



Munich Personal RePEc Archive

Dynamic Role of Zakat in Alleviating Poverty: A Case Study of Pakistan

M. Akram, Mian and Afzal, Muhammad

Govt. College of Science, Punjab, Pakistan, University of the
Punjab, Lahore

2014

Online at <https://mpra.ub.uni-muenchen.de/56013/>

MPRA Paper No. 56013, posted 22 May 2014 13:07 UTC

Dynamic Role of Zakat in Alleviating Poverty: A Case Study of Pakistan

Mian Muhammad Akram and Muhammad Afzal*

ABSTRACT

Poverty is a curse at individual as well as community level. It is a threat to humanity at whatever level it exists. All the societies of the world have made efforts to address this challenge. Islam being the religion of all times has also presented a comprehensive system to alleviate this curse. The present study explores the application of some of these measures in collective way and brought into consideration the *Zakat* system exercised in Pakistan since 1980. This is hypothesized that weather *Zakat* disbursement along with other Islamic measures has proved to bail out the poor from poverty.

Descriptive as well as empirical appraisal of the existing system showed that the *Zakat* disbursement among the poor, needy, destitute, orphans and widows has played a significant role in poverty alleviation. The ARDL approach to cointegration is used to evaluate the short run and long run impact of *Zakat* disbursement along with the other exogenous variables on poverty. The results of the study show that there is an inverse relationship between poverty and *Zakat* disbursement both in the short run and long run. The study also investigated the certain flaws in the system operated in Pakistan and suggested the remedies.

Keywords: Religion, *Zakat*, Poverty Alleviation, ARDL

JEL Classification: I3, I24, N3, P36, P46

*The authors are, respectively, Professor of Economics at Govt. College of Science, Punjab, Pakistan and an Assistant Professor at Department of Economics, University of the Punjab, Lahore-54590 (Pakistan).

Corresponding author e-mail: muhammad_afzalch@yahoo.com

1. INTRODUCTION

Pakistan is a developing country. Its per capita income is very low. Literacy rate does not show a remarkable progress in last 66 years. The incidence of poverty in Pakistan is increasing day by day. In 2012 one-third of the households in Pakistan were falling below the poverty line and 21 percent were severely poor (Naveed & Ali, 2012). Human Development Report (2013) ranks Pakistan at 146th out of 187 countries with Human Development Index (HDI) value of 0.515. The report shows gradual increase in the value of HDI from 0.504 in 2011 and 0.503 in 2010, though Pakistan's rank has slipped a slight during 2012. Other composite indices place Pakistan at a lower rank. The Inequality Adjusted Human Development Index (IAHDI), the multi-dimensional poverty index (MDI) and Gender Inequality Index (GII) for Pakistan remained at 0.356, 0.264 and 0.567, respectively. These indices show more inequality and non-income dimensions of poverty (UNDP, 2013). Pakistan has been ranked 123rd in terms of gender inequality and reported that 49 percent of the population in Pakistan is living in multidimensional poverty, a proportion only below one other in the region – Bangladesh, at 58 percent. According to the report, the intensity of deprivation is 50 percent in Bangladesh and 53 percent in Pakistan. Although a larger proportion of the population (headcount) lives in multidimensional poverty in Bangladesh than in Pakistan (Malik, 2013).

Poverty is one of the most crucial challenges faced by mankind. Poverty is basically inability to attain the minimal standard of living and having insufficient money to purchase the crucial necessities of life such as food, clothing, housing, basic education etc. (World Bank, 1990). The poor are those who do not have sufficient income or consumption to put themselves above some ample minimum threshold of wellbeing in the society (World Bank, 2001). It is no longer considered as only an economic issue but is universally recognized as social as well as

political problem. It exists in almost every community of the world irrespective of its economic status. It has become a major human problem transcending the economic, political, social and even probably cultural and religious matter. Today poverty is a multi-facet problem. It not only depends on the resource endowment, size of population, socio-economic profile of the country but also on the kind of economic policies being undertaken.

It is evident from the literature review that the subject of poverty and its alleviation has been given much importance in the literature in secular perspective as well as in the Islamic perspective. Many studies have been conducted which discuss and explain the role of different Islamic measures for alleviation of poverty. These studies include Maududi (1984), Seoharvi (1984), Qardawi (1985) Ali (1985), Siddiqi (1988), Ghifari (1989), Sadeq (1992), Zarqa (1992), Ahmad(1991), Zarqa (1992), Ahmad (1992), Khan(1994), Ahmed (1994), Mannan (1995), Sahibzada (1997), Kahf (1998), Quraishi (1999), Akhtar (2000), Shaban, Abu-Ghaida & Al-Naimat (2001), Al-Ghazali (2001), Yasin & Tahir (2002), Iqbal (2002), Ahmad (2004), Toor & Nasar (2004), Suriya (2005), Iqbal (2005), Naumani (2007), Herani, Rajar, Wasim & Shaikh (2008), Dogarawa (2009), Ahmad (2012), Gallant (2013), Khattak (2013), Siddiqui (2013). All of the above studies did a lot on theoretical aspects of the Islamic measures of poverty alleviation and they have also discussed significance of the *Zakat* system on alleviation of poverty.

As for as empirical research regarding the Islamic measures of poverty alleviation are concerned, a few studies have also been conducted in Pakistan. These studies include Kahf (1989), Faiz (1992) Jehle (1994), Shirazi (1994), Hussain & Shirazi (1994), Malik, Hussain & Shirazi (1994), Shirazi (1995), Shirazi (1996), Kahf (1999), Ahmad (2000), Shirazi (2003), Toor & Nasar (2004), Shirazi (2006), Arif (2006), and Firdaus, Beik, Irawan, & Tonny (2012).

Presently, perhaps, there is hardly any study available in Pakistan which has quantified the role of *Zakat* in alleviating poverty in Pakistan by using ARDL approach to Cointegration. Now, on completion of thirty three years of implementation of *Zakat* system at the State level in Pakistan, there is dire need to evaluate the system by using the econometric techniques and make the appraisal and to present suggestion for the success of the system. Therefore the present study is an attempt to explore the impact of Zakah along with some other variables like GDP, inflation and net school enrolment on poverty alleviation in Pakistan.

Since poverty prevails in almost every country of the world with more or less degree and each community had tried to tackle this issue with its own resources and approaches. Besides that World Bank, International Monetary Fund (IMF), International Labour Organization (ILO), United Nations Organization (UNO), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations International Children's Emergency Fund (UNICEF), United Nations Development Programme (UNDP), Asian Development Bank (ADB) and various other organizations and institutions are also allocating funds for this purpose.

Islam being the religion of all times and all regions utilizes an institutional approach in its distributive scheme for alleviation of poverty. Market as an institution is allowed to play a significant role supplemented by other institutional arrangements to correct market disequilibrium. The other institutions include, family, *Zakat*, *Infaq*, *Awqaf*, *Sadaqat ul fitr*, *Maniha*, *Hiba*, *Qatee'ah*, sacrificing animal for pleasure Allah, *Infaq ul afv* (charity of surplus), *Wrathah* (inheritance) and elimination of *riba* (interest) etc. Besides that all types of exploitative acts (including violation of basic human rights) are strictly prohibited and are declared as sin.

Poverty alleviation is also having paramount importance in fiscal and development policies of Islam. It utilizes an institutional approach in its distributive scheme to address any of the socioeconomic issues confronting the society. In the context of concentration of wealth, it advocates and suggests a fair and just distribution and sharing of the bounties wherever it is insufficient. For that matter, the system of distribution is not centralized; rather it is decentralized and requires everyone from the society to look after the needs of the near relatives, his neighbors, his locality and then the society at large, in that order. This approach has very important economic and social implications.

The institutional approach of Islam uses *Zakat* as a distributive instrument for the solution to many of the problems both economic as well as social. Among them, this tool may also be used quite effectively for the reduction and eventually alleviation of poverty from a society. This is a multipurpose strategy, which is used not only to alleviate poverty and correct inequalities, but also aims at achieving other goals of Islamic system. Islam uses a hierarchy of compulsory and voluntary, permanent and temporary measures, which lend flexibility to the system, as *Zakat* (including Ushr etc.). Islam does not restrict itself to alleviation of poverty, but to relieve all kinds of hardships of the people.

