The Role of Religiosity in Philanthropic Behavior

Muhammad Asghar Tashfeen, Syed Nisar Hussain Hamdani
and Muhammad Ali Bhatti[1]

Abstract

An adequate amount of economic literature exists which examines the determinants of human philanthropic activities however, not much work seems regarding influence of religion in such behaviour[2]. The economists now acknowledge the significance of neglected non-economic factors like religious, spiritual and ethical attributes which play an important role in economic decision making of individuals and households. It is evident from the scriptures describing history that caring of mankind is a divinely prevalent value from the dawn of civilization. The religious orientation promotes and strengthens such values thus causing enhancement in the altruistic activities. Mostly that has been unnoticed and analysis was mainly focused around the warm glow, tax price, public good, social acclaim and impure altruism, missing to also consider Divine beliefs, perceived reward of worldly deeds in an afterlife, in the form of Paradise and Hell. The present study develops a theoretical model under the recently emerged framework known as Divine Economics which models the relationship between perception about an afterlife and household's systematic behavior to optimize eternal utility (Fala'h) i.e. the successfulness of both lives (here and hereafter) through time and resource allocation in philanthropic activities. Such an allocation is a main tool to alleviate poverty in any religious and particularly Islamic society. The study is based on Religiosity Scales and index of Divine Economics [Hamdani 2004, 2006] have been prepared for the cross sectional analysis of 817 households collected through Divine Economic Survey (2009)[3] in four Capital cities in Pakistan and Azad Jammu & Kashmir to examine such hypothesis. This study proves that religiosity has significant consequences on

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[1] The authors are PhD Scholar at Department of Economics, Allama Iqbal Open University, Islamabad; Professor of Economics & Director KIE University of AJK and Associate Professor at Department of Economics, Forman Christian College (A Chartered University), Lahore, respectively. Corresponding author email: tashfeen.ma@gmail.com.

philanthropic activities and leads to a different systematic economic behavior than as assumed in conventional economics. Hence this paper is a contribution towards a better understanding of religiosity, philanthropy and poverty relationship. Moreover, this paper is seminal work of Becker [1974].

Keywords: Religiosity, Altruistic behavior, Philanthropy, Warm glow, Faith based incentives, *Fala'h*, Divine-economics.

JEL classification B59, D1, Z12, D63, D64, D69,

1.   Introduction

Philanthropic behavior has achieved a greater importance and became an interesting field of research in economic literature since the article of Becker's (1974). Many economists have endeavored to elucidate and analyze this behavior with many socio-demographic and other arguments theoretically and empirically. Hamdani (2003 a, b) postulated that orientation of individual's religiosity plays a vital role in determining his choices in economic as well as non-economic decision making. This is so because almost all religions of the world promote morality and 'other-regarding' values which run virtually through every action of the individual's behavior. According to Anderoni (2004) that morality is a main human feature inhibited by religious doctrines to followers that generate our choices unexplained by well-behaved model introduced by conventional economists.

The history is evident that caring of mankind is a divinely prevalent value from the evolution of society. The religious orientation promotes and strengthens the altruistic activities that have been overlooked even in the 21st century and the analysis has been focused yet around the social capital, tax price, warm glow, public good, impure altruism, social acclaim etc. (Tashfeen et al., 2013). According to L'ari (2008) that human being can achieve advantageous and quite peaceful atmosphere for successful life only in association with everlasting life in contrary to this temporary and unreliable worldly life. Such atmosphere is accessible in collaboration, brotherhood, association, compassion, and helping human beings in societies, is only cause for the Will of Allah. Hamdani (2004), suggests that in the divine religions, philanthropic activities are a part of worship and; especially, in Islam some forms of charity are obligatory.[4]

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[4] For example, Zaka'h, 2.5% tax on specific items retained for one year; Khums, 20% tax on specific items including annual residual income; Nazr, Kuffara, Sadaqa-e-wajib etc. In the "Qur'an the significance of Zaka'h can be recognized from more than 80 verses related with Zaka'h and Sala'h (prayer); perform regularly Sala'h (prayer) and pay Zaka'h and observe Allah

