Socioeconomic Determinants of Charitable Giving to Individuals and to Organizations: An Empirical Analysis of Khyber Pakhtunkhwa, Pakistan

Aqsa Farooq*, Naila Nazir† and Shumaila Ihtisham‡

Abstract
Charitable giving takes different forms in a Muslim society like Pakistan. Monetary/non-zakat, zakat, in kind, giving time, usher, hides and giving at shrines etc. are different forms of charitable giving. Broadly it can be split into money and time. Monetary donations and time volunteered is given to individuals, organizations or both. This paper aims to identify socio-economic determinants of charitable giving in Khyber Pakhtunkhwa along with an attempt to understand the relationship between charitable giving and volunteering. Further, it aims to find relationship between charitable giving to individuals and to organizations. The study tests the hypothesis that there is no relationship between charitable giving and volunteering in the study area. Using 2014 survey data of Pakistan Centre of Philanthropy (PCP), a correlation test has been used. The results show that there is a complementary relationship between charitable giving to individuals and to organizations whereas charitable giving and volunteering are substitutes. Multiple regression results show that gender, region of residence, monetary donations to organizations and zakat payments, significantly affect charitable giving to individuals whereas giving to organizations is also affected by region of residence. Income is another factor significantly affecting charitable giving to organizations.

Keywords: Charitable giving; Volunteering; Giving to individual; Giving to organization; relationships

Introduction
Other than the classical division, an economy can also be divided into public sector, private sector and the non-profit sector. The non-profit sector is also known as voluntary sector, charitable sector, community

* Aqsa Farooq, Ph.D Scholar, Department of Economics, University of Peshawar. Email: aqsa.yasir2010@gmail.com
† Naila Nazir, Associate Professor, Department of Economics, University of Peshawar.
‡ Shumaila Ihtisham, Assistant Professor, Department of Statistics, Islamia College Peshawar.
sector, civic sector and social sector. Since organizations that encompass the sector are diverse in nature, therefore the terms non-profit and voluntary sector are preferred (Frumkin, 2009). According to Andreoni (2007) charitable giving has three constituents; demand, supply and the government. The demand side consists of organizations that collect funds and utilize them to deliver goods and services. The supply side has two parts; donors and volunteers. The former provides money and the later provides time to the charitable organizations. The third constituent i.e. government, is involved with the organizations in multiple ways. The most frequently debated are the tax policy and regulatory issues. Charity has appeared in recent times as an important segment of Sustainable Development Goals (SDG's). As reported by PCP (2016) it requires supporting and upgrading of social institutions to empower confidence and fabricate partnerships between the government, civil society associations and business segments to advance its viability where required.

World Giving Index (WGI) identifies three behaviors of giving; helping a stranger in need of assistance, giving money to a charity, and volunteering one's time to an organization. According to the report of World Giving Index (WGI) 2017, Pakistan was ranked 78 among 139 countries in the world. Myanmar, Indonesia and Kenya were ranked as top three. Regarding the three behaviors of giving mentioned earlier, Pakistan was ranked 7th based on the number of people helping a stranger; 61 million people helping strangers. The huge figure is no surprise, as Pakistan is the sixth most populous country in the world with a total population of 203.4 million in mid-2016. Pakistan was ranked 5th by the number of people donating money with a total of 40 million people involved in charitable giving and its ranking for volunteering time was 109. There is little literature available to trace the magnitude of charitable giving in Pakistan however one study (Bonbright & Azfar, 2000) communicated that Pakistani people donated 41 billion rupees (about 1.5 % of the GDP) and offered 1.6 billion hours of time to charitable activities in 1998. According to recently published report by Pakistan Centre of Philanthropy, the magnitude of charitable giving of a household was Rs.739.7 in year 2014 which is thrice as much as the estimates for year 1998. This total monetary giving came from zakat and non-zakat donations (13 and 32 percent respectively). Monetary valuation of time volunteered made 31 percent of overall giving. Nearly 98 percent of households were found involved in charitable giving through either of the three forms cash, in kind and time volunteered. All of these raw numbers demonstrates that Pakistani individuals give a lot of charity and its magnitude has increased over the years.
As mentioned earlier Pakistan is a heavily populated country. About 39 percent of its population is living in multidimensional poverty and its prevalence rate is approximately six times higher in rural areas. During 1990’s, monetary crises combined with the political and administrative issues led the government to decrease its expenditure on public services. Subsequently, numerous revenue driven associations, especially in health and education sector came up in the market. Correspondingly, social and welfare services were taken up by the organizations with non-profit motives. Additionally, the global benefactor group redirected the monetary funds from the government to non-government associations as reported by Ismail (2002).

In Pakistan, the voluntary sector is reasonably small and immature. As Pasha et al. (2002) pointed out it developed during 1990s; a time of arrival of democratic system, globalization, inclination towards privatization, worldwide demand for common society and deficient provision of public services. There are around 45,000 organizations in the non-profit sector in Pakistan. About 37% of their money income is generated through private indigenous philanthropy.

**Literature review**

A bulk of literature is available on charity and other aspects of philanthropy in the field of economics and more interestingly in disciplines like sociology, political science, anthropology, brain sciences, evolutionary psychology etc. More than forty years ago, it was indicated by Smith (1975) that researchers who want to work on voluntary actions should search cross disciplinary information. Similar indications were given by others in later years. Since 1980, investigations related to charity have risen as a new multi-disciplinary field. Many issues related to voluntary sector have attracted scholarly work including, the reasons of the existence of the sector, cost and benefits of charitable giving, size and scope of charitable organizations, behavior and characteristics of donors and beneficiaries, bequest giving, tax incentives of donations, motivations behind monetary donations and volunteering of time etc.

Why do people give away a part of their income as charity to others? This particular question generated a series of academic work among economists treating charitable giving as a "good" like any other good and service. The assumptions of neoclassical microeconomics provided basis to the concept, as to how individuals or households make their decisions selfishly to maximize their utility (Halfpenny 1999). Charitable giving and the assumptions seem to oppose each other but nevertheless it remains that people give charity because it makes them happier (Anik et al. 2009). It is also a fact that people give away a substantial amount of
their income to compel strangers for their self-interests. One model put forward by Andreoni (1990) is that charity can be considered as a public good that can directly enter the donors’ utility function. This approach was further propelled by theoretically showing that if charitable giving is a pure public good then the government grants to charity organizations are generally ineffectual. Models and justifications are also recognized that individuals not only care about the total supply of charity, they also enjoy some direct benefits from the act of giving. These include: charity as a mean of indicating social status and gaining experience of well-being. Such benefits are known as "impure altruism" and 'warm glow' effects of giving (Andreoni, 1989).

Charitable giving is also known to benefit the donor in monetary terms through tax incentives (Clotfelter, 1997). Tax reform can also affect the giving patterns of various income groups. For example, after the tax reforms of 1980's, the amount of donations in the United States of America was found higher despite the rise in cost of giving; middle income groups gave more charity while high income groups were found giving appreciated items like art or real estate. Also the amount given as charity varied from year to year, reason being social recognition or control over the organization. Other reason of generous donations to non-profit organizations is that the individuals realize and feel comfortable with the fact that non-profit organizations do not serve the objective of profit maximization (Rose, 1997). Many studies have examined the effects of demographic variables such as age, gender, marital status, number of children, place of residence, religion, education level, income, perceived financial position, home ownership, race, immigration and citizenship status etc. The results varied as they were dependent upon the data, definition and construction of variables in each respective analysis. The study of charity and philanthropic behavior has also found its way in social psychology under the broad category of helping behavior. Helping behavior can be of many types for instance, helping a stranger in times of emergency like a fire breakout (Darley, 1970) or donation of one's bone marrow to a relative (Schwartz, Shalom and Judith, 1980). The study of charity picked up popularity in standard social psychology in 1980's but it is not quite the same as other types of helping behaviors. One major difference is the presence of the beneficiary in a helping behavior while this may not be the case in charitable donations. Many studies conducted in 1960's and 1970's show that presence of a beneficiary strongly affects the motivation factor behind helping. Beckkers (2011) identified eight mechanisms as the most important forces that drive giving: (1) awareness of need; (2) solicitation; (3) costs and benefits; (4) altruism; (5) reputation; (6) psychological benefits; (7) values; and (8) efficacy.
It is highly debated in literature whether charitable giving and volunteering are complements or substitutes. Many have explored the relation between hours spent in volunteering to organizations and amounts donated. These models are based upon the frame work that warm glow and production of public goods are valid motivations behind charitable giving and volunteering.

Keeping in mind the above discussion, our research question is centered round the philanthropic activities in a Pashtun society. What are the determinants of charitable giving in Khyber Pakhtunkhwa, is the main question, the present study focuses on.

Objectives
The present study aims at four objectives: (1) to identify socio-economic determinants of charitable giving to individuals and to organizations (2) to explore the relationship between charitable giving and volunteering in the study area (3) to investigate the relationship between charitable giving to individuals and to organizations (4) to quantify the impact of socio-economic factors playing meaningful role in determining participation in charitable giving to individuals and organizations. It must be noted that for the present study "giving" and "donating" are used synonymously for charitable donations by the individuals/ households.

For our research, we hypothesize that there is no relationship between charitable giving and volunteering in the study area.

Methodology
The present study is based on the data taken from the Pakistan Centre for Philanthropy (PCP). The data was collected by PCP from all the four provinces in the year 2014 for about 10,000 households using qualitative and quantitative methods and was made available for our research in April 2018. The data provides information regarding measures of charitable giving and volunteerism to individuals and organizations along with many other behavioral, demographic and social factors from rural and urban areas of Pakistan. For the present study, the data for Khyber Pakhtunkhwa was utilized. The data consists of 1965 households that was gathered from 26 districts of Khyber Pakhtunkhwa.

For the analysis, multiple regression applying ordinary least square (OLS) method was used for estimating the unknown parameters in the following linear regression models.

\[
\ln(\text{G}_i) = \beta_0 + \beta_1 \text{Gen}_i + \beta_2 \text{Age}_i + \beta_3 \text{Edu}_i + \beta_4 \text{Mar}_i + \beta_5 \text{R}_{it} + \beta_6 \text{Emp}_i + \beta_7 \ln(\text{L}_i) + \beta_8 \ln(\text{G}_{v2}) + \beta_9 \ln(\text{E}_i) + \mu_i, \ldots (1)
\]
For the present study, charitable giving to individuals ($g_{ind}$) and charitable giving to organizations ($g_{org}$) are taken as dependent variables. Independent variables used in the data set are gender ($Gen$), age ($Age$), education ($Edu$), marital status ($Ms$), region of residence ($R$), employment status ($Emp$), average monthly income ($Y$) and zakat ($Z$). Gender was recorded as "1" for male and "2" for female respondent. Marital status ($Ms$) was recorded as "1" for married and "2" for unmarried, divorced, widowed or widower. Both age and education were recorded in years. Region of residence was coded "1" for the respondent living in rural area and"2" for the respondent living in urban area. Employment status was coded "1" for respondents who reported being employees, self-employed/ businessmen and farmers. Unemployed, retired, housewives, unpaid family helpers, students, disabled and minors were coded as "2". Variables like charitable giving to individuals other than zakat ($g_{ind}$), charitable giving to organizations ($g_{org}$), Income ($Y$) and Zakat ($Z$) were recorded as continuous variables in rupees. PCP provides two measures of respondents' income; one records the monthly income and the second provides total income generated from other sources in the last year. The latter was transformed into monthly income and then added to the former to get average monthly income of the respondents. All the monetary measures $Y$ and $Z$ were log transformed as they better satisfied the assumption of normality.

It can be noted that $g_{org}$ appears as independent variable in model 1 while $g_{ind}$ appears as independent variable in model 2 and the two are treated as dependent variables in the respective models. This was done keeping in view the endogenous nature of the two along with the target to capture the effect of the two kinds of charitable giving on each other.

To find correlation between $g_{org}$ and $g_{ind}$, the frequency of charitable giving of the two types in the past year was used and was coded from 1 to 8, based on eight (8) categories: Daily, Weekly, Monthly, Quarterly, Biannually, Annually, ‘When needed’, and ‘No response’. To find correlation between charitable giving and volunteering, incidence of the two in the past year was used with codes 1 to 3 for "Yes", "No" and "no response".
Results and Discussions

Correlation test
Spearman rank correlation test was applied on the respondents’ reported frequency of donations to individuals and to organizations to verify the relationship between the two types of giving. Respondents who answered all questions were included in the analysis (N= 1765). The results show a correlation of 0.160. The result was significant at 0.01 level. This showed a weak complementary relationship between charitable giving to individuals and charitable giving to organizations. There is bulky of literature available which suggests complementary relationship between charitable giving and volunteerism but it is worth mentioning that such literature treats giving to individuals and organizations as one. The present study has tried to treat the two types of giving as separate.

Further, the correlation between charitable giving and volunteering (N=1933) turned out to be -0.047, significant at 0.05 level. It shows that charitable giving and volunteering are substitutes as they are negatively associated, however the correlation between the two in the present study is not high. The findings of substitutability are consistent with standard economic theory which assumes that donating and volunteering are substitutes (Meier, 2006). People do make a distinction between volunteering and money that can be donated.

Determinants of charitable giving to individuals
Numerous investigations have attempted to measure socioeconomic variables that may contribute towards charitable giving. This has helped develop a better understanding for charitable organizations to identify likely donors and reasons of. In our study, upon running regression on model 1: gender, region, zakat payment and charitable giving to organizations, it is found that these variables significantly affect charitable giving to individuals (adjusted R² = 0.329). In model 2, the variables; region, income and charitable giving to individuals are found significantly affecting the charitable giving to organizations (R²= 0.345).
Table 1: Determinants of Charitable Giving and Level of Effect

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender/ (Gen)</td>
<td>0.272**</td>
<td>-0.197</td>
</tr>
<tr>
<td></td>
<td>(0.150)</td>
<td>(0.188)</td>
</tr>
<tr>
<td>Age/ Age</td>
<td>-0.004</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Education/ (Edu)</td>
<td>0.004</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Marital status/ (Ms)</td>
<td>0.023</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Region of residence/ (R)</td>
<td>-0.224**</td>
<td>0.303**</td>
</tr>
<tr>
<td></td>
<td>(0.137)</td>
<td>(0.171)</td>
</tr>
<tr>
<td>Employment status/ (Emp)</td>
<td>-0.304</td>
<td>0.123</td>
</tr>
<tr>
<td></td>
<td>(0.197)</td>
<td>(0.246)</td>
</tr>
<tr>
<td>Ln (Income)/ Ln (Y)</td>
<td>0.041</td>
<td>0.085**</td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.050)</td>
</tr>
<tr>
<td>Ln Giving to organizations/</td>
<td>0.441*</td>
<td>---</td>
</tr>
<tr>
<td>Ln (Gorg)</td>
<td>(0.053)</td>
<td></td>
</tr>
<tr>
<td>Ln Giving to Individuals/ Ln</td>
<td>----</td>
<td>0.0681*</td>
</tr>
<tr>
<td>(Gind)</td>
<td></td>
<td>(0.081)</td>
</tr>
<tr>
<td>Ln Zakat payments/ Ln (Z)</td>
<td>-0.054**</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(0.040)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.328</td>
<td>0.345</td>
</tr>
<tr>
<td>F statistic</td>
<td>10.481*</td>
<td>9.726*</td>
</tr>
</tbody>
</table>

Source: Authors calculation based on PCP data 2014
Note: * shows significance at 5% and ** shows significance at 10%. The figures in brackets show standard errors of the coefficients.

In model 1, gender significantly affects charitable giving to individuals. Females tend to give 27.2% more to individuals as compared to males (p< 0.1). However, in model 2- gender appeared to have negative impact upon charitable giving to organizations with women donating 19.7% less to organizations as compared to men. Findings on gender and charitable giving are mixed. Most investigations identified no dependable contrasts amongst males and females. Some studies found that women are more likely to give but men give higher sums than women (Rooney, 2005).

Age of the respondent appeared to have negative effect on charitable giving to individuals in model 1. One year increase in age appeared to bring 0.4% decrease in charitable giving to individuals. Age came up affecting charitable giving to organizations positively in model
2. One year increase in age increases charitable giving to organizations by 1%. Both results are statistically insignificant. Majority of the existing literature shows positive relationship between age and charitable giving with a few exceptions.

In both models, education has positive relationship with charitable giving to individuals and to organizations. One year of more education, increases giving to individuals and to organizations by 0.4%. The effect is however, insignificant. The findings are consistent with studies like Apinunmahakul et al. (2009) and Banks & Sarah (1999) showing positive relationship between charitable giving and the level of education. It makes sense that with increased level of education one becomes more aware of the social problems and feels like contributing in monetary terms towards the less fortunate groups of the society as well as charitable organizations.

The regression results for marital status were interesting. In model 1, unmarried, divorced, widow and widower appeared to be donating 2.3% more than those who were married. In model 2, the variable “unmarried” also appeared with positive effect on charitable giving to organizations. In other words, unmarried people give 1% more in charity to organizations as compare to married sampled respondents. Majority of the literature supports the notion that married couples give more charity whereas our findings are otherwise. However, a sizeable number of investigations discover no relationship between marital status and giving.

In model 1, charitable giving to individuals in urban areas, was found to be 22.4% less as compared to rural areas (p<0.1) while in model 2, the region of residence appeared with a positive effect indicating that urban residents donate 30.3 % more to organizations (p<0.1). Both the results were found statistically significant. The size of the town has been reported to have negative relation with giving in several studies. However, some studies support otherwise.

Status of employment was found negatively associated with charitable giving to individuals. The results showed that employed people give 30.4% less as compared to unemployed. Our findings are consistent with some studies. Further, it was found that employed people give 12.3% more to organizations as compared to individuals. Some studies support our results.

Average monthly income in both the models showed positive effect. In model 1, regression results showed that 1% increase in income would likely increases donations to individuals by 0.041%. However 1% rise in income would bring 0.085 % increase in charitable giving to organizations. Increase in income affects giving to organizations more than giving to individuals. The effects however, are statistically insignificant. It is understandable that higher income households donate
more than lower income households and there is plenty of literature supporting this notion.

Charitable giving to organizations in model 1 was found statistically significant. The results suggested that a household/individual involved in charitable giving to organization is likely to increase giving to individuals by 0.441% (p<0.05). In model 2, the result was also found statistically significant suggesting that a household/individual involved in donations to individuals will cause 0.681% increase in charitable giving to organizations (p<0.05).

Muslims throughout the world practice charitable giving in two forms: Zakat (obligatory giving); and Sadaqah (voluntary giving). Zakat is one of the five basic tenets of Islam. Being the most important instrument for redistribution of wealth, it guarantees a fair standard of living for every Muslim. The accepted amount of zakat is 2.5 percent assessments on assets held for a full year. According to sharee'ah definition sadaqah is worshiping Allah by voluntary giving. Thus, sadaqah implies giving away of goods and funds for the sake of Allah expressing faithfulness and belief in resurrection and afterlife. Most of the literature on giving revolves around tax incentives as a major motivation behind charity and that too seems to be influenced by Christian tradition. Charitable giving in Islam is viewed differently. In Islam, the motivation of charity comes from Islamic law articulated in the Holy Quran and hadith (reports of the actions and words of Prophet Mohammad PBUH). Modernization of muslim giving coordinated with islamization of contemporary philanthropic methods has produced some incredibly successful organizations. They are popular among donors because of their ability to show quick response in time of emergencies. Al-Khidmat foundation, Hamza foundation, Edhi foundation, Indus hospital (Karachi), Shaukat Khanum cancer hospitals are just a few to mention providing services in Pakistan.

Zakat payment expressed in model 1 was found to significantly decrease charitable giving to individuals by 0.054% (p<0.1) where as in model 2, zakat payment appeared to have positive effect on charitable giving to organizations suggesting that increase in the payment of zakat is likely to cause increase in giving to organizations by 0.013%. The result for model 2 was found insignificant. The breakdown of various forms of giving in the province is provided in table 2.
Table 2: Magnitude of Giving By Types and Urban-Rural Area of KP (Rs billion)

<table>
<thead>
<tr>
<th></th>
<th>Monetary</th>
<th>Zakat</th>
<th>In-kind</th>
<th>Time</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>8.26</td>
<td>4.94</td>
<td>3.68</td>
<td>10.10</td>
<td>3.49</td>
<td>30.47</td>
</tr>
<tr>
<td>Urban</td>
<td>1.80</td>
<td>1.56</td>
<td>0.97</td>
<td>2.92</td>
<td>0.59</td>
<td>7.84</td>
</tr>
<tr>
<td>Total</td>
<td>10.06</td>
<td>6.5</td>
<td>4.6</td>
<td>13.02</td>
<td>4.08</td>
<td>38.3</td>
</tr>
</tbody>
</table>

Source: Authors calculation based on PCP report

It is clear from the table that largest contribution comes from time volunteered, followed by non–zakat monetary giving and zakat, respectively. All forms of giving are of greater magnitude in the rural areas of the province compared to the urban areas suggesting that rural dwellers are more philanthropic in Khyber Pakhtunkhwa (KP). Although the present study did not undertake recipients of the charitable giving under any empirical or econometric investigation; it is nevertheless important to mention a few major statistics about the recipients of charitable giving in the province. PCP study shows that charity is mostly given to individuals (48.39%) as compared to organizations (6.79%) while contribution towards both is 44.82% in KP. Individuals receiving charitable giving include relatives, neighbors needy (non-beggars/disabled/seriously sick) and beggars. Among the type of organizations receiving charitable giving are Mosques, Madrassas, Schools, CSO's (Civil Society Organizations), community centers etc.

**Conclusion and Recommendations**

Findings of this study shed light on socio-economic and demographic variables that can potentially explain what determines charity in the province of Khyber Pakhtunkhwa. The findings are valuable addition to the existing literature. However, it is worth mentioning here that the bulk of available literature is from developed countries including America, England, Australia, Netherlands etc. with little information on the subject from Asia let alone from the fourth most populous country in the region. Based on the present study, following recommendations are presented:

Based on our data source, majority of the sampled households reported that the biggest motivation behind their charitable giving stems from religious reasons. For research purposes it would be worth exploring why certain social and demographic variables do or do not contribute significantly towards voluntary charitable donations. In other words, attitudinal and behavioral variables should be brought under spotlight. The present study does not envelop the recipients of charity in
detail (individuals or organizations). Future studies must investigate why certain individuals and organizations attract donors. A step further would investigate the use of donated funds by the individuals and the organizations. A study area where joint family system is the key feature of their socio-economic structure, more variables should be studied that affect their philanthropic behavior.

References
Halfpenny, P. (1999). Economic and sociological theories of individual charitable giving: complementary or contradictory? Voluntas:


