

## **Major Drivers of Charitable Giving's and Donations in Case of Pakistan**

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### **Abstract**

Giving charity is a worldwide phenomenon. Charities help to bring social wellbeing in a society. The world is full of philanthropists who have empathy for the needy with an objective to work for the betterment of whole community. Pakistan is also facing severe poverty crisis and in that situation those philanthropist need to play their role along with government. For that it needs to be identified that what are the major drivers of giving charity in case of Pakistan. For that purpose, this study is conducted based on sample size of 1000 tried to cover maximum districts of Punjab to have representation of each area through cluster sampling. Ordered Probit Regression model is used to identify the possible determinant of donation from a list of individual and perceptual characteristics identified through literature. The analysis found that higher income; higher number of educated members, less household size, family influence and altruism are the major driver of giving more donations in case of Pakistan. The perceptual variables like warm glow, prestige, reciprocity don't have any significant impact on donations. The study also analyzed the behaviour of donor in terms of in-kind and time donation revealed that people prefer to share household goods, used clothes and foods with the less advantaged. In term of voluntary time donation, on average 3.45 hours per week are spend in altruistic activities. The government needs to work on above identified drivers of charity to increase donations

volume. By mobilizing the donations of individuals, the burden on part of government can be shared in terms of projects based on social safety net.

Keywords: Ordered Probit Regression, Warm Glow, Prestige, Reciprocity

## Introduction

In the human history, it is an observed phenomena that one person stretch his own resources to benefit other person considering this as his own duty. Such kind of behaviour is not purely based on some religious or social obligations, such behaviour is a part of human nature. In 1759 Adam Smith claimed that human are supposed to be selfish still there are some principles in his nature which force him to help others, and consider others happiness as his own responsibility, despite the fact that he don't get anything out of it but the pleasure of seeing it. But as the literature on consumer welfare developed, the definition of a rational individual got strength which defined an individual who seek happiness for his own self and don't care about happiness of others (Piliavin, 1990). And since then all the school of thoughts belonging to economics, sociology, biology and psychology believed that there is nothing like selfless individual. In the recent framework, these assumptions of having selfish individual were relaxed and discarded slowly. The extreme heroism observations reported by Hill, (1984) contradicted the pillars of egoistic model. Considering a person jumped on train track to safe a child or climbing on a burning building to save a stranger. It is claimed that egoistic motives are zero or negligible when a person put his life on stake for the help of others (Crawford, 1987). The act of spontaneous help, give a kind of indication that altruism is genetically embedded in humans, which result in impulsive altruistic behavior. The nature give clear indication of this like when predators approach, the birds alarm their flocks, and similar is observed in other mammals.

According to Forbes 2019 list of billionaires we have Jeff Bozos on top followed by Bill Gates, Warren Buffett, Bernard Arunalt and Mark Zuckerberg. Parallel to that Forbes reported Warren Buffett, Bill Gates and Mark Zuckerberg as world top givers (philanthropist). This means that the more you have, the more you give. The basic economics theory of consumer behavior always talked about higher consumption bundle preferences but this statistics revealed that the more you get, the more you are going to share. Such kind of observations further reinforces to find the real picture of selfless behavior and what are the motives behind it. The understanding of the motives behind selfless behavior will help to develop world a better place to live. According to CAF Global World Index 2018, China and India are the top most countries where helping a stranger is a dominant phenomena. Countries where helping a stranger is more dominant in male as compare to females are Afghanistan, Botswana and Pakistan. Australia and Indonesia are ranked as top countries in term of giving charities. Pakistan is ranked on 91th position in the index. This report clearly indicated that generosity is a global phenomenon. The common observation shared by the editors of the report was that, the countries which faced conflict in the past are more generous in giving than other countries (Low, 2018).

Over the period of time, poverty penetrated various economies very badly. The governments of such countries failed to mobilize their resources in order to have any comprehensive strategy to get rid of this poverty trap. Countries like Pakistan where circular debt and twin deficits have limited government role to take bold decisions for the betterment of poor's. In such situations, the economy can get a relief if altruistic behavior of the individuals can be mobilized to control the poverty level in the country. The identification of motives of donation in case of Pakistan will help to formulate a public policy to mobilize that money to control the poverty gap. The analysis on household of individuals and finding their motives of donation will help to propose a policy for the government institutions.