In conventional economics, a significant factor has been ignored while discussing consumer behavior regarding philanthropic activities that is strengthened by religion. Except few studies, this area is neglected in Pakistan as well. Sufficient data are not available in Pakistan enabling to study the relationships among faith, charity and economy. The first comprehensive data set was developed by Quaid-i-Azam University through Divine Economics Survey [DES] in 2000 which gradually emerged as a series. The later rounds included DES 2005 by UAJK, DES 2006 by Harvard University and DES 2009 by UAJK/PIDE and Harvard University. The present paper is based on DES 2009 data set to reply that whether religious and philanthropic factors have any systematic relationship while individuals make economic decisions such as money or time allocation for purposes of others' interest opposite to what is generally known as self-interest in economics? In USA "nearly $300 billion, is being given as charitable giving every year that is roughly 3% of its total GNP, at world level a very high proportion. In this philanthropy individuals paid 77% of the total giving while corporate sector done 5%", Thornton and Helms (2010). According to PCP the total charitable giving in Pakistan is nearly Rs.180 billion. while containing animal martyr of worth Rs.320 billion[5] each year on the day of Eid Festival (*Eid uz Zuha'a)*, it turn out to total gesture of philanthropy of Rupees 500 billion that is about 3% of GNP of this homeland, the upper most rate in the world.

The people allocate their time and resources for philanthropic activities that is a competing with their time for labour market. "Therefore labour wage rate influence the allocation of time among different activities known as non-market and market factors", Tashfeen (2012). Considering this point of view, the main objectives of this study is to extend the theoretical model of philanthropic behavior based upon Divine Economics Framework and also empirically analyze the same using Cross Section data of the selected four big cities of Pakistan and AJ&K collected through DES 2009.

The next section of the paper reviews some existing literature on the subject; in the third section, theoretical model and methodology have been

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and His Prophet", (Qur'an 33: 33), likewise in second verse "And We prepared them (Progenies /Aal e Abraham) privileged, supervisory by Our grasp, and We lead them motivation to do good acts, to perform regularly Prayers and to give Zaka'h; and they constantly obliged Us", Qur'an (Sura'h 21: 73). There is one verse about obligator Khums and a large number of verses relating to other forms of charity.

[5] The obligatory duty on Haves to sacrifice law full animals on the eve of Eid uz Zuha'a and also it is obligatory duty on every Muslim who go Macca (Saudi Arab) for Pilgrimage (Hajj)

presented. Section four discusses results of the study and in the last section, conclusion has been discussed.

2. Literature Review

Hamdani (2004) draws attention towards an ever increasing concern amongst conventional economists to study economics that compacts with the analysis of a real man covering all the activities such as economic as well as non-economic. According to Becker (1976) that discrepancy exists in the conventional decision model building. In addition to this Hamdani (2003b) claims that, a dichotomy exists among traditional and religious economics as well as Islamic economics, notwithstanding the datum religious economics fulfill the requirements of rational choice theory even in advance of it. Principally, economics of Islam having a great prospective potential to assist as rational theory slightly more than purely a mystical explanation as currently assumed by the traditional economists. Hamdani (2004) claims that the origin and basis of Islamic economics depend on divine revelations, henceforth is more proficient of sustaining any benchmark as 'rationality'. Nevertheless, there is a greater need to eradicate the contrast or dichotomy among the different alternate disciplines by exhausting the structure and linguistic matters so that it may become understandable.

The altruistic behavior transmits the decisions of labor supply directly connected with time allocation for voluntary services or indirectly related with market time allocated for labour supply for earning and hence money donations out of these earned income, Hamdani (2004). While the main stream traditional economics strained a diversity of model building for estimation of the correlation among wage rate and time assigned to market labor force but found that most of the conclusions do not declare the real picture of situation of the world as Deaton (1980) states.

This is a joint contemplation that pecuniary variables for an individual's decision making are being mostly influenced by the religious activities and individuals of divine religion having cognizance about here and life hereafter, Tashfeen (2012). In the religions such as Judaism, Christianity and Islam, much importance has been specified to philanthropic activities by the followers' especially in Islam, Tashfeen and Tahira (2010). The Holy Prophet of Islam Mohammad (PBUH)), states that *"*On the Day of Judgment (*Youm ul Qayy'amah*) each individual will rest below the shade of his philanthropy (charity) till the substances are established among the people".

