios. As defined earlier in section 2.1, it is assumed that from the perspective of the volunteer ‘private contributions by others’ towards a public good and ‘public contributions’ towards the same good are perfect substitutes. The volunteer is therefore indifferent between changes in private contributions and in public spending levels. Since private donations by other volunteers are more difficult to capture, the variable ‘donations by others’ will be proxied by the level of public spending in the volunteer’s community.

The substitutability assumption between the two sources of contributions, private or public, has no effect on the established relationships between own and others’ contributions in the three model contexts. In case of the public goods model, the volunteer is only interested in the total amount of the public good  $G$ , regardless of its contributing source, whereas in the private consumption model,  $G$  does not even enter the volunteer’s utility function. For the investment model, a positive relation between the amount of own donations and private donations by others as well as public spending levels has been established. For the latter relationship, the positive influence was further derived theoretically.

The deduced relationships between the amount of labor volunteered and the level of public spending in the three model settings are captured in Figure 1.<sup>14</sup>

**Figure 1: Effects of Public Spending Levels on Volunteer Contributions**



<sup>14</sup> Menchik and Weisbrod (1987) have described two scenarios in which changes in public spending may occur. In the first scenario, changes in public spending are exogenously triggered and therefore independent of changes in the actual aggregate demand of the good for which expenditures are increased. In the second scenario, changes in public spending are not exogenously triggered but represent a response to changes in the demand of the median voter. The following analysis will be based on the first scenario and aggregate demand for the public goods is assumed to be constant.

Source: Own presentation

The figure presents the following relationships:

- Substitutability or crowding-out for the Public Goods Model
- Complementarity or crowding-in for the Investment Model
- Neutrality for the Private Consumption Model.

On the basis of these, a conceptual framework for empirically verifying the economic theories can be established. The next section will go a first step in this direction by operationalizing the three identified motives for volunteering.

### III Volunteer Motivation as an Empirical Concept

Given the plausible assumption that motivations within a population of volunteers are heterogeneous, a verification of the deduced model implications without identification of the underlying motive is not possible as only aggregated effects, dominated by the strongest motivation in the volunteer population, would be captured.<sup>15</sup> As this paper is aimed at testing the implications of each of the three models, a direct measure of volunteer motivations is needed.

In this section, the concept ‘motivation for volunteering’ will therefore be operationalized to enable an empirical investigation into the driving forces behind volunteer motivations and thereby a test of model implications. Section 3.1 describes the operationalization of the three motivations and Section 3.2 establishes the conceptual link between the created motivation variables and model predictions on volunteer behavior.

#### 3.1 Operationalization of Motivation Constructs

The underlying assumption for the operationalization of motives is that the motivation of volunteer  $i$ ,  $M_i$ , is composed of the three core motivations, i.e.

$$(3.1) \quad M_i = (Altruism_i, Investment_i, Egoism_i)$$

where  $Altruism_i$  represents the public goods motive,  $Investment_i$  the investment motive and  $Egoism_i$  the private consumption motive of volunteer  $i$ . The three motivations can be

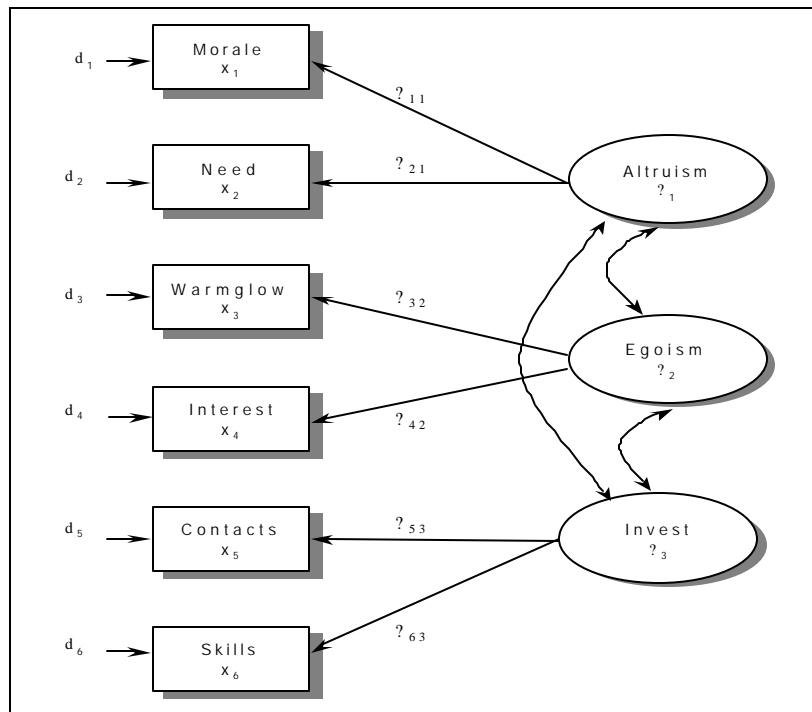
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<sup>15</sup> For example, a positive relation between the level of public spending and the level of the volunteers’ donations would merely indicate that the altruism motivation within the population of volunteers is strongest but would not allow to make any predictions on the presence and on the validity of the theoretically assumed relationships between own donations and public spending levels of the other two motivations.

regarded as latent concepts which are not directly observable or measurable and therefore need to be represented by indicator variables.<sup>16</sup>

The established measurement model, capturing the hypothesized relationships between latent motivation variables and indicator variables, is depicted in Figure 2:

**Figure 2: LISREL Measurement Model**



Source: Own presentation based on SEM notation.

