

An economic study on charitable giving of individuals in Korea:
Some new findings from 2002 survey data

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1. Introduction

Charitable giving has spread among the Korean people, especially since 1998 when the economic crisis hit Koreans have come to recognize the importance of charitable giving in improving the welfare of society. A survey conducted in 2000 on charitable giving of 1999 showed that 63% of individual households surveyed had experience of giving money for charitable activities during the year of 1999. At that time, charitable giving was expected to grow in Korean society and was also expected to play a more important role in financing charitable activities in the years to come. At the same time, in Korea, a growing number of people involved in charitable activities have become interested in issues, such as how to promote charitable giving among Koreans, that is, how to help nonprofit organizations, succeed in fund raising and how to support those organizations in fund raising with more effective government policies. This is related to the fact that in Korean society, nonprofit activities are no longer the sole responsibility of the government and the civil sector should now be active in carrying out nonprofit activities to meet social demand more efficiently in a partnership with government. Therefore, research needs to be carried out on charitable giving behavior of Koreans to provide empirical findings that would offer solid answers to those questions related to charitable giving since the 2000 giving survey. This paper is a follow-up to the voluntary giving behavior study of 1999 (Park et al., 2002).

The main purpose of this study is to discuss whether charitable giving behavior of the Korean people has changed during the three years following 1999, the year in which the first giving survey was conducted. This paper tries to answer the questions of, (i) whether there has been significant change in charitable giving participation rate between the two years, (ii) if there has been, what are the main factors of this change, (iii) have there been changes in charitable giving behavior of Koreans during this period, regardless of any significant change in charitable giving participation rate.

2. The Data

The data used in this paper is from the survey of household giving conducted from July 3 until July 17 of 2002. The survey was conducted on a nation-wide sample of 1,512 individuals over 20 years of age through individual interview.ⁱ The sample was made based on the proportion of gender and region across the country, except for Jeju Island. The data on charitable giving refers to 2001 monetary giving of the respondent's household for the calendar year. The sample consists of 49.3% male and the remaining 50.7% female interviewees. With respect to region, 47.5% of the sample was selected from large cities across the country, 37.1% from small and medium-sized cities, and the remaining 15% from rural areas.

ⁱ Volunteer 21, a nonprofit organization in Korea, prepared the questionnaire and conducted the survey with assistance from a professional survey company.

Looking at age structure, people in their 20's and 30's accounted for 23.8% and 25.6%, respectively, 40's and 50's 22.1 % and 28.5%, respectively. Among the sample, 42.9% received more than high school level of education and more than 34% of the sample received college education or more, while around 22% received less than junior high school education.

(Table-1) Gender, Age, and Socio-economic Characteristics of Respondents

Characteristics		%
Gender	Male	49.3%
	Female	50.7%
Age	20s	23.8%
	30s	25.6%
	40s	22.1%
	50s or more	28.5%
Education	Less than junior high school	22.4%
	Less than senior high school	42.9%
	College or more	34.7%
Religion	Buddhism	26.7%
	Protestant	20.7%
	Catholic	8.7%
	None	44.0%
Region	Large cities	47.9%
	Small & medium cities	37.1%
	Rural areas	15.0%
Occupation	Agriculture/Forestry/Fishery	8.2%
	Self-employed	18.1%
	Blue-collar	16.9%
	White-collar	16.5%
	Housewives	25.5%
	Students	9.1%
	Without occupation	5.6%
Income	Less than 1.5 million	30.3%
	1.5-2.5 million	38.7%
	2.5-4.0 million	23.3%
	More than 4 million	5.5%
	No response	2.2%

Some findings from the 2002 survey

According to the 2002 survey, more than 950 individuals, equivalent to 63.3% of the total of 1,512 individuals, responded that he/she participated in charitable giving during the year of 2001 at least once. The participation rate of those who ever participated in charitable giving during 2001, excluding ordinary giving to religious organizations as members, is about 52.3%, about 10% lower than the total participation rate. The 2002 survey, unlike the 2000 survey, distinguishes ordinary giving to religious organizations by members for maintenance and operating expenses and/or building construction from special contributions only to support charitable activities for society through their religious organizations, such as help to the poor. Considering this difference between 2001 and 1999, the participation rate in

2001 did not change much from that in 1999. According to the 2002 survey, individual charitable giving did not change during the years of 1999-2001, during which civil society organizations tried every effort to promote charitable giving activity in Korean society. In 2001, 62.8% of males were found to be participating in charitable giving, more than 1% point lower than female respondents. But, excluding ordinary giving to religious organizations, participation rate of male respondents was found to be almost 6% point higher than that of female respondents, showing the fact that females usually have higher tendency to contribute to religious organizations.

(Tabele-2) Participation rate in charitable giving in 2001

63.3%				
Gender	Male		Female	
	62.8%		63.9%	
Age	20s	30s	40s	50s & over
	53.6%	77.8%	77.6%	48.0%
Income	1.5 million	1.5-2.5 million	2.5-4.0 million	4.0 million or over
	52.2%	65.8%	72.4%	74.7%

Among different age groups, respondents who were in their 30's showed the highest rate of participation in charitable giving, 77.8%, followed by 76.6% for those in their 40s, 53.6% for 20s, and 48.0% for 50s and over.ⁱⁱ Among different household income groups, those belonging to the highest income group with more than 4.0 million won showed the highest participation rate, 74.7%. For those with the next highest household income, 2.5- 4 million, 72.4% ever participated in charitable giving, but, those with lower household incomes show lower participation rate than higher income groups, 65.8% for those with 1.5-2.5 million won and 52.2% for those with less than 1.5 million won. Compared to 1999, those with higher household income have shown a higher rate of participation in charitable giving. The participation rate of individuals belonging to the highest and second highest household income has increased, while that of those with the lowest and second lowest household income have relatively decreased compared to 1999.

Looking at types of organizations that charitable contributions have been made to, excluding ordinary ones to the religious organizations of those participants, more than 44% of the respondents who ever participated in charitable giving gave monetary contributions to religious organizations to support them in handing out help to their poor or economically disadvantaged neighbors. More than 23% of the participants had experience in making contributions to social welfare organizations to support them to pursue their activities. Combining these two contributions, most of the individuals who have ever given

ⁱⁱ In 1999, people in their 40s showed the highest participation rate, followed by those in their 30s, then 20s, and 50s and over. Compared to 1999, the participation rate of those in their 30s remarkably increased in 2001.

charitable contributions in 2001 made charitable contributions for social welfare activities, either through social welfare organizations or religious organizations. Educational institutions rank third in terms of type of nonprofit organizations that received charitable contributions, followed by environmental preservation or protection organizations, and organizations carrying out other public-interest activities.

(Table-3) Types of organizations receiving charitable giving

Types of organizations	%
Religious organizations(for the purpose of helping for the poor)	44.6
Social welfare organizations	23.1
Educational institutions	7.8
Environmental organizations	4.3
Private public-interest organizations	3.8
International organizations	3.7
Health and medical organizations	2.9
Corporate and private foundations	2.8
Arts, culture, and sports organizations	2.2
Youth organizations	1.8
Recreational organizations	1.3
Other	58.8

In 2001, among 1,512 respondents, only more than 10 percent contributed only to religious organizations as ordinary contributions as member of those organizations and more than 21% only to non-religious organizations to support their charitable activities. More than 31 % contributed both to religious and non-religious organizations, in support of charitable activities of both organizations. The overall participation rate did not increase, compared to 1999, but those who ever contributed to non-religious organizations as well as religious organizations remarkably increased in number. It is very noticeable that those who ever voluntarily contributed to non-religious organizations for their intended activities increased in number, as well as their religious organizations to support neighbor-helping activities in 2001.

(Table-4) Percentage of charitable contributions among religious and non-religious organizations

Year	Giving only to religious organizations	Giving both to religious and non-religious organizations	Giving only to non-religious organizations
1999	17.40%	12.97%	32.31%
2001	10.84%	31.15%	21.30%

Compared to 1999, the average giving amount of those who ever participated in voluntary giving much increased from less than 180,000 won to more than 480,000 won per year. Looking at the structure of

giving, even in 2001, people still contributed a much higher amount, more than 460,000 won, to their own religious organizations as members, but the same people increased their amount of giving to non-religious organizations and their own religious organizations to support social welfare activities outside their religious organizations. Combining the giving amounts both to non-religious and religious organizations, one contributor, on average, contributes more than 216,000 won, much higher than the amount only to non-religious organizations.

3. Charitable giving and its explanatory factors

The economic literature, assuming that individuals are self-interested and are using their limited amount of monetary resources only for their own satisfaction, explains voluntary giving of individuals in three ways: public good approach, warm-glowing approach, and private consumption approach (Park et al., 2002). There have been a number of empirical studies based on these economic approaches to test which approach is more appropriate in explaining charitable giving of individuals with different types of data, survey or non-survey data. This study, for conducting empirical analysis on charitable giving in Korea, is to confirm whether or not those major determinants found in our 2002 study explain individual voluntary giving behavior, using the economic model as follows:

$$\text{Giving} = f(\text{Income}, \text{Givingprice}, \text{Position}, \text{Volunteering}, \text{Attitude}, \text{Education}, \text{Age}, \text{Religion})$$

Giving indicates that the amount of monetary giving that the respondent or his/her family made together for the calendar year of 2001. (*Giving* > 0 if giver, *Giving* = 0 if non-giver)

Income is monthly income of the household that the respondent belongs to. The level of household income(*Income*) is expected to positively affect the decision to participate in charitable giving and the amount of giving when participating. However, it has been said that even though the level of household income does positively affect whether to participate in giving or not, it does not affect giving amount for participants(Smith et al., 1995). In our previous study using 1999 giving data, the level of household income that respondent belongs to was found not to be a significant factor explaining either the participation in charitable giving or the amount of charitable giving of those who participated in the voluntary giving. But as time passes, household income could be a significant explanatory factor in determining voluntary giving behavior and/or amount of charitable giving. While our previous study of 1999 data used 9 income classes, this study uses 10 income classes, 1) less 1 than million won, 2) 1-1.5 million, 3) 1.5- 2.0 million, 4) 2.0-2.5 million, 5) 2.5-3.0 million, 6) 3.0-3.5 million, 7) 3.5-4.0 million, 8) 4.0 - 4.5 million, 9) 4.5 - 5 million, and 10) 5 million and over. Therefore, for estimation, we used the

midpoint of each household income class. But because in the first and last income classes we could not derive the midpoints, we used the average household incomes of the lowest and highest income classes from “Household Income and Expenditure Survey.”ⁱⁱⁱ

Givingprice indicates how much the contributor actually bears the cost of monetary giving. This variable reflects how tax benefit for charitable giving has been treated for those contributors. In the previous studies, this variable has been treated as one of the most important determinants affecting charitable giving, both whether to participate in giving and the amount of participants (Feldstein, 1977a, 1975b ; Glenday et al., 1986 ; Kingma, 1989). This study is to test whether *Givingprice* affects voluntary giving behavior and/or the amount of charitable giving among the participants, even though our previous study did not support this argument. When an individual decides whether or not to contribute money to charitable or nonprofit organizations, how much tax benefit they can get from it is assumed to matter significantly in deciding participation and amount of giving. When an individual contributes money, he can get tax deduction and as a result, the actual cost of charitable giving would be reduced by the amount of the tax benefit. *Givingprice* would be 1 if no tax benefit and become less than 1 and smaller as tax benefit comes into existence and becomes larger. $Givingprice = 1 - (\text{amount of tax benefit}/\text{taxable income})$.

There are some limitations with estimating *Givingprice*. First, only income tax benefit is considered for estimating *Givingprice*, assuming that all the respondents are wage and salary earners without business incomes, because the survey data do not provide more classified income sources of household incomes. For those who have business incomes, more generous tax benefits for monetary contributions, compared to wage and salary earners without business income, are applied.^{iv} The range of *Givingprice* for 2001, from 1 to 0.773, has expanded, compared to from 1 to 0.812 in 1999, mainly due to one important change of tax code in 2000 related to charitable contributions of individuals.^v

(Table-5) *Givingprice* by income classes

Income classes (million won)	<i>Givingprice</i>
Less than 1.0	1.0
1.0-1.5	1.0

ⁱⁱⁱ Income groups of “Household Income and Expenditure Survey” do fit with the giving survey and therefore, we can use average household income for these two income groups. For those two groups, less than 1 million and 5 million and over, the average incomes of the lowest and highest income groups within the survey are used.

^{iv} About 18% of the respondents have business incomes and almost all of the respondents are not contributing amount of money that exceeds the upper limit of the deductible amount applied to wage and salary earners. Therefore, there might exist some error with the *Givingprice* in this study.

^v For individuals, the 2000 tax reform stipulates more generous income tax benefits for charitable giving, allowing up to 10% of total income as deductible, compared to 5% until then.

1.5-2.0	0.9
2.0-2.5	0.875415
2.5-3.0	0.854259
3.0-3.5	0.841964
3.5-4.0	0.834317
4.0-4.5	0.828498
4.5-5.0	0.821684
5.0 and over	0.773321

Position indicates what kind of occupation respondent is involved in for a living. This variable is included as an explanatory one, assuming that individual's participation in charitable giving is affected if they are engaged in a certain type of occupation with peer pressure or prestige. White-collar employees are assumed to have a higher chance of participating in charitable giving than blue-collar workers. This, as a dummy, is 1 if white-collar worker and 0 if not.

Volunteering shows whether or not the respondent has ever experienced volunteering. Since voluntary contribution of individuals for charitable activities includes labor contribution as well as money contribution, having experience in volunteering or not is supposed to be included in analyzing charitable giving behavior. But it cannot be determined a priori whether charitable giving and volunteering experience have a substitutive or complementary relationship.^{vi} On the one hand, monetary contributions can replace the role of labor contribution in carrying out charitable activities for increasing social welfare. On the other hand, those with experience in volunteering have higher chances of participating in charitable giving than those without, because they have a better understanding of the role and meaning of charitable giving. The 2002 study showed that those who ever experienced volunteering had a higher chance of participation in voluntary giving behavior, showing that volunteering and charitable giving behaviors are complementary. At the same time, those, among the participants in voluntary giving, who ever had volunteering experience made larger amounts of charitable contributions.

Education, found to be significant in explaining voluntary giving behavior and also amount of charitable giving of participants in the previous study of 2002, indicates the level of education of the respondent under the assumption that the level of education of the respondent would affect charitable giving behavior. As level of education increases, respondent will have better understanding of the meaning of charitable

^{vi} Duncan(1999) argues for a substitutive relationship between volunteering and money giving, while Brown & Lankford(1992), Schiff(1990), and Menchik and Weisbrod(1987) argue for a complementary relationship between them.

giving and its effect on society. In this study, education variable becomes 1 if education level is college or over and 0 if otherwise.

Age, *Religion* and *Region* are other important determinants of charitable giving behavior. *Age* indicates whether respondent is 65 years old or over. The previous study of 2002 did not support *Age* as a significant explanatory factor of voluntary giving behavior and amount of charitable giving. *Religion*, found to be very significant both in explaining voluntary giving behavior and amount of charitable giving in the previous study of 2002, indicates whether the respondent has religious faith or not. And the region where the respondent lives is assumed to affect participation and amount of charitable giving and, therefore, in this study, two variables, *Largacity* and *Mediumcity* indicate whether respondent lives in a big city, a medium, or a small city, respectively. There was not found to be any difference between large city and medium city in voluntary giving behavior and amount in the previous study.

(Table-6) Explanatory variables and definitions

Variable	Definition
<i>Income</i>	The total amount of household income of the respondent
<i>Givingprice</i>	The household's price of charitable giving with value between 0 and 1
<i>Position</i>	Dummy variable with a value of one if white-collar
<i>Volunteering</i>	Dummy variable with a value of one if participated in volunteering
<i>Attitude 1</i>	Dummy variable with a value of one if agrees with charitable giving is made to contribute to improvement of public good
<i>Attitude 2</i>	Dummy variable with a value of one if agrees with charitable giving is made based on moral obligation
<i>Attitude 3</i>	Dummy variable with a value of one if agrees with charitable giving is made based on religious faith
<i>Education</i>	Dummy variable with a value of one if having college or higher education
<i>Age</i>	Dummy variable with a value of one if respondent is over 65 years old
<i>Religion</i>	Dummy variable with a value of one if respondent has a religion
<i>Largacity</i>	Dummy variable with a value of one if respondent lives in big city
<i>Mediumcity</i>	Dummy variable with a value of one if respondent lives in medium or small city

The 2002 survey also asks about opinion or attitude on charitable giving, such as motivation of monetary contribution and relationship between charitable giving and the role of public sector. These questions indicate basic attitudes of the respondents toward voluntary giving for charitable activities. The

variable about attitude of money contributor toward charitable giving usually is included in the empirical study to test whether respondent's basic attitude of charitable giving would affect giving behavior. The attitude of respondent can be reflected in different ways and the survey includes three different questions about the basic attitude. *Attitude 1* denotes whether charitable contribution is made to improve public welfare of the society and becomes 1 if respondent agrees with this motivation of charitable giving. *Attitude 2* becomes 1 if respondent agrees with the assertion that charitable giving is made by moral obligation for returning something to society, and 0 if not. *Attitude 3* asks whether or not charitable giving is motivated by religious faith.

4. Estimation results

As we did in our previous study, we use two estimation methods, Tobit and Heckman's two-step method, to investigate major determinants of charitable giving of individuals. The voluntary giving used in this estimation includes all the contributions to nonprofit organizations including ordinary contributions to religious organizations.

Tobit model estimation and results

Estimation of Tobit model is to test both determinants of participating in charitable giving and level of giving at the same time.^{vii} According to Tobit model estimation results, compared to the 2002 study, there is not any noticeable difference in the estimation results of this study. By Tobit model, *Income* and *Givingprice*, the two important economic variables, are not found to be significant in explaining charitable giving behavior, like the previous study. The level of household income of participants does not affect participation in and amount of voluntary contributions for charitable activities. And also, like the 2002 study, age(whether anyone is over 65 or not) does not affect voluntary giving behavior of the respondents. But other non-economic variables, *Volunteering* and *Religion*, are found to be positively affecting charitable giving behavior as they were in the 2002 study. But, unlike the 2002 study, *Position*(white collar or not) and *Education*(college education) are not found to be significant in explaining voluntary giving behavior.

Heckman's two-step estimation and results

This method is consisted of two steps; the first step is to test what determines participation in charitable giving by using Probit model and the second step is to test what determines amount of giving among

^{vii} $G_i = \beta X_i + u_i$

G_i denotes charitable giving amount of individual household if $G_i > 0$, and 0 if $G_i \leq 0$

those who have ever experienced giving.^{viii} Heckman's two-step model separates testing determinants of 'participating' or 'not participating' in charitable giving from testing determinants of amount of giving among those participating in charitable giving. According to estimation results by Heckman's two-step model, there have been several interesting findings:

i) Household income and charitable giving

According to this estimation, the income level of household that a respondent belongs to has not significantly affected either the level of participation in charitable giving or the giving amount among those who participate in charitable giving.

ii) Tax benefit and charitable giving

In this study, as in the 2002 study, it is found that tax benefit has affected neither the level of participation in charitable giving nor amount of giving among those participants.

iii) Volunteering and charitable giving

Having experience of volunteering has been found significant in explaining giving behavior. It has been found that those who have experience of volunteering have higher probability of participating in charitable giving. At the same time, volunteering has positively affected the amount of giving. Combining these results, it can be said that volunteering and charitable giving are complementary, rather than substitutable.

iv) Motivation for charitable giving

Among those two motivations, 'moral obligation' and 'religious faith', the latter one only has been significant in explaining participation in charitable giving in the 1st step, and both motivations have been significant in determining the amount of giving once participate in charitable giving in the 2nd step.

v) Among those explanatory variables, religion is the only one variable that has been found to be a significant determinant in both steps. Having religion or not has been found to be significantly affecting positively both probability of participating in charitable giving and amount of giving. That is, those who have religion have higher probability of participating in charitable giving than those who have not and, among participants in charitable giving, respondents with religion have contributed a greater amount of money than those without religion. College level of education, white-collar or not, and region have not been found to be significantly affecting both the level of participation in charitable giving, and the amount

^{viii} The second step is estimated by the two stage least square method. Greene(1991) pp.740-747.

The 1st step is to estimate the Probit model, $G_i = \beta X_i + U_i$ where G_i is a dummy variable equal to 1 if the respondent participates in charitable giving. In the 2nd step, $(\text{Giving amount} / G_i > 0) = \gamma X_i + \gamma_\lambda \lambda_i + U_i$ where λ is the correction term for consistent estimation.

of giving among participants in charitable giving.

5. Concluding Remarks

This study tries to test whether or not the factors found to be significant in the 2002 study are still effective in explaining charitable giving behavior of individuals in Korea and what things have changed, if any, from the previous study. Basically, we have tried to test determinants that have been found to be significant in the previous study. For this purpose, we used two estimation methods, Tobit and Heckman's two-step. The estimation results by the two methods show consistency with each other and also show the same results as in the 2002 study with the inclusion of some important variables, income, giving price, and experience of volunteering. During 1999-2002, we could not see any meaningful change in participation rate of voluntary giving. With respect to some important explanatory factors of charitable giving behavior and/or amount of giving, there has not been any significant difference between this and previous study. Most importantly, income and tax benefit were not found to be significant determinants. Volunteering and charitable giving are found to be in a complementary relationship rather than a substituting one. Religion is found to be a positive determinant in individual giving in Korea, while age, level of education, and region are not. In this study, it is found that religious faith has been a significant motivation for charitable giving. On the other hand, asking about the role of public sector and charitable giving, it is found that the public good approach might be effective in this study as in the previous one. But, compared to the 2002 study, this study shows that there has been some meaningful change with the structure of participants in charitable giving behavior. In contrast to the 2002 study, those with religion have contributed to charitable activities both through their own religious organizations and non-religious organizations, showing that those with religion have actively participated in charitable giving even to non-religious organizations. And those who participated in voluntary giving only to religious organizations in 1999 have expanded their voluntary giving to non-religious organizations as well as their own religious organizations. Compared to 1999, amount of giving in 2001 has much increased both in terms of total amount and amount of giving to non-religious organizations.

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[Appendix -1]

Tobit Estimation

Independent Variable	Coefficient (z-Statistic)
C	2.638147 (0.814036)
INCOME	0.224628 (0.903759)
GIVINGPRICE	-2.345613 (-1.061793)
POSITION	0.119863 (1.035223)
VOLUNTEER	0.500822*** (3.766769)
ATTITUDE1	-0.183776** (-2.299487)
ATTITUDE2	-0.006870 (-0.086573)
ATTITUDE3	-0.278836*** (-3.413685)
EDUCATION	-0.008422 (-0.068412)
AGE	0.105985 (0.741799)
RELIGION	2.188209*** (16.56760)
REGION	-0.066719 (-0.596477)
Included observation	834
R-square	0.35141
Log likelihood	-1459.35

, *, **** denotes statistical significance at 10%, 5%, and 1% respectively

[Appendix -2]

Heckman two-step Estimation

Independent Variable	1st step Probit Model (z-Statistics)	2nd step OLS (t-statistics)
C	-0.491261 (-0.229907)	-0.201209 (-0.058686)
INCOME	0.168231 (1.029398)	0.415860 (1.599675)
GIVINGPRICE	0.095147 (0.064852)	-1.974058 (-0.982740)
POSITION	0.037467 (0.470146)	0.169595 (1.533102)
VOLUNTEER	0.477169*** (4.273366)	1.042002*** (3.096100)
ATTITUDE1	-0.080132 (-1.470044)	-0.293025*** (-3.108550)
ATTITUDE2	0.082954 (1.523917)	0.142788 (1.539000)
ATTITUDE3	-0.238263*** (-3.988822)	-0.606316*** (-3.224468)
EDUCATION	-0.017205 (-0.206609)	0.010420 (0.092649)
AGE	-0.015328 (-0.153151)	0.035463 (0.268287)
RELIGION	0.710163*** (8.966284)	3.018150*** (4.848316)
REGION	0.055772 (0.731044)	0.007564 (0.069904)
λ	-	3.030665* (1.905460)
Included observations	1322	828
R-square	0.111117 (McFadden R-square)	0.350305
Log likelihood	-761.5295	-1464.301

*, **, *** denotes statistical significance at the level of 10%, 5%, and 1% respectively.