Furthermore, according to, Chiswick (1991), "it is presumed that economic agent is self-governing, rational and optimizes his utility / minimizes his cost, only observing economic variables whereas all non-economic variables are congested outside the study", Now a day the non-economic variables that were overlooked in the analysis are gaining greater significance again since [Becker (1974, Schwartz 1970)], while Azzi and Ehrenberg (1975) state that "charity" / "philanthropy" is a main determinant of household's utility function. Moreover, this point of view can be more categorized in many parts.

Some economists have modeled philanthropy as public good theory while some introduced it as social capital and others support it as altruistic. "It is very difficult to study philanthropic behavior escaping the concept of altruism which emanates to attention at once; really altruism is a dynamic and significant characteristic of philanthropic behaviour and is commonly well-distinct and unselfish deed for the welfare of human being irrespective of oneself", Tashfeen (2008). According to Iannaccone (1998): "The bases of Religious activities are also depending upon economic rationality, all such religious activities are chosen by people in the similar likewise other economic commodities are picked in order to achieve maximum utility".

While Smith and Smith (2004) examines the link among religious activities and the volunteer labor decision making similar to [Iannaccone (1992) and Azzi & Ehrenberg (1975)], by optimizing a utility that depend on expenditure on religious activities" while Freeman (1997) states that "the consumer obtains extra utility from their expenditure made on philanthropic/altruistic activities". According to N'araqi (2007), that the "spirituality and holiness of people is the top extreme of religious activities and this level of religiosity cannot be achieved lacking generosity".

3.   Theoretical Model and Methodology

Primarily this paper offers an alternate approach to analyze altruistic behavior. Under Divine Economics, a consumer having faith belief in some form of afterlife, particularly as in the Divine religions, obtains utility/satisfaction by allocating his time and resources in philanthropic activities while keeping in life-here and a perceived life hereafter [Hamdani 2003a,b]. Such kind of time and resource allocation implicates in the activities; Time for the production of consumer's goods, denoted by 'x_c', leisure, 'x_l', religious activities, 'x_r', philanthropic produces 'Ph', through gifts, donation of money or supply of volunteer labour, shown as $Ph(x_d, x_v)$.

The quasi concave utility function, increasing in all the arguments can be defined as:

$$U = u[x_c, x_l, x_{r,} Ph(x_d, x_v)] \qquad (1)$$

The real man maximizes the utility function while facing the problem of choices for time allocation to market, care/leisure of household, religious and philanthropic activities.

All the arguments of utility function are apportioned in to two categories for optimization substance of the utility function proceeds in two stages by the individual at stage one he maximizes the sub utility of the group $U_1(x_c, x_l, x_r)$ subject to the constraint of time and money and to the given level of utility of the second group $u_2[Ph(x_d, x_v)]$ the arguments of money donations and volunteer time are determined distinctly subject to pre-allocated budget share for these philanthropic goods and their prices.

The utility function of a real man is of an individual is well defined as under:

$$\max U\left[x_c, x_{l,} \ x_{r,} Ph(x_d, x_v)\right] = F\left[u_1\left(x_{c,}x_{l,}x_r\right) + u_2\left(Ph(x_d, x_v)\right)\right] \qquad (2)$$

The utility function is assumed as an increasing, continuous and twice differentiable, monotonic transferable, homothetic in all of its arguments and is maximized subject to time and financial resource constraint and further more utility function will yield the shape as follows:

$$u^*\left(x_c^*, x_l^*, x_r^*, Ph^*\left(x_d^*, x_v^*\right)\right) = F\left[u_1^*(x_c^*, x, x_r^*) + u_2^*\left(Ph^*(x_d^*, x_v^*)\right)\right] \qquad (3)$$

$U^*$is optimum realistic attainable level of satisfaction, x_c^*, x_l^*, x_r^* and $Ph^*(x_d^*, x_v^*)$ are optimal amounts of the goods subject to constraints. The utility of sub group 1 $u_1(.)$ is being optimized at first stage as follows:

3.1 Optimization at Step I

$$\max U_1 = u_1(x_c, x_l, x_r) \ subject \ to \quad x_c + wx_l + (w + p)x_r = I^\emptyset \qquad (4)$$

$x_c =$ is composite consumer's good with normalization of prices as one.

$w =$ Labour supply wage rate.

$'w' =$ Opportunity cost calculation has been made on the basis of the market labour supply wage rate similarly $'\rho'$ has been taken explicitly cost of religious activities x_r; and has been supposed predetermined or fixed in the system.

x_l = the time spent on leisure and its price as opportunity cost is set equal to market labour supply wage rate and has been adjusted for tax and denoted by 'w'.

$I^{\emptyset}$ = as budget share, all resources available and allocated for subgroup I similarly the budget is defined as below:

$I^{\emptyset} = 1 - I^{\overline{\emptyset}}$ where $I^{\overline{\emptyset}}$ is pre allocated share of resources for subgroup 2.

The expenditure optimization of budget share $I^{\emptyset}$ at stage I, the real consumer optimizes his utility equation (1) subject to budget constraint using Lagrangian technique as shown below:

$$= u_1(x_c. x_l, x_r) + {}_1\left[I^{\emptyset} - \{x_c + wx_l + (w+p)x_r\}\right] \qquad (5)$$

The demand functions for the respective commodities x_c, x_l, x_r and in the similar way the indirect utility functions have been derived[6].

3.2 Optimization at Step 2

In the 2nd step the real economic agent faces the issue of to optimize time and financial resources in philanthropic activities x_d and x_v subject to budget constraint their prices P_d and P_v respectively. This problem of optimization problem can be shown as below:

$$\max U_2 = u_2\big(Ph(x_d, x_v)\big) \qquad (6)$$

In above u_2 (.) function is increasing in all its arguments. Moreover, the function is quasi concave, continuous, monotonic and twice differentiable. In addition to above, the sub utility function $U_2(x_d, x_v)$ is further assumed in quadratic form with arguments x_d and x_v in the following arbitrary utility function.

$$U_2\big(Ph\,(x_d, x_v)\big) = \alpha_* + \alpha_d x_d + \alpha_v x_v + \alpha_{dv}\,x_d x_v + \frac{\alpha_{dd}}{2}x_d^2 + \frac{\alpha_{vv}}{2}x_v^2 \qquad (7)$$

In above function: α_* = is a constant and predetermined exogenously at zero philanthropy in shape of donation and volunteer labour.

α_d = Money donation[7] marginal utility when x_d = 0

α_v = Volunteer time marginal utility when x_v = 0

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[6] The demand functions of commodities x_c, x_l, x_r, x_d, x_v and in similar way the indirect utility functions can be had from authors.

[7] When $x_d = x_v = 0$ and α_d, α_v " are MU, utilities of time and resource donations respectively Tashfeen (2012).

α_{dv} = Parameter, that determines whether volunteer labour supply and money donation are Frisch substitutes $(\alpha_{dv} < 0)$ *or Frisch complements* $(\alpha_{dv} > 0)$ the parameters

α_{dd} *and* α_{vv} show marginal utilities of both kind of philanthropy is diminishing, having negative sign in the standard quasi concave utility function in this case. The real economic consumer faces the following constraints;

$$P_d\, x_d + P_v x_v = I^{\bar{\emptyset}}\, , \qquad while \qquad x_d, x_v \geq 0 \qquad (8)$$

The equations (6), (7) and (8) yield the following solution of four regimes while characterizing by the Kuhn-Tucker conditions and using the Lagrangian multiplier ' ', in altruistic behavior of a real economic man:

Regime-1 (No philanthropy at all) $\quad \alpha_d < \lambda P_d \quad and\; \alpha_v < \lambda P_v \;$ (9)

Regime-2 (Monetary Philanthropy only) $\quad \alpha_d > \lambda P_d \quad and$

$$\alpha_v - \left(\frac{\alpha_{dv}}{\alpha_{dd}}\right)\alpha_d < \lambda P_v - \left(\frac{\alpha_{dv}}{\alpha_{dd}}\right)\lambda P_d \qquad (10)$$

Regime -3 (Volunteer Time only) $\quad \alpha_v > \lambda P_v \qquad and$

$$\alpha_d - \left(\frac{\alpha_{dv}}{\alpha_{vv}}\right)\alpha_v \lambda P_d - \left(\frac{\alpha_{dv}}{\alpha_{vv}}\right)\lambda P_v \qquad (11)$$

Regime-4 (Both donations) $\quad \alpha_v + \left(\frac{\alpha_{dv}}{\alpha_{dd}}\right)\alpha_v \lambda P_v - \left(\frac{\alpha_{dv}}{\alpha_{vv}}\right)\lambda P_d \quad and$

$$\alpha_d - \left(\frac{\alpha_{dv}}{\alpha_{vv}}\right)\alpha_v \lambda P_d - \left(\frac{\alpha_{dv}}{\alpha_{vv}}\right)\lambda P_v \qquad (12)$$

In the above mentioned analysis of each regime[8] and choice decision conditions are obtained by comparing marginal utility of donations (time and money) when its quantity assigned is zero to its implied price assessed in utility terms. As an equation (10) second part is derived by solving for the quantity of $'X_d'$ in the first condition of donating monetary philanthropy only, the value is used in evaluating marginal utility when $'X_v'$ is equal to zero at this marginal utility of time donation is lower than its implicit price in utility terms λP_v resultantly economic agent decides to donate only monetary philanthropy.

An important factor is that when time and money donations are separable i.e. $\alpha_{dv} = 0$ it means when time and money donations are independent of each

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[8] The religiosity level of particular individual has been categorized as high religiosity, moderate or low religiosity level.

other's quantity, these participations conditions reduces to the four possible permutations and the inequalities $\alpha_d < \lambda P_d \quad and \quad \alpha_v < \lambda P_v$. In the coming section these faith based models have been utilized to analyze the effects of religious factors and other connected variables on the altruistic behavior of real economic man and four regimes of donations have been formulated by using Kuhn Tucker technique.

The theoretical of individual's behavior model based on Divine Economics Approach as derived above, however, cannot be directly estimated as such because religious principles and beliefs need to follow rules and value system that is extremely subjective in nature[9]. There are sensitive questions also involved. That is why to quantify them, there is a greater need to introduce proxy' variables, for this purpose, the DES 2009 'questionnaire' was designed to collect data a number of proxy factors to enumerate "religious" activities and their effect on individual's behavior. Therefore, an empirical model has been proposed in place of theoretical model derived earlier. This questionnaire helped to bridge the gap in the existing secondary data sources which do not sufficiently enable economists to capture the effect of afterlife perceptions, faith patterns, intensity of religiosity and spirituality, prevalence of ethical values and other non-economic factors on economic behaviour despite their importance in religious societies and particularly in Islamic countries including Pakistan. The same is the rationale for using primary data set of Divine Economic Survey (2009) for this study. The Survey collected data of sampled population ranging 18 to 65 years of age randomly selected from four big cities namely Lahore, Rawalpindi, Islamabad and Muzaffarabad. The "people of selected cities owns virtually all features of Pakistani metropolitan city population henceforth fulfills the conditions of representation. The tested spots have a diversity of characteristics concerning, locality, structural of population, pecuniary environmental location, ethnic cultural and class multiplicity level etc. The Lahore city is located in plain areas, the arid region represented by Rawalpindi and Islamabad, while city of Muzaffarabad is situated in mountains. According to population Lahore is the

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[9] Empirically valuation due to a numerous cause such as; the behavior of the projected a real man is mostly bound by religious faith, beliefs, social customs and norms, including ethical values prevalent in a religious set up. "All these religious and other socio and demographic non-economic factors make influence on the 'valuation' mechanism that in turn really impact the level of 'utilities' involved to specific amounts of goods and services. The actual problem lies that the influence of religious faith, beliefs, doctrines, customs and norms. Likewise, this difficulty is increased and a very little favour is found from the prevailing treatise for investigator or researcher. In this regard very inadequate economic literature is accessible on religious view point of consumer behavior, particularly empirical one.

most populous and is located in the considered a big city, however Muzaffarabad is relatively a small city while Rawalpindi and Islamabad are twin cities of medium size and capital, (Tashfeen, 2012). The total numbers of 1200 household respondents were interviewed, the validation of sample size has been made through consistency check, the difference has been excluded and final sample size is 817 taken for analysis of this study. The sampling design was prepared with the help of FBS experts keeping in view the purpose and convenience principles as per the nature of the study.

There are some limitations in the primary dataset of Divine Economic Survey 2009 such as; since both educated and uneducated respondents were included in the survey, it is possible that some of the survey questions could not be understood by less educated respondents due to complexity or sensitivity of the questions. Secondly, philanthropic and religious activities performed for the pleasure of God are usually neither recoded nor remembered deliberately[10]. During survey it was observed that less reply has been provided by less literate households that is why there is partially some biasedness in dataset.

Similarly, regarding proportional accuracy of the different sects of the total population is not available in Pakistan therefore; ratio of samples could not be managed during survey. Since the tenants of philanthropy (obligatory/non obligatory) are different that is followed by the people that is why amount recorded are based on just estimates. There are different tenants of the divine religions regarding altruistic activities, though the amount spent on charities either those are based on religious or otherwise a very careful questionnaire is needed in this regard.

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[10] The Holy Qur'an as well as Bible emphasize on doing charity without the intention of fame and reciprocity. For example, New Testament 2002, Page 13 says, "when charity is given by your right hand then this should be so secret that your left hand should not know this action". The Prophet of Islam stated that Seven kinds of people) would be under shade made by Almighty Allah on the Day of Judgment when nothing will have any shade except His Shadow. (Those people will be), a just (impartial) ruler, a fresh young man whom has been taken / brought up in the (adoration) worship of almighty Allah, a person who recalls or remembers Allah in privacy and has the eyes swamped through tears, a person whose heart is affiliated to mosques by offering his mandatory congregational prayers with other people in mosque, two persons who have affection and love each other only for the sake Allah, a person who refrains when invited by a beautiful and charming lady to pledge an illicit and illegal sex with her saying that 'I am fearful of Almighty Allah's punishment and (lastly), a person who donate charity so secret that if his right hand give and his left hand does not know the action" [Narrated" by Abu Huraira].

Moreover, the followers of divine religions are discouraged to disclose nonobligatory philanthropy particularly Islam ordain to disclose the helping other people and there are many traditions of Prophet of Islam Muhammad (PBUH) regarding philanthropy, "*if charity is given by your right hand to anyone then it should not be the knowledge of your left hand*", and similarly in The Holy Bible many traditions have been quoted by Christ (AS). Observing these traditions in Divine religions people hesitate to explore such philanthropic activities as well as religious in answering the survey questions regarding time and resource allocation. That is why the information recorded in survey dataset is to some extent underestimated.

4.   Results

This section explains the salient features/characteristics and descriptive analysis empirically of the dataset of the samples of 817 households of DES (2009). Different types of religiosity indices have been formed to observe the altruistic behavior of a real economic consumer regarding various variables described earlier. The proportion of male respondents is 89% while 10.8% female of total. "Age wise the percentage of households is such that 2.4% & 5.4 percent of those individuals of less than 20 and above 60 years respectively. Whereas the individuals belong to the age cluster 20-50 years is 82.2%. While the households having not any official education are 4.2 percent, the individuals having education 10-year schooling are 21.7% while individuals having bachelor's degree are 11.6% and 21.7 percent hold Master. So it is evidently clear from the samples that larger percentage of the household consists of qualified samples. The religiosity levels of households are as such that 51% are less religious whereas 27.2% are moderate while the percentage of the individuals 21.7% belong to more religious category is 21.7%, respectively" (Tashfeen, 2012).

The Table-1 represents various sample characteristics with respect to religiosity levels. Household average income per annum is the highest among moderate religious group, lowest in low religious and high religious group falls between the two. Whereas, trend in per capita income is different from house hold average income, i.e. it is highest (Rs.49014) in high religious group, (Rs. 40549) in lowest while (Rs. 45263) in moderate religious group. Per capita consumption (per annum) follows the similar trend of annual per capita income exactly. There is sizeable difference between household assets across the religiosity level. Moderate religious people possess assets equal to Rs. 97528.6 while high religious have only Rs. 48060.45, even low religious group own assets amounting to 70151.8. This may be due to higher consumption on philanthropic activities by

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the higher religiosity group. Religiosity has positive correlation with average age of the respondents. For low religiosity group, average age is the lowest (31.15 years), and highest (38.84 years) in high religiosity group, while moderate religious people are spread around the age 35.54 years.

The philanthropic motives have been analyzed empirically in this study such as philanthropy due to economic benefits, social benefits, social capital familiar as to social acclaim, warm glow, family traditions, tradition in relatives and friends and lastly that is totally different i.e. any other than the above motives. For the last motive the majority of the households have enlightened themselves replied only for the sake of the pleasure of Allah (*Inf'aq Fi Sabi Lillah*)). However, this motive was not questioned seemingly in the questionnaire form to escape from the prejudice of dataset as follows.

Table 1: Descriptive Statistics by Religiosity Indicator

Variables	Low	Moderate	High
Household Income (Rs. Per Annum)	237791.8	292065.7	284844
Per capita income/A	40549	45263	49014
Per capita consumption/A	32213	35337	38337
Health Expenditures/A	5306.76 *(11183)	6020 *(10331)	5084.75 *(8443.5)
Household Assets (Rs.)	7051.8 *(225536)	97528.61 *(280960.9)	48060.45 *(119107.5)
Age of Respondents	31.15 *(10.59)	35.54 *(12.22)	38.84 *(13.92)
No. of Respondents	222	418	177

Note: * SD in parenthesis.

It is evident by following schedule Table -2 that there are 50% households of the total who accomplish philanthropy only for the sake of the pleasure of

Allah while the households belonging to relatively higher religiosity level i.e. 35.8%, modest 33.8 and 30.1% of low religiosity level respectively. This is apparently clear that households believe on One God (Allah), faith on lives here and here after (worldly and life after death), accountability of virtuous and bad actions in worldly life, The Day of Judgment (*Youm ul Qayy'amah*), the Paradise and Hell (life in *Jannah and Jahannam*) and *Ajar* and severe punishment (eternal utility and eternal disutility) perform a significant role in household's time and resource allocation problems particularly in altruistic activities in Islamic society whereas in non-

Muslim societies and US mostly people donate for impure altruism, tax rebate, social acclaim, warm glow etc. The response for these motives is only 10% and 5% from total philanthropic respondents and majority of them belong to low level religiosity", Tashfeen (2007).

Table 2: Religiosity Level and Motives of Philanthropy

Serial No.	Philanthropy Motives	%age of households	Religiosity levels		
			High	**Modest**	**Low**
1	Family Tradition	12%	31.25%	31.25%	37.5%
2	Warm glow, social acclaim, social capital (social Benefit)	10%	29.3%	22%	48.78%
3	Economic Benefits	5%	19.5%	29.3	51.2%
4	Philanthropic Friends and relatives	22%	28.9%	30%	46.7%
5	*Fi Sabi Lillah* for Pleasure of Allah (other than above)	50%	35.8%	33.8%	30.1%

In the coming schedule (Table-3) it has been explained that the annual total spending on philanthropy the percentage of total income respective to the religiosity groups. It is clear that the religiosity has positive correlation with all types of philanthropy. Moreover, the table shows that low religious people do Philanthropy at least i.e. (1.42%), while highest rate (2.81%) of more religious

households. Similarly, there is same trend foe general and religious philanthropy. It is clear from this study that religious and philanthropic factors alter the economic decision making particularly consumption choices.

Table 3: Philanthropic Types and Religious Index

Total Spending on philanthropy	Religious Index - RI		
	Low	Moderate	High
Total Philanthropy	1.42%	2.46%	2.81%
a. General	0.21%	0.24%	0.32%
b. Religious	1.21%	2.22%	2.48%
i. *Zaka'h*	0.78%	1.40%	1.48%
ii. *Wajib*	0.43%	0.83%	1.00%
Number Of households	222	418	177

Time allocation comparison by type of activity and religiosity level (hours/day show that time allocated to market activities (earning) is higher in low religious people and lower in high religiosity group has been explained in Table 4. This may be due to the in- elasticity of religious activities by the high religious respondents. This is explained by the time allocation behavior in religious activities (*Ib'ad'at, Mun'aj'at* etc.); it is only 0.80% hour/day in low religiosity group, and 2.02 hours/day among higher religiosity strata. Similar trend is shown in time allocation for volunteering i.e. higher in high (0.51 hours/day) religiosity and lower (0.25 hours/day) in low religiosity level. An explain factor to this behavior is the time allocated to personal case and leisure; which has negative relation with religiosity levels. Further details are given in the coming Table - 4 on the next page.

Self-reported satisfaction/dissatisfaction level allows some desirable outcomes may several important facts about the consumer behavior while making choices. This may be seen as an indicator of internal consistency in choices. So, logically, we may expect greater satisfaction or lesser dissatisfaction) among higher religious people. The information collected from sample households are expressed

in scores (number) obtained by ith individual out of 100 points so that higher scores shows higher level of satisfaction and lower level of scores shows lower level of dissatisfaction.

Table 4: Time Allocation Comparison by Type & Religiosity

Level (hr. /Day)

Activities	Religiosity Index-I		
	Low	Moderate	High
Religious	0.8	1.45	2.02
Market	10.09	9.62	9.09
Leisure	7.56	7.15	6.76
Voluntary	0.25	0.37	0.51
Home	2.53	2.93	2.68
Socialization	2.74	2.41	2.24

The data show that low religious people belonging to low religiosity sub-group earned low scores in satisfaction index and higher scores in dissatisfaction index as compared to the moderate and high religiosity groups. Though high religiosity group's score i.e. marginally lower than moderate religious group in satisfaction index, but it is significantly different from the same group in dissatisfaction index i.e. 52.15 (high religious) are less dissatisfied than moderate; 60.17 (more dissatisfied). This line of reasoning may not be conclusive due to the fact that "satisfaction" or "dissatisfaction" is purely subjective thing and each one may not be expected to express it precisely. These scores are represented with respect to religiosity groups in Table-5.

The data on philanthropy in the following Table-6 (time and money) shows that households 26.44% (216) give both types of philanthropy, 40.39% (330) the respondents do time philanthropy only, 7.59% (62) respondents are donate only money while 25.58% (209) households do not make philanthropy at all. The factors that determine these contribution rates may be religious, socio-economic, demographic or any other.

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Table 5: Philanthropic Donations by Type & Religiosity Indicator

Religious Groups	Religiosity Index-I		
	Low	Moderate	High
Self-Reported Satisfaction (out of 100 points)	68.64	73.45	72.04
Self-Reported Dissatisfaction (out of 100 points)	59.82	60.17	52.15
Number of respondents	222.00	418.00	177.00

Table 6: Rate of Participation in Philanthropy

Households	Activity	Money Philanthropy	
		Yes	No
Volunteer time Philanthropy	Yes	*26.44%	7.59%
	No	40.39%	25.58%

* Calculated as percentage of the total respondents

In short it is concluded that religious variables having likewise salient features play a vital role like economic, demographic, and social variables that determine the philanthropic activities of individuals regarding time and resource allocation. Similarly, the other variables like income, consumption, environment of society (religious friends), education and age have also been proved a significant role in determining the philanthropy. A very much interesting and significant deduction that derives out of the model of econometric is that the religious factor r is an imperative as other factors such as socio-economic factors that explain household's time and resource allocation. The various philanthropic behavior regimes of households having various religious levels are systematically

dissimilar, particularly in regarding the decision about the volume and forms of philanthropic activities.

5.   Concluding Summary

The paper aimed to extend the theoretical model of philanthropic behavior based upon Divine Economics Framework and also attempted to empirically analyze the same using Cross Section data of the selected four big cities of Pakistan and AJ&K collected through Divine Economics Survey [DES]-2009. The paper concludes that religious factors such as faith on Oneness of Allah, Hell, Heaven *(Jahannam & al Jann'ah)* and the Day of Judgment (*Youm ul Qayamah*) have a systematic change in individual's behavior regarding time and resource allocation that will be dissimilar to those having a little or no faith of such type. Moreover, education and financial resources/assets have also positive effects on philanthropic activities.

The study draws several results from data analysis which is presented as insights for further research and not as final conclusions because: This study proposes that religious and philanthropic factors have similar importance like economic factors such as income, money, price etc. in decision making of time and resource allocation. The present study explores significant statistical results that comparatively more religious people have more propensities of codependent utility functions as households prefer for caring of other's needs on the cost of their own consumption and leisure. While the majority of people make philanthropy only for *(Inf'aq Fi Sabi Lillah)* to achieve Allah's pleasure as relative bulk percentage of households are high religious who donate more charity although this was not openly asked in the questionnaire to avoid from biasedness. On the other hand, the households claiming other motives such as economic benefits, warm glow and social benefits (mentioned apparently) are majority of having low religiosity level. The present study claims that relatively more religious people are more altruistic as compared to those people who are less religious.

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