## **Literature Review**

A typical neoclassical economic theory fail to explain the motives of donations because the given theory assumes that people only maximize their own utility thus whole income is utilized to achieve self-satisfaction. Giving to others is not defined in neoclassical model. It is argued that individual charity behavior is based on altruism. The pure altruism model defined by few behavioral economists believes that charities are a public good which enter utility function of an individual (Andreoni, 1989) (Bergstrom, 1986). The model is declared as pure altruism because it derives utility from charities which is based on consumption of others. In this model, donations from an individual enter the final output of charities and resultantly increase utility of an individual. The other models are called impure altruism model in which private donation is based on warm-glow, conspicuous giving, and reciprocity. Andreoni (1989) incorporated Egoistic factors in warm glow model along with altruistic factors. In the previous model of defining charities as source of utility, egoistic factors also help to explain utility form giving. The conspicuous giving model is different from warm glow model in the sense that in this model the motivation to give is to earn prestige, which means that people give charity in order to get some recognition in their social circle (Glazer, 1996). This means that conspicuous giver wouldn't give anonymously and give only to improve his/her reputation or signal his/her wealth. The third model of impure altruism is based on reciprocity which define an individual who give and take charity at the same time (Kolm, 2006). In this model the individual derive utility by being a giver and receiver of charity.

The empirical analysis of the whole phenomena will help to see how household respond to charity. A study based on United States household, analyzed the behavior of charitable donations of money and time. The analysis of thousand household revealed that price of donation that is taxes is negatively associated with donation in terms of time and money (Andreoni, 1996). The people, who earn more, have higher education level and age contribute more to charities in terms of time and money. Moreover female with children less than age 3 will donate less. Another study was done based on warm glow altruism researched the relation between time and money contributions at individual and country level. The European Social Survey data based on 22 countries and 22000 household was analyzed. The model of private consumption was used which

derive utility from public goods, private consumption and voluntary contributions (Menchik, 1987). By using bivariate Probit model the study revealed that as the opportunity cost of time increase, people tend to move towards money donations from time donations (Bredtmann, & Schmidt, 2012). The people at younger age are more likely to volunteer but female give more when they get older. If a person has tertiary education, he is more likely to give more charity. Supporting previous study, if you have children of age less than five, you are less likely to give to charity. The surprising finding of the study was that, income and probability of donation has non-linear relationship which means that poorest and the richest are least likely to donate.

In few studies Tobit model is also used to analyze the probability of donation like a study based on Canadian household survey, which used two models in which total contributions and religious contributions was taken as dependent variable. The analysis showed that total contributions and religious contributions is positively associated with price of donation (Kitchen, 1992). However the association of price with religious contribution is not strong among all provinces covered under this study. In another study, binomial logit and multinomial logit model has been used to study determinants of charitable giving, volunteering, and the relationship between them. The other list of variables incorporated in the analysis were age, political affiliation, social self rank, income, marital status, religion, children status, employment, and residential area. The analysis showed that more donation come from people having higher social rank, religious, married and earn higher income (Yao, 2015). However supporting previous studies, it was again validated that people which more number of children, donate less. Young people are more active in participation in voluntary activities as compare to older ones. The association with any political party increases the probability of being involved in a voluntary activity.

The experimental analysis of given phenomena include testing of pure altruism, impure altruism, warm glow, relative consumption, relative donation, relative consumption with relative donation and relative donation with impure altruism. The results showed that relative consumption with relative donation is 94 percent association with the given subject and lowest association was found with warm glow that is 50 percent (Deb, 2014). Another laboratory experiment was performed to answer the question regarding voluntary behavior of an individual. The treatment group includes Continual Reminder, Continual Donation, Baseline Analysis and Toggle (Brown, 2013). The results revealed that Continual Reminder (subjects are reminded that they can donate at the end) and donation behavior (people can donate at any time) is similar to Baseline (people can earn and donate at the end). It was found that donation behavior is strongest in Toggle, stronger in Continual Donation and strong in Continual Reminder. The individual who perceive giving to other as uncommon and infrequent behavior, donate more than, people who perceive it as a frequent activity (Sussman, 2015).

The above literature revealed that the giving behavior or altruism is part of human genes. This personality attribute is transferred to next generation. So besides its importance in economics literature, altruistic behavior has some races in psychology literature as well. Exploratory factor analysis is most common technique use to investigate the charity giving behavior of an

individual which is based on likert scale. A study based on similar technique was conducted in United Kingdom tried to determine the perceptual determinants of charitable giving revealed that trust and commitment has positive impact on altruistic behavior (Sargeant, 2006). The attributes studied in this analysis were warm glow, prestige, reciprocity, family influence and altruism. Chömpff, (2009) also studied the behavior of individual in order to determine its willingness to donate, based on individual characteristics like education, age, income gender, his/her attitude toward charity based organizations and his/her attitude towards altruistic activities. The analysis showed that individual characteristics are not major determinants of donations both in terms of money and time with an only exception is that older donate more in form of money. The association of charitable organization with any spiritual cause will increase people's willingness to donate towards that organization. The overall efficiency and effectiveness of charitable organization increase its donations. So the testable motives of donor behavior turn out to be warm glow, prestige, reciprocity, family influence, altruism and individual personal characteristics. So a model needs to be developed to incorporate all of these to test whether they have any significant impact on donations of an individual.