The six indicator variables,  $x_1$ -  $x_6$ , have been directly obtained from survey data of responses of volunteers and measure how important specific reasons were for the volunteer's decision to engage in volunteer work.<sup>17</sup> They are classified on a *Likert* scale from 1-4 depending on the importance of the underlying motivation for the volunteer. The path coefficients,  $\gamma_i$ , measure the regression of the indicator variables on the latent variables, and the residual variables,  $d_i$ , account for measurement errors of each indicator variable.<sup>18</sup>

On the basis of the Maximum Likelihood (ML) method, using covariance matrices and asymptotic covariance matrices as inputs for the empirical data, the measurement model was estimated via Confirmatory Factor Analysis (CFA) using LISREL 8.51 (Jöreskog and Sörbom 2001). The analysis was carried out on a pooled data set of all countries and on separate

<sup>16</sup> Hair et al. (1998).

<sup>17</sup> The motivation questions behind these indicator variables are presented in the Appendix.

<sup>18</sup> References for Structural Equation Modelling (SEM) are e.g. Bollen (1989), Hair et al. (1998).

country data sets. The pooled data analysis and the multi-group tests of the three-factor model revealed a good applicability of the measurement model to all four countries. Consequently, the selected indicator variables can be regarded as appropriate representations of the latent constructs.

On the basis of the estimated coefficients between indicators and latent variables, factors scores for the variables ‘altruism’, ‘egoism’, and ‘investment’ were produced for each volunteer.<sup>19</sup> These scores were then (1) normalized and (2) set into relation with the other motivations to receive the proportion of each motivation in an individual’s total motivation. In the following formulas,  $MOT_i$  represents the obtained factor score for each of the three motivations of volunteer  $i$ .

$$(3.2) \quad NMOT_i = \frac{Max(MOT) - MOT_i}{Max(MOT) - Min(MOT)} \quad MOT \in \{ALT, INV, EGO\}$$

$$(3.3) \quad RNMOT_i = \frac{NMOT_i}{(NALT_i + NINV_i + NEGO_i)} \cdot 100 \quad MOT \in \{ALT, INV, EGO\}$$

In the two equations,  $MOT_i$  refers to the obtained factor score for each of the three motivations of volunteer  $i$ . In equation (3.2),  $NMOT_i$  represents the normalized factor scores for each motivation. The measures  $RNALT_i$ ,  $RNEGO_i$  and  $RNINV_i$  depicted in equation (3.3) indicate vector elements of a volunteer’s motivation  $M_i$ . They are positive, continuous and sum to 100. This reformulation of the factor scores helps to indicate the percentage proportion of each of the three motives in a volunteer’s total motivation. The presented operationalization of motives as compared to their operationalization as discrete variables further allows to model volunteers as being simultaneously driven by more than one motive.<sup>20</sup>

### 3.2 Linking Motivation Measures and Model Implications

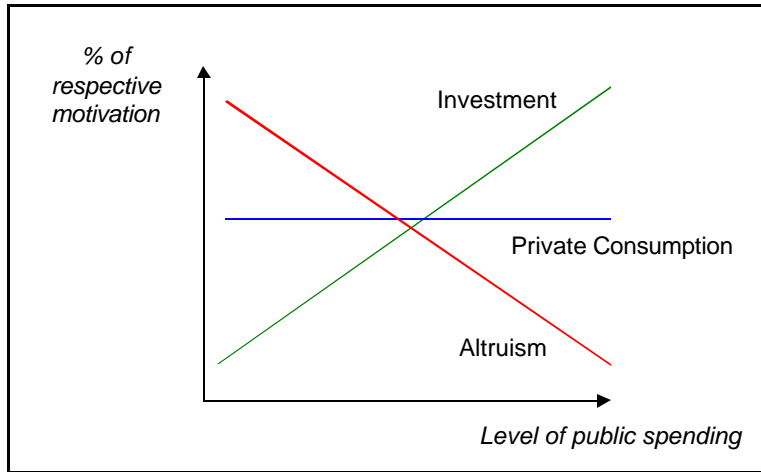
On the basis of these operationalized measures of volunteer motives, a conceptual framework can be established, whereby model predictions on volunteer behavior are translated into observable shifts in volunteer motives. The following Figure 3, which captures the testable relationships, is an adaptation of Figure 1.

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<sup>19</sup> Factor scores were calculated on the basis of the pooled data set to ensure equal scales and enable comparability of scores across the countries.

<sup>20</sup> In theory, the interplay between motives was formulated in the impure altruism model, in which individuals follow altruistic as well as egoistic considerations.

**Figure 3: Effects of Public Spending Levels on Motivation**



Source: Own presentation

The y-axis marks the share of each motivation (Altruism, Investment, Egoism) in a volunteer's total motivation,  $M_i$ . According to model implications, the share of a specific motivation within the total motivation for volunteering in a given population of volunteers should change as the level of public spending changes. For example, when public spending increases, altruism-driven volunteers will reduce their donations according to model predictions thereby causing a fall in the number of altruistically engaged volunteers and leading to a lower representation of altruism motivation as a whole. The reverse effect can be deduced for the share of investment motivation. The proportion of private consumption motivation should remain unaffected by changes in public spending as egoistically motivated volunteers are assumed to be indifferent towards contributions by others.

The following testable hypotheses can be derived:

**Hypothesis 1:** The proportion of altruism motivation in a given population of volunteers falls with increases in the level of public spending.

**Hypothesis 2:** The proportion of investment motivation in a given population of volunteers rises with increases in the level of public spending.

**Hypothesis 3:** The proportion of private consumption motivation in a given population of volunteers remains unaffected by changes in the level of public spending.

Confirmation of these hypotheses on the basis of empirical evidence would provide support for the empirical applicability of model implications.

## **IV Methodology and Data Sources**

Micro-level data on volunteers and voluntary organizations have been collected in South Korea, Poland, Ghana and Bangladesh in the period August – October 2001. A common definition for volunteering and voluntary institutions and a synchronized methodology for data collection in all four countries were utilized to ensure a reliable comparative analysis.

### **4.1 Definition of Volunteerism**

Volunteerism is defined as volunteering in the form of time donations. Furthermore, the volunteer work needs to be carried out within an institutional setting in the sphere outside the public and for-profit sector. In the context of this definition, a person qualifies as a volunteer if the voluntary action is:

- uncoerced, i.e. carried out with the volunteer's free will,
- productive, i.e. can be carried out by a third person for payment,
- not fully remunerated, allowing for reimbursements of costs and/or a small honorarium,
- carried out on a regular basis, excluding ad-hoc one-time action,
- for the benefit of persons outside the extended family of the volunteer while the volunteer (and/or his family) may also derive benefits from his actions.

The institutional setting in which the voluntary work needs to be carried out must satisfy the following conditions<sup>21</sup>:

- Organized, i.e. possess some institutional reality,
- Private, i.e. institutionally separate from government,
- Nonprofit-distributing, i.e. not returning any profits generated to their owners or directors,
- Self-governing, i.e. equipped to control their own activities,
- Voluntary, i.e. established voluntarily and employing at least two active volunteers,
- Exclude religious and political parties. Agencies affiliated with religious bodies but organized separately are included. Church affiliated groups are included if they do not work towards the aim of increasing membership of the church.

### **4.2 Data Sources**

In each country, cities and villages have been selected according to a stratified sampling scheme accounting for variations in rurality and population size of sites. For these sites sampling frames of voluntary organizations were compiled sharing the characteristics outlined

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<sup>21</sup> Criteria adapted from the Johns Hopkins Comparative Nonprofit Sector Project (CNP), Salamon et al. 1998.

in section 4.1. The basis for these sampling frames was the consultation of secondary information obtained from directories, ministries and umbrella organizations as well as primary information obtained from key informants.

From the established sampling frames 100-105 organizations were selected in each country. Selection was carried out according to stratification along different sites and proportional to the total number of voluntary organizations in that site. Three interviews were conducted in each organization: One with the director of the organization or a key-informant and two interviews with volunteers in the organization. The interviews were based on two different versions of questionnaires. The director responded to the ‘organizational level’ questionnaire which asked for general information on the organization and its volunteer and paid workforce and the two volunteers responded to the ‘individual level’ questionnaire which asked for socio-demographic information, community characteristics, frequency and type of volunteer work, and motivational factors.

## **V The Determinants of Volunteer Motives**

This section will make use of the operationalized motivation variables to test the established hypotheses regarding the influence of public spending levels on volunteers’ motives on the basis of econometric analysis. As country comparisons are among the main aims of this analysis, the data within each country were weighted to make them representative for the whole country. Furthermore, data sets have been corrected for outliers were applicable.