This study is planned keeping in view the following objectives: that is to identify the various dimensions of poverty alleviation suggested by Islam and to empirically determine the role of *Zakat* in alleviating poverty in Pakistan for the period 1980-81 to 2012-13.

Pakistan has experienced the *Zakat* system since 1980, so it would be useful to appraise the performance of this system and its potential to alleviate poverty in Pakistan. This study is of unique nature because:

-
- It helps to explore the measures which will lead towards alleviation of poverty in Pakistan and all around the world
 - The study is helpful for the policy makers for efficient running of the *Zakat* system as a safety net for alleviation of poverty in Pakistan and abroad.
 - This study will also be helpful for other Muslim countries of the World for alleviation of poverty. Non Muslim countries can also get the guidelines from this study to alleviate poverty and plan for provision of basic necessities to everyone.
 - This study has also its peculiar significance because it is perhaps the first study in Pakistan that utilizes a more robust cointegration approach known as “ARDL approach” to cointegration to examine simultaneously the short run as well as the long run relationship between *Zakat* and poverty in Pakistan. The findings of this empirical study shall be helpful for Government of Pakistan to combat poverty in Pakistan.

This study discusses only the case of Pakistan. Overall data for the time period 1980 to 2013 related to Pakistan have been taken. Because of the lack of data availability, the study fails to discuss the poverty alleviation through *Zakat* at provincial levels in Pakistan.

The poverty is affected by many variables like GDP, Inflation and school education, debt, foreign remittances, population growth, political instability, openness to trade and last but not the least the institutional and sociological factors. But due to limited time and data span, this study

confines only to empirically explore the role of *Zakat* in alleviating poverty in the presence of variables such as GDP, Inflation and school education in case of Pakistan.

2. ISLAMIC STRATEGY FOR ALLEVIATION OF POVERTY

Islam is not an ascetic religion. It is a complete code of life. The spiritual and material spheres of life are closely interdependent and if one of the two is neglected, the whole object of life is doomed. It is said that Islam is not a mere appendage to life, it is life itself. It sees life as a whole and treats it as one indivisible unity, not to be broken into fragments.

Islam has a multidimensional economic system, which cover all economic aspects of life. Islamic Economic System means a system which is based on and is derived from the Holy Quran and Sunnah. In this system the economic agents are guided by the Holy Quran and the Sunnah of the Holy Prophet (P.B.U.H). The decisions concerning production, distribution and utilization of resources are taken in the light of the Holy Quran and Sunnah. The economic activities are based on certain values. These values are Justice, Benevolence, Piety, Equality, Cooperation, Moderation and the concept of Halal and Haram. The basis of Islamic Economic System are very strong, and are unchangeable because these bases are not formulated, created or mentioned by any man having limited thinking and knowledge.

The first and the foremost aim and objective of Islamic economic system is achievement of '*Falah*'. *Falah* means wellbeing of the mankind in this world and hereafter. In economic field the concept of *Falah*, refers to material wellbeing of the human beings. This system aims at the equitable distribution of resources. The other objectives include the discouragement of concentration of wealth in few hands and emphasis on circulation of wealth among all sections of society including poor and destitute. So bridging the gap between the rich and the poor; and

provision of the basic necessities of life like food, clothing, shelter, education and health to all the citizens of the Islamic State is the primary objective of the Islamic Economic System. It is obligatory upon the Islamic state to provide the basic necessities of life to all those citizens who are unable to earn due to physical disability, unemployment or any other reason. One of the major objectives of the Islamic economic system is to establish socio-economic justice among all the members of the society.

Islamic Strategy for Alleviation of Poverty in the light of the teachings of the Holy Quran and Sunnah of the Holy prophet includes the prohibition of concentration of wealth in few hands and it should remain in circulation in the society so that its members may maintain their life and be vigorous and energetic. Islam encourages its believers to work hard to earn one's living. The primary responsibility to provide the basic necessities of life for himself and his family and ultimately to alleviate of his personal and his family's poverty is the responsibility of the person. Islam wants from the poor to take part in economic activity. Islam prohibits from extending one's hand before others, if he or she is not destitute or handicapped. It is evident from the Quran and Sunnah that this act of involvement in economic activity is appreciated. The Holy Quran describes the earning through economic activity as bounty of Allah (Al- Jumaa', 9-10). Numerous traditions may be cited in which the Holy Prophet (P.B.U.H) has forbidden his followers to beg from others and stressed on earning with one's hands. This approach prevents man from sitting idle; compel him to work to avoid poverty and hunger.

A poor lacks financial resources and he requires these resources to carry out production and related business operations. To obtain them it is inevitable to solicit the cooperation of other individuals or organizations. Islam provides several modes to acquire such financial resources such as *Qard-al-Hasan* (loan without interest). By the virtue of *Qard-al-Hasan* one can get the

resources to start a business and to meet his needs. This makes his economic position secured. So this is a very effective source of poverty alleviation. If a poor person has limited resources, he is also allowed to do business or economic activity on Shirakah basis (i.e. Partnership). Shirakah may be used in any lawful mode of business. For instance, in trade Shirakah and Mudarbah, in agriculture *Muzariah* (tenancy) and *Musaqat* (partnership in fruit trees) and in plain industry and craft *Shirakah* in work (*Shirakah Sannai or Shirakah Amml*) are lawful modes. This mode of acquiring financial resources will help the poor to eradicate their poverty and to become self sustained. This will also save the poor from interest based loans; and the evils and exploitation of interest. Shirakah based business will not only alleviate the poverty of the working poor but also provide the job opportunities to the other people. Another shape of shirakah is diminishing Musharkah which means participation of a financier and his client in joint ownership of a property or equipment, or in a joint commercial enterprise. The shares of the financier are purchased by him so as to make him the sole owner of the property, or the commercial enterprise, as the case may be. The client pays the rental and the price of the share according to the agreement and becomes the owner of the asset. This mode is helpful for the poor to get assets and alleviate their poverty.

A poor also can acquire financial resources on the basis of mudarbah to do business or some other economic activity. Mudarbah is defined as: “Two or more persons enter into a deal in which one party provides capital and the other party conducts business with this capital under an agreement of receiving a share in the profit with an agreed ratio (Siddiqui, 1981). Mudarbah and Shirakah are the tools which can be used in Islamic society for poverty alleviation. It often happens that a person has capital and yet is unable to engage in business due to mental or physical infirmity, disability or lack of experience. On the other side there is a poor person who

has the will to work but he is lacking finances. In this case Shirakah and Mudarbah are the only means by which he and the economy in general can benefit from the flow of his wealth into circulation. Ijara (Islamic leasing) is another mode through which a poor can get equipments, instruments and the other required assets like public call offices, Photostat machines, tools and machinery for small enterprises etc., on lease or rent from persons, leasing firms or banks working on interest less basis and can do their own business on the basis of *Ijara*. These schemes can bring the poor people out of poverty. The housing schemes on this basis can provide the shelter to the homeless poor (Ahmad, 1992).

Bae' Salam and Bae' Murabaha are also trade based arrangements permitted by Islam through which a poor person can achieve assets for business. *Salam* means advance payment of the price for future delivery of a good or asset and *Murabaha* means selling a commodity at a price which is the sum total of the purchasing price or cost of that commodity and an increase or profit (Al Jazeeri, 1979).

Bae' Salam can be used for provision of financial resources to the poor. This mode is successfully used in Iran for agriculture loans. While Murabaha means selling a commodity at a price which is the sum total of the purchasing price or cost of that commodity and an increase or profit (Al Jazeeri, 1979). In other words Murabaha is to purchase a thing at a price and add to it a sum at a settled or determined rate and resell it. Murabaha is largely used for obtaining finance for short-term business enterprises. This contract of sale takes place on the basis of deferred payment. This concept can be successfully used to provide the equipments, machinery, instruments and different inputs to the low income group, small and medium enterprises and the poor people to stand on their foot and earn their livelihood. Poor and low income people can use these equipments and inputs in their business, agricultural farms and cottage industry and participate in

increase of production in the country. This will also generate jobs for the locality in which business is established.

A poor person, if is not indigent or destitute and has no financial resources may work as laborer and get remuneration for his or her services. He may work as a bonded worker or a common worker (Qardawi, 2004). Involvement of a person in labour activity is appreciated by the Messenger of Allah (P.B.U.H). It is reported from the Messenger of Allah (P.B.U.H), the manual worker is the friend of Allah (S.W.T.) and He is also reported that once He (P.B.U.H) kiss the hands of a laborer.

In contrast to the other religions, Islam is not a static mode of life. The goal of Islam is welfare of mankind. This concept of welfare comprehends both the worldly and the eternal life. The Holy Quran teaches the believers to offer the following prayer: *“and there are men who say: "Our Lord! Give us good In This world and good In the Hereafter, and defend us from the torment of the Fire!"* (Al-Baqara, 201). Hence it is the responsibility of an individual as well of the society as a whole to achieve the good things and merits of this world and the next. The achievement of well-being in worldly life depends on economic development. Hence Islam empathetically urges its followers to participate in economic struggle, eliminate poverty and ignorance and probe and promote other factors of economic development.

2.1 ISLAMIC SAFETY NETS

There are several safety nets which save the people from poverty. Thanks to the precepts of Islam, the spirit of mutual help, sympathy and kindness has penetrated into the inner depths of its consciousness. There are different safety nets about which the Muslims are directed to act upon individually as well as collectively. If these safety nets are implemented in their true spirit,

with planning and sincerity will result into alleviation of poverty at mass level. These safety nets are discussed in the coming pages.

2.1.1 The Islamic Law of inheritance

Allah (S.W.T.) has given the constitutional verdict concerning to the property of the deceased person to distribute among his or her heirs (Surah Al Nisa, 11). This God given law of inheritance helps in diminishing wealth concentration in few hands. All those members of the family who get their share from the property will be in a position to fulfill their needs and start or expand their business out of the inherited property. This is a great safety net which on one side saves the masses from poverty and on the other from concentration of wealth in few hands.

2.1.2 Al-Nafaqat (Maintenance of one's Family and Near Relatives)

Nafaqa (plural Nafaqaat) is defined as “what a person spends on the other persons to be maintained and consists of food, clothing, residence, and all the related things as water, light, and other things (Al Jazeeri, 1979). It includes food, clothing, residence, nursing, upkeep, service, burial, and the expenses on medical treatment and marriage. The institution of Nafaqat (maintenance) provides the ‘cement’, which makes these relationships stronger. This institution is so important that Allah has pointed it out at seventy (70) places in the Holy Quran. Besides the Quran, the Sunnah and wisdom has established its importance. This system of maintenance provides a social security system not only for wife, children, parents and relatives but also for servants, slaves and even for animals. This institution has the potential to knock out poverty. An important factor behind poverty today is female headed families. This problem can also be solved if the other relatives feel their responsibility and provide Nafaqa to such families.

2.1.3 Slaughtering Animals on Eid-ul-Azha

Eud-ul-Azha is an occasion of celebration for the Muslims. On the eve *Eid-ul-Azha* they are directed to sacrifice (slaughter) the animals such as camels, cows, goats and sheep etc. At least one third of the flesh of the animals may be distributed among the poor and another one third to the poor relatives. The purpose of this activity is again to help the poor, needy and the destitute. This is also helpful in income generation, employment creation and ultimately in poverty alleviation.

2.1.4 Sadaqa tul Fitar (Fitrana)

Fitrana (Sadaqa-tul-fitar) has been made compulsory on the occasion of the *Eid-ul-Fitar*. The believers are directed to pay a prescribed quantity of the cereals or their price to the poor before going to offer *Eid* prayer. It will be paid per member of the family. Everyone has to pay this sum not on his/her, own behalf, but even on behalf of one's minor, servants and even for one's guest. The purpose of Sadaqa tul-fitar is that when the Muslims are celebrating their festivals, they should not forget the other members of the society and share with the poor in the society.

2.1.5 Penalties (Kaffarat)

Islam has given a prescribed procedure of *Ibadaat* (devotions). If due to some reason the believer is not obeying the direction or not following the prescribed procedure or he/she has committed a sin then he or she have to pay a penalty. This penalty is known as Kaffarah in Islamic terminology. For example, if a Muslim breaks his *saum* (fasting), or breaks the oath or commits some wrong during the pilgrimage then he or she has to pay a penalty. This penalty will be paid in terms of fasting, freeing the slaves or payment in the form of kind (e.g. wheat) or its value in cash to the poor. Again the purpose is to get the wealth from that person and to help the poor.

2.1.6 Infaq Fi Sabil