## Methodology

This study aims at examining the determinants of charitable giving in case of Pakistan. The determinants identified on the basis of literature review are warm glow, prestige, reciprocity, family influence, altruism and individual personal characteristics.

## The Model

This study applied the full model of charitable giving which included warm glow, prestige, reciprocity, family influence, altruism and individual personal characteristics derived from the pure and impure altruism models (Andreoni, 1989), (Bergstrom, 1986) (Glazer, 1996) (Kolm, 2006).

$$u_i = u(X_i - g_{ij} + g_{ji}, X_i + g_{ij} - g_{ji}, g_{ij}, g_{ij})$$

The above model assumes that utility can be maximized by choosing optimal level of  $X_i$  and  $g_{ij}$ , given the prices of  $X_i$ . For any non zero level of  $g_{ij}$ , individual will donate money which will increase its overall utility, respective of the fact that whether that utility is based on warm glow, prestige, reciprocity, family influence, altruism or any individual personal characteristics. This study has particularly examined the probability of donation that is probability of  $g_{ij}$ . For that purpose, an Ordered Probit Model is applied for the case of donations in term of money.

$$\Pr(g_{ij} > 0) = \frac{1}{1 + e^{-\alpha Z_i - \beta X_i}}$$

Where denotes donation in terms of money, Z used for individual characteristics and X used for perceptual characteristics like warm glow, prestige, reciprocity, family influence and altruism.

### **Data and Survey Instrument**

The probability sampling was used to cover the province of Punjab which comprised of 36 major districts. Based on previous literature and statistical analysis a sample of 1000 respondents was finalized based on cluster base sampling. The population proportion of 36 major districts of Punjab was used to identify sample size for each district. The Multiple Indicator Cluster Survey 2014 published by Bureau of Statistics Punjab, (2014) has been used to identify population proportion in each district. The questionnaire has been developed to incorporate respondent income expenditure profile, their perception regarding monetary status, altruism and over all welfare. The information regarding donations in term of money in kind and time has been incorporated in the questionnaire. The pilot study revealed that for better understanding of questionnaire, it need to be translated in local language and enumerators team should be hired to facilitate the respondents.

### **Variables**

The variables incorporated in analysis are mix of household characteristics and perceptual characteristics. The dependent variable was probability of donation take position 1 if respondent donate and zero otherwise. On the other hand, there is list of dependent variable starting from income. It is believed that higher earnings will lead to more donations (Lee, 2007) (Basil, 2008). However there are studies which support that poor give more proportion of their income to charity as compare to rich (Silver, 1980). Household size is used to analyze the impact of it on donations with an assumption that higher household size leads to less donations. The people employed in the household will lead to more earning and hence lead to more donations. The more people got educated in the household, the more they develop empathy for others (Eisenberg, 1987) and hence lead to more donations.

Talking about perceptual characteristics warm glow was major element of impure altruism model given by Andreoni (1989) stated that people feel good about themselves when they help other people. Prestige is also part of impure altruism model in which donor don't want to give his/her donations anonymously rather they prefer to publicize donations. Prestige is used as motive of donation when utility is maximized by conspicuous giving. Reciprocity was used by Kolm (2000) in which giver act as receiver at same time. It is believed that reciprocity and donations has positive relationship. The family influence has positive impact on donations like if you give to charity your next generation is more likely to give to charity (Andreoni, 2003). Finally altruism is considered as major motive of charitable giving's defined by various pure and impure

altruism models which believe that individual with altruistic attributes tend to give more to charity. The questions asked to measure warm glow, prestige, reciprocity, family influence and altruism were asked on likert scale stated in the table below. For warm glow, prestige, reciprocity and family influence the desired outcome is strongly agree and for altruism questions, the desired outcome is strongly disagree.

**Table 1: Perceptual Questions**

<b>Warm Glow</b>
I often feel concern for people who are less fortunate materially than me. I am often touched by what other people go through.
<b>Prestige</b>
Respect can be earned by helping others. People earn local prestige by giving more donations.
<b>Reciprocity</b>
Tax benefits help to promote charity.
<b>Family Influence</b>
Tragedies motive us to be kind to others. Being optimistic is a family trait.
<b>Altruism</b>
I prefer to work for my own welfare rather than that of others. To help others it's important that you (helper) don't need it first. Only those who have financial stability in their lives, help others.