### **5.1 The Econometric Model**

To empirically assess the determinants of each specified motivation, an Ordinary Least Squares (OLS) Model with the following three regression equations is specified:

$$(5.1) \quad RNALT_i = \mathbf{a} + \mathbf{b}_1 PS\_INDEX_i + \mathbf{b}_2 IND_i + \mathbf{b}_3 INST_i + \mathbf{e}_i$$

$$(5.2) \quad RNINV_i = \mathbf{a} + \mathbf{b}_1 PS\_INDEX_i + \mathbf{b}_2 IND_i + \mathbf{b}_3 INST_i + \mathbf{e}_i$$

$$(5.3) \quad RNEGO_i = \mathbf{a} + \mathbf{b}_1 PS\_INDEX_i + \mathbf{b}_2 IND_i + \mathbf{b}_3 INST_i + \mathbf{e}_i$$

The dependent variables,  $RNALT_i$ ,  $RNINV_i$  and  $RNEGO_i$ , represent the strength of the specified motives in a volunteer’s aggregate motivation for volunteering. As they are measured on a scale from 0 to 100 (refer to equation 3.3), each variable reflects the percentage of the volunteer’s total motivation allocated to the specified motivation.

The determinants of volunteer motives are assumed to be differentiable into three groups. The first determinant represents the level of public spending,  $PS\_INDEX_i$ , the other two sets of variables refer to control variables which might influence a volunteer's motive regardless of the prevailing level of public spending. The proxy  $IND_i$  refers to variables specific to the individual, and the proxy  $INST_i$  represents variables linked to the institutional setting in which the individual resides.

## 5.2 Variables Used in the Econometric Analysis

In the regression analysis, the level of public spending,  $PS\_INDEX_i$ , is proxied by three variables, (1) the economic situation of the community in which the volunteer lives (ECOCOM), (2) the level of service provision through the community (COMPROV), (3) the degree of satisfaction of the volunteer with public service provision (SATIS). These three variables are based on subjective estimations of the volunteer and consequently reflect the volunteer's perceived level of public spending in the community.

Since the aim in the given framework is to understand the decision-making process of the volunteer, it is necessary to consider the volunteer's 'perceived' estimates of the public spending level in his or her community rather than objective measures of public spending. The volunteer will always react to what he or she 'feels' the public spending levels are and not necessarily to the true levels. Due to imperfect information, the volunteer will rarely have an exact knowledge about public spending levels in his or her community. Depending on the extent of asymmetric information, the difference between the perceived and true levels will vary.

Generally, levels of public spending are assumed to increase with the variables ECOCOM and SATIS and decrease with COMPROV. Wealthier communities as measured by ECOCOM enjoy higher levels of public provision and the need for filling niches left through the public or private sector will be smaller. On the other hand, high levels of provision of basic services, such as education, transportation, health, sanitation related services, through the community itself as measured by COMPROV indicate low degrees of public or private provision, as community provision typically becomes necessary because services are not or not sufficiently provided through the public sector or because public services are of a low quality. Regarding the variable SATIS, high degrees of satisfaction with public service provision suggest high levels of public spending and a low necessity for own supplementation of services.

The index,  $PS\_INDEX_i^{22}$ , equally accounts for all three measures and is used representatively for these measures in the regression analysis. Following model implications, it is hypothesized to have a different influence on each of the specified motives. Particularly,  $b_1 < 0$  is expected in the case of altruism motivation,  $b_1 > 0$  is expected in the case of investment motivation, and  $b_1 = 0$ , i.e. an insignificant effect, is expected in the case of egoism motivation.

The signs of the coefficients for the proxies referring to the individual and institutional variables are not directly determined by the theories but predictions can be made for some of the variables captured in these groups based on empirical evidence.

Definitions of the variables used in the regression analysis and their expected signs for the three regressions are presented in Table 2.

**Table 2: Variables Used in the Econometric Analysis**

Variable	Definition	Expected Sign ALT / INV / EGO
<i>Public spending</i>		
ECOCOM	Economic situation of community on scale 1-5 (1: poor)	- / + / 0 or +
COMPROV	Level of community service provision on scale 1-3 (1: low)	+ / - / 0
SATIS	Degree of satisfaction with public service provision on scale 1-7 (1: low)	- / + / 0
PS_INDEX	Public spending level in community on scale 0-1 (0: low)	- / + / 0
<i>Individual-specific</i>		
MALE	=1 if male	- / + / +
LOEDU	=1 if no or primary school education	- / + / x
MIEDU	=1 if middle school or high school education	- / + / x
STUD	=1 if student	x / + / x
RETIRE	=1 if retired	x / - / x
PAEMP	=1 if works part-time	x / - / x
HOUSE	=1 if housewife /-keeper	x / - / x
UNEMP	=1 if unemployed	x / + / x
AGE	Age in years	+ / - / x
AGESQ	(Age) <sup>2</sup> / 1000	+ / - / x
YGCHILD	=1 if child(ren) below age 6	x / + / -
MDCHILD	=1 if child(ren) aged 6-18	+ / x / x
INCOME	Household income on a scale from 1-6 (1: lowest)	x / - / +
<i>Institutional-specific</i>		
GOVENC	=1 if government encourages volunteerism	+ / + / x
RURAL	=1 if volunteer lives in rural area	+ / x / -

$$^{22} PS\_INDEX_i = \frac{1}{3} \left[ \left( \frac{SATIS_i - 1}{6} \right) + \left( 1 - \left( \frac{COMPROV_i - 1}{2} \right) \right) + \left( \frac{ECOCOM_i - 1}{4} \right) \right]$$

BANGLA	=1 if volunteer is from Bangladesh	+ / x / -
GHANA	=1 if volunteer is from Ghana	+ / x / -
POLAND	=1 if volunteer is from Poland	+ / x / -
GDP_PC	GDP per capita (PPP) / 1000	- / x / +

'x': no assumption on expected sign; '-' : negative; '+' : positive; '0': neutral.

In terms of gender, empirical studies have found different preferences of voluntary engagement. A volunteer survey conducted for Germany revealed that while male volunteers are mainly interested in recreational, job-related or political engagement, female volunteers prefer activities related to caring and helping others (Zierau 2000: 141). Similarly, a volunteer survey for Austria found that the majority of male volunteers are engaged in culture, entertainment and sports, while females are predominantly engaged in social services (Badelt and Hollerweger 2001: 26). This finding of females' interest in caring, person-to-person tasks and males' interest in public political activities, has been replicated in numerous studies<sup>23</sup> and is found to be stable across countries (Gaskin and Smith 1997: 35).

A further typical finding of the German national survey was that men tend to frequently become involved in leadership positions which are of a high public standing, whereas women prefer to volunteer in small, informal organizations (Zierau 1999: 141). From these findings it can be hypothesized that male volunteers exhibit higher shares of private consumption and investment motivation and lower shares of altruism motivation as compared to female volunteers.<sup>24</sup>

The level of education has been found to be one of the most consistent predictors for voluntary engagement (McPherson and Rotolo 1996).<sup>25</sup> One reason for this is that educated people are more likely to be asked to volunteer (Brady et al. 1999). Furthermore, education is also assumed to increase an individual's awareness of problems and to raise empathy (Wilson 2000). An empirical examination of volunteering among members of a fraternal benefit society revealed a positive effect of education on altruism, and a negative effect on parochialism (Busching 1987). Consequently, in terms of motivation, a positive relation is hypothesized between a volunteer's education level and his or her degree of altruistic considerations. A further empirical study analyzing the influence of education on volunteers' motivations found that less educated people place a higher emphasis on investment

<sup>23</sup> See Wilson (2000) for a discussion of findings in the literature.

<sup>24</sup> Several sociological studies address gender differences in altruism and empathy and typically find that females as opposed to males are more concerned with helping others (see e.g. Wilson and Musick 1997, Flanagan *et al.* 1998, Wilson 2000).

<sup>25</sup> The significance of the educational level for volunteer engagement varies, however, across different types of volunteer work. E.g. it is particularly strong for political volunteering and insignificant for informal, community work (Omoto and Snyder 1993, Wilson 2000).

motivation<sup>26</sup> (Clary et al. 1996), justifying the hypothesis of decreasing investment motivation with educational level.

In terms of employment status, few predictions can be made for altruism and private consumption motivation. Regarding investment motivation, it is expected that students exhibit higher investment motivation as compared to other employment groups as they are in the process of accumulating labor market qualifications.<sup>27</sup> On the other hand, retired individuals will be less investment oriented as the period of return from volunteer work is relatively short. At the same time, it can be inferred from empirical findings that they might be more private consumption and altruistically motivated in their volunteer engagement<sup>28</sup> (Brendgens and Braun 2000: 156ff).

Working on a part-time basis could be an indicator for less ambitions on the job-market, suggesting a negative influence on investment motivation. For the group of not employed volunteers, housewives are hypothesized to be more altruistic or egoistic rather than investment oriented, while unemployed volunteers should follow the investment motivation.

In terms of age, Janoski and Wilson (1995) find that people who move from young adulthood to middle age tend to exchange their 'self- and career-oriented activism' for more community-oriented work (Wilson 2000). This suggests that age should have a negative influence on investment motivation, as the possible return from the job-market decreases with age, and a positive influence on altruism, as the awareness of societal problems grows with age.

Individuals with children below the age of six are typically time constrained, suggesting low shares of private consumption motivation.<sup>29</sup> Individuals with school aged children, on the other hand, are predicted to be more altruistically motivated. They often get involved in school-related activities for which public funding is scarce, such as scouting (Smith 1994). Furthermore, parents of school-aged children are more likely to volunteer in helping community-oriented groups, while they are less likely to help professional associations or

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<sup>26</sup> Investment motivation is referred to as Career function in the study (Clary *et al.* 1996).

<sup>27</sup> In a volunteer survey conducted for Germany in 1999 it was found that students and young individuals place a much stronger emphasis on gaining experience through volunteer work as compared to other age groups. Young volunteers were also particularly concerned with obtaining appreciation for their engagement (Picot 2000:150).

<sup>28</sup> The volunteer survey conducted in Germany found that retired volunteers are predominantly engaged in the areas of recreation, church, social fields, leisure, culture and music, suggesting special interest for altruistic and private consumption motives. The study further found that the elderly are less likely to be involved in leading functions as compared to the other age groups, indicating the lack of investment motivation (Brendgens and Braun 2000: 156ff).

<sup>29</sup> Findings of a volunteer survey conducted in Germany revealed that women with children below the age of three years show the lowest representation in volunteer engagement, probably due to time constraints (Zierau 2000: 139).

unions, further suggesting higher altruism levels (Janoski and Wilson 1995, Woodard 1987, Wilson 2000).

Finally, in terms of income, a positive influence on egoism motivation is expected as volunteering is seen as a normal consumption activity in the private consumption model. At the same time, Clary et al. (1996) found that investment considerations seem to play a less important role for volunteers with higher income levels relative to those at lower income levels. A negative influence of income on investment motivation is therefore hypothesized.

Regarding the institutional-specific variables, the variable 'GOVENC' helps to indicate whether the institutional concept 'volunteerism' is established and accepted in society and reflects the general 'climate' for volunteering. The existence of public encouragement also suggests that the population probably has more possibilities for volunteer engagement. In terms of motivations, it can be hypothesized that investment motivation will be higher in such an environment as volunteer work is probably more accepted and accredited. Altruism levels might also be higher as the encouragement will raise the awareness of needs in society.

The 'RURAL' variable is included as it can be assumed that volunteerism takes different forms in rural and urban environments<sup>30</sup> which might also affect volunteer motives. Rural environments are typically characterized by a higher incidence of poverty and market and state failures. Consequently, the lack of public goods and services and the need to fill these gaps is also more severe. It can therefore be expected that altruism levels will be higher. Furthermore, private consumption motives should be lower as poor people have a higher opportunity cost for leisure. These hypotheses are supported by Wuthnow (1998) who finds that volunteers living in small towns emphasize solidarity benefits and norms of reciprocity, while volunteers in suburban environments emphasize self-development. These observations further confirm the general assumption that the reasons for volunteering are affected by the volunteer's place of residence.

The three country dummies are included to control for country-specific differences in motives. While it is difficult to generalize a country's effect on motives, some hypotheses regarding the influence of the development level of a country on the distribution of volunteer motives can be established. It is predicted that altruism motivation plays a more significant role in less developed countries where public service provision generally is low as individuals will face a larger need for supplementing services. Private consumption motivation on the

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<sup>30</sup> Cities and urbanized areas are generally found to be less congenial to volunteering (Smith 1994, Wilson 2000).

other hand should increase in significance with a country's development level. As the living status of the population rises, leisure activities will also increase in importance.

Alternative to the country dummies, the variable GDP\_PC which measures the GDP per capita in each of the four countries is included. The variable is a proxy for the level of economic development of a country. Accordingly, altruism motivation is expected to decline and private consumption motivation is expected to increase with rising GDP per capita.

The descriptive statistics for the variables used in the analysis are presented in Table 3, both for the individual country data sets and the pooled data set.

**Table 3: Descriptive Statistics of Variables Used in the Analysis**

	Bangladesh		Ghana		Poland		Korea		Pooled	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
<i>Dependent Variables</i>										
RNINV	32.654	6.338	29.536	15.325	28.479	10.692	25.837	10.613	29.142	11.393
RNALT	33.615	3.595	35.915	13.682	35.127	9.240	37.506	11.714	35.526	10.302
RNEGO	33.731	4.109	34.549	8.148	36.393	5.773	36.656	5.845	35.332	6.225
<i>Independent Variables</i>										
MALE	0.830	0.377	0.665	0.473	0.381	0.487	0.474	0.501	0.588	0.493
LOEDU	0.152	0.359	0.022	0.146	0.033	0.180	0.025	0.157	0.059	0.235
MIEDU	0.501	0.501	0.572	0.496	0.433	0.497	0.444	0.498	0.487	0.500
HOUSE	0.102	0.303	0.000	0.000	0.025	0.156	0.217	0.413	0.086	0.281
STUD	0.063	0.244	0.140	0.348	0.237	0.426	0.196	0.398	0.159	0.366
RETIRE	0.024	0.153	0.044	0.205	0.103	0.304	0.016	0.125	0.047	0.211
PAEMP	0.184	0.388	0.100	0.301	0.013	0.115	0.076	0.265	0.093	0.291
UNEMP	0.115	0.320	0.169	0.376	0.039	0.195	0.081	0.273	0.100	0.301
AGE	33.831	10.890	36.611	12.709	37.879	16.920	36.668	11.524	36.236	13.285
AGESQ	1.263	0.864	1.501	1.123	1.720	1.396	1.477	0.887	1.489	1.099
YGCHILD	0.364	0.482	0.259	0.439	0.053	0.224	0.100	0.300	0.194	0.396
MDCHILD	0.388	0.488	0.396	0.490	0.249	0.433	0.338	0.474	0.342	0.475
INCOME	2.655	1.732	4.099	1.385	3.270	1.213	3.323	1.499	3.327	1.554
GOVENC	0.518	0.501	0.460	0.500	0.125	0.332	0.368	0.483	0.367	0.482
RURAL	0.522	0.501	0.062	0.243	0.432	0.497	0.302	0.460	0.333	0.472
PS_INDEX	0.330	0.149	0.438	0.226	0.366	0.214	0.281	0.179	0.353	0.202
GDP_PC	1.4830	0.000	1.881	0.000	8.450	0.000	15.712	0.000	6.891	5.800
Sample Size	204		194		202		200		800	

### 5.3 Results of Regression Analysis

Regression analysis for each motivation based on OLS estimation has been conducted on a pooled data.<sup>31</sup> In total, four models were run on this data set which can be differentiated by (1) their inclusion or exclusion of the AGESQ term, which allows to capture non-linear

<sup>31</sup> Regression analysis of four separate country data sets have also been carried out, but are not presented here due to space constraints. Results generally confirm findings of the pooled data set and are available from the author upon request.

influences of age, and (2) their inclusion or exclusion of country dummies versus the variable GDP\_PC. Including the variable GDP\_PC allows to test whether significant country effects can be accounted for by differences in the level of economic development. Since significant country effects were found for all three motivations, Table 4 depicts the estimated regressions results using the variable GDP\_PC. The presented regression models further depend on the particular findings of the age effect

**Table 4: Determinants of Motives in Pooled Data Regressions**

	<b>Altruism</b>	<b>Investment</b>	<b>Egoism</b>
	<b>Model 4</b>	<b>Model 4</b>	<b>Model 3</b>
Constant	33.423*** (17.71)	37.469*** (17.51)	34.009*** (14.37)
PS_INDEX	-8.561*** (-4.80)	4.865** (2.41)	3.471*** (2.95)
MALE	-1.361* (-1.91)	0.431 (0.54)	1.241*** (2.62)
LOEDU	-2.011 (-1.28)	1.938 (1.09)	0.208 (0.20)
MIEDU	1.551** (2.15)	-1.596** (-1.96)	-0.067 (-0.14)
HOUSE	-2.938** (-2.31)	2.825** (1.96)	0.472 (0.56)
STUD	-4.883*** (-4.16)	5.910*** (4.44)	-1.529* (-1.87)
RETIRE	1.839 (1.00)	-3.776* (-1.83)	0.134 (0.11)
PAEMP	0.618 (0.53)	-1.693 (-1.29)	1.250 (1.64)
UNEMP	-1.687 (-1.38)	0.431 (0.31)	1.325 (1.63)
AGE	0.156*** (4.35)	-0.170*** (-4.18)	-0.285** (-2.48)
AGESQ	---	---	3.352** (2.53)
YGCHILD	-2.316** (-2.53)	2.191** (2.11)	0.423 (0.70)
MDCHILD	1.622** (1.96)	-1.872** (-1.99)	1.138* (1.93)
INCOME	0.057 (0.24)	-0.480* (-1.78)	0.518*** (3.30)
GOVENC	-0.703 (-1.01)	-0.419 (-0.53)	1.075** (2.34)
RURAL	-0.819 (-1.05)	0.688 (0.77)	0.143 (0.27)
GDP_PC	0.116* (1.80)	-0.384*** (-5.28)	0.295*** (6.90)
Adjusted R <sup>2</sup>	0.172***	0.191***	0.081***
N	797	800	799

t-statistics in parentheses. \* significant at 0.1, \*\* significant at 0.05, \*\*\* significant at 0.01

The regression results reveal a strong and significant influence of the perceived level of public spending on volunteer motivations. Furthermore, the signs of the variable for the individual motives support theoretical predictions: high perceived public spending levels negatively influence altruism motivation and positively influence investment motivation. While no clear relation between private consumption motivation and level of public spending can be established in theory, the regression reveals a positive effect of public spending on private consumption motivation. The effect is, however, weaker when compared to the other two motivations. One possible explanation for this positive influence could be that the ‘warm

glow effect' of volunteer giving is stronger when the area of engagement is regarded of high importance, as indicated by high public spending levels.

The results further depict that individual-specific variables also significantly affect volunteer motivations. The significant variables and their direction of influence differ across motives, indicating that differently motivated volunteers are typically also defined by quite different personal characteristics.

Volunteers who are altruistically motivated are generally female and have completed a middle or high school education as opposed to a higher level of education. In terms of employment status, students are less likely to follow altruistic considerations as compared to other employment groups. Altruistically driven volunteers are more likely to have children aged 6-18 rather than older children or no children at all. This finding supports the reflection that parents of school-age children are more likely to become aware of gaps in public sector provision, e.g. in the educational system, and frequently take up volunteer work in school-related activities to fill these gaps. Volunteers with very young children appear to be least altruistically motivated. Lastly, altruism increases with age and is not affected by income level. Generally, many of these findings confirm the hypothesized influences outlined earlier in Table 2.

In terms of investment motivation, gender plays no significant influence. Regarding the educational level it is found that volunteers characterized by a strong investment motivation typically have a low or very high educational achievement, as opposed to a medium education level. The positive significance of volunteers with a high educational degree contradicts the established prediction that volunteers who are more established or socially advantaged, as those with high educational levels, have a lesser need for using volunteer work as an investment tool. On the other hand, the findings that investment motivated volunteers are more likely to be students and less likely to be retired and that investment motivation declines with age support model predictions. Students can expect higher increases in future earnings from volunteering as compared to retired volunteers, and the relevance of investment considerations tends to decrease with age.<sup>32</sup> Investment oriented volunteers are further found to mainly have young children and are less likely to have school-aged children.

Gender plays a highly significant role in the case of egoism motivation. As hypothesized, males are more likely to follow private consumption considerations in their volunteer work. While employment status is found to be of little importance for determining a volunteer's

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<sup>32</sup> See Duncan (1999), Menchik and Weisbrod (1987).

private consumption motivation, students are generally less likely to be egoistically motivated. Private consumption motivation declines with age and then rises again. Having school-aged children has a positive influence on the volunteer's private consumption motivation. The positive influence of income supports the theory that egoistically motivated volunteers see volunteering as a consumption activity of which consumption is increased with increases in income.

The effects of institutional variables on volunteer motives, with the exception of the country-specific effects, are less pronounced. The variable indicating a rural environment is insignificant in all three motives, whereas the variable measuring government encouragement has a positive effect on private consumption motivation. Government encouragement could lead to the establishment of certain types of institutions for volunteer work, such as sports facilities, which are more attractive to private consumption motivated volunteers.

The level of economic development of a country, as indicated by GDP\_PC, significantly influences volunteers' motivations. Increases in GDP per capita lead to an increase in altruism and private consumption motivation and to a decrease in investment motivation. The effects are stronger for investment and egoism motivation. These shifts in volunteer motives partially confirm expectations. Private consumption was assumed to be of a higher importance in more developed countries where the population enjoys a higher living standard. On the other hand, altruism was predicted to be negatively influenced by the development level of a country, instead a positive effect was found. The high relevance of investment motivation in less developed countries reveals that volunteers might be more concerned with income-generating activities in these countries. Also, volunteer work might be regarded as a more instrumental type of activity rather than a pure leisure activity.

## **VI Conclusions**

Volunteerism is regarded as a socially and economically desirable activity. As such, policy makers are concerned with improving their understanding of this institution by identifying factors that stimulate voluntary action and those that inhibit voluntary action.

In the economic literature, three main theories on motivations for engaging in volunteer work have been identified. Each of them predicts quite different reactions of volunteers towards changes in the level of contributions by others. Depending on whether the volunteer follows altruistic, investment or egoistic motivations, he or she will regard own donations and collective donations by others as substitutes, complements or neither. This implies that each of the three motivations for volunteering is also stimulated and inhibited by different factors.

To identify the determinants underlying each motivation and particularly to verify the effects of changes in the level of contributions by others on volunteer motivations, a disaggregated analysis based on micro level data has been undertaken.

The results reveal that public spending levels, a proxy for aggregate contributions by others, as perceived by the volunteer, can indeed be regarded as a significant determinant of volunteer motives. Theoretical predictions can therefore be generally supported. Volunteers who perceive high levels of public spending tend to be characterized by a lower share of altruistic motivation and a higher share of investment motivation.

Furthermore, it became evident that volunteer motives are also significantly influenced by individual and country-specific factors. Particularly, the level of the country's economic development significantly determines the distribution of motives, with economic development positively influencing altruism and private consumption motivation and negatively influencing investment motivation. Moreover, differences in terms of the type of opportunities countries offer for volunteer work, the incentives they provide volunteers, and the time they leave the population for volunteering will most probably also account for variations in the distribution of volunteer motives within and across different countries.

Further research needs to address the implications that different volunteer motives have on the volunteer, such as their influence on volunteer behavior. Particularly, it will be of high policy relevance to understand in how far differently motivated volunteers will also differ in terms of the hours they engage in volunteer work, the type of voluntary activity they carry out, and the field of voluntary organizations in which they decide to engage themselves.

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## Appendix

**Table A.1: Reasons for Volunteer Work <sup>a</sup>**

	<i>Reason</i>	<i>Variable</i>	<i>Motive</i>
1.	I volunteer because of my social principles / moral obligation.	MORALE	Altruism
2.	I think there is a great need for somebody to do this kind of work.	NEED	Altruism
3.	I am volunteering because it makes me feel good.	WARMGLOW	Egoism
4.	I had an interest in the activity or work.	INTEREST	Egoism
5.	I want to make new contacts that might help my business or career.	CONTACTS	Investment
6.	I want to learn new skills and/or receive training	SKILLS	Investment

<sup>a</sup> Questions were partially adapted from Independent Sector's Giving and Volunteering Survey.