Source: Author own construction

## Results and Discussion

The Ordered Probit Model is used to determine the motives of donations in case of Pakistan. First of all the descriptive analysis of each available will help to analyze the individual response of each variable. The question of giving charity was responded as yes by 83 percent of respondent which mean that majority belief that helping others is a common phenomenon. The income was taken in log form to make the model statistically significant. The average household size turn out to be six which means that on average six individual live in a particular household. Out of six members, two people are employed. This means that two individual earn to bear the expense of six individuals. On average, four household members are educated, and our literature supports the fact that education leads to more giving behavior.

The responses on perceptual questions of warm glow were more inclined towards strongly agree and agree. This means that on average people agree that helping others give good feeling about their own self. On questions of earning local prestige, the response is again between agree and strongly agree which means that publicizing charity is a dominant phenomenon. But reciprocity response lied between neutral and agree which means that people are neutral at it. There are

individual who give and take charity at same time but the number is not that significant. The response of family influence is more towards agreed which means majority of respondent failed to accept the fact at first position. Finally, altruism response was more inclined towards neutral which means that majority of respondent took neutral position to the questions. For warm glow, prestige, reciprocity and family influence the desired outcome is strongly agree and for altruism questions, the desired outcome is strongly disagree.

**Table 2: Descriptive Statistics of Variables**

Variable	Observations	Mean	Standard Deviation
Donor (Charity )	1,000	0.831	0.375
Log Income 2017	1,000	13.01	0.799
Household size	1,000	5.70	1.994
No. of Employed	1,000	1.70	1.127
No. of Literate	1,000	4.21	2.043
Warm Glow 1	1,000	4.478	0.875
Warm Glow 2	1,000	4.357	0.927
Prestige 1	1,000	4.213	1.052
Prestige 2	1,000	4.139	1.065
Reciprocity	1,000	3.8778	1.244
Family Influence1	1,000	4.454	0.784
Family Influence2	1,000	3.983	1.155
Altruism 1	1,000	2.487	1.518
Altruism 2	1,000	3.794	1.451
Altruism 3	1,000	3.398	1.604

The in-kind donations are more inclined towards household goods and food. 18 percent of the respondent believed that giving household items help them to continue their daily living requirements. Instead of throwing extra food, it's better to share with people who don't have it. In Pakistan sharing used clothes with servants and less advantaged people is also a dominant phenomenon. To our surprise 42 percent claimed that they don't do for in-kind donations listed here, rather they give money to the needy to purchase their required things so that their needs can be fulfilled timely.

**Table 3: Analysis of In-Kind Donations**

In-Kind Donations	Percentage
Household Goods	17.9
Used Clothing	15.7
Food	17.6
Used Furniture	0.7
Medicines	2.2



Books, Journals	3.7
Other	42.2

The time profile gives an idea that spending time with parents and friends is very dominant behavior. In parallel to that people prefer to take part in household activities. On average 3.45 hours per week are spent on helping others. Visiting hospitals is least preferred phenomena but still some people spare their time and visit hospital to donate blood or money.

**Table 4: Analysis of Time Donation**

Time spend on altruistic activities (2017-18)	Mean	Std. Deviation
	Time with parents / elders (weekly)	8.16
Visiting friends (weekly)	6.81	6.874
Visit to hospital (weekly)	2.78	4.479
Helping others (weekly)	3.45	5.201
Non-economic activities (weekly)	8.48	8.096

The period of analysis is 2017-18. Going through whole analysis, it is revealed that helping others is not just bound to give monetary benefits, rather it can be in form of giving in-kind goods of some basic use or it can be in form of giving time like voluntarily helping others.

The results of Ordered Probit Regression revealed that income is positively associated with probability of giving donation. The relationship is statistically significant. This gives us a clear indication that income is major determinant of giving more charity. If your financial status is good, you are going to help others. So any increase in income is not completely utilized for self-consumption, rather it is charity with others to increase welfare of whole community. The other major determinant which is highly significant is household size. The coefficient is negative but statistically significant which show that more members of family lead to decrease in donation capacity. This supports the previous literature as well. The more number of dependents in family, the fewer donations would be expected from them. The number of employed members in the family is highly insignificant.

**Table 5: Ordered Probit Regression Results**

Donor (Charity )	Coefficient	Std. Err.	dy/dx
Log Income 2017	0.1529 **	0.0706	-0.035**
Household size	-0.084 ***	0.0313	0.0194***
No. of Employed	0.0057	0.0497	-0.001
No. of Literate	0.1386***	0.0311	-0.032 ***
Warm Glow 1	0.0771	0.0632	-0.0178
Warm Glow 2	0.0771	0.0640	-0.178
Family Influence1	0.1386**	0.0610	-0.032**
Family Influence2	-0.0751	0.4860	0.0173

<b>Prestige 1</b>	-0.0013	0.0629	0.0003
<b>Prestige 2</b>	0.0290	0.0615	-0.006
<b>Reciprocity</b>	-0.0706	0.0456	0.016
<b>Altruism 1</b>	-0.0715**	0.0331	0.0165**
<b>Altruism 2</b>	0.0215	0.042	-0.004
<b>Altruism 3</b>	-0.091 **	0.0376	0.021**

Notes: (\*\*\*) significant at 1% level, (\*\*) 5% level, and (\*) 10% level.

The number of educated members in the family is positively associated with probability of donations and it's highly significant. This means that if you belong to an educated family, the empathy for others will be your dominant personality attribute. The questions of warm glow has positive coefficient but those are not statistically significant. They are significant at around 22 percent. So in case of Pakistan, warm glow is not a major player in increasing donations. The positive coefficient still give us an indication that its impact is positive on probability of giving charity but the analysis failed to validate it on statistical basis. The family influence on probability of giving charity is positive and statistically significant. This will support our initial argument that altruistic attitude is part of genes but it is also learned by our forefathers. Like if a child observes altruistic behavior in his/her parents, he/she is surely going to develop it (James Andreoni A. A., 2003). The desire to earn local prestige is statistically insignificant. The variable with negative coefficient is highly insignificant but positive have lower p-value as compare to other. But still both coefficients are insignificant so we can say that desire to earn local prestige by publicizing donations is nor dominant phenomena in case of Pakistan. The coefficient of reciprocity is negative but significant at 12 percent. This means that tax benefits are not major driver of giving more donations in case of Pakistan. This is also a fact that government has not incorporated nay such tax bracket in their system till now so may be people are not aware of it at large. But such kind of tax benefits are given in developed countries to promote charities. The coefficients of altruism are negative and highly significant. As the desired outcome was strongly disagree so the negative sign is as per our expectations. So we can say that under perceptual attributes, family influence and altruism are the major drivers of charity in case of Pakistan.

## Conclusion

The analysis of major drivers of donations in case of Pakistan is done by using a sample of 1000 respondents from 36 different districts of Punjab based on cluster probability sampling technique. The cluster was developed to have a comprehensive representation of people from each area. The donations in term of time, in-kind and money were part of whole analysis. It is found that people prefer to give in-kind donations in the form of household goods, food items and used clothes. The recipients of such donation are mainly the servants or lower staff working under any donor. Instead of making it a waste, these things are shared with others so that they can enjoy the facility as well. On the other hand, time profile was developed to analyze the time

spend on altruistic activities by an individual. The analysis of time donation found that on average 8 hours per week are spend with parents. The people actively participate in household activities majorly during weekends and analysis showed that on average 8.5 hours per week are spend on non-economic activities like cleaning house or helping spouse. Nearly 7 hours per week are spend with friends and this is again mainly during weekends. The average time in helping others is 3.45 hours per week and 2.8 hours spend in visiting hospital. This shows that people try to spare time to actively participate in altruistic activities.

The Ordered Probit regression analysis revealed that income has positive impact on probability of giving more charity. The major drivers identified by the regression analysis are income, number of educated members, family influence and altruism. All these variables are actively responsible of higher donations in case of Pakistan. However household size is negatively associated with probability of giving charity. Identifications of these drivers will help to promote higher donations at national level.

### **Policy implications:**

Pakistan is currently facing huge financial crisis. The need of the hour is to mobilize internal resources to get over the crisis situation. The charity collection each year in Pakistan is nearly one percent of total GDP. The government needs to work on above identified drivers of charity to increase donations volume. The major driver found is income. The government needs to focus on individual with higher income because they are the one who can contribute a lot. Education is another major driver and government needs to make sure that national campaign should be initiated to make sure the target of education for all. As education promote altruistic behavior in society. On the side of perceptual attributes government should focus on appreciating altruistic behavior in the organizations and at work place. The family influence can be utilized by creating more awareness about the fact that children learn altruistic behavior from their parents (Nu, 2015). The current generation giving behavior will be adopted by future generation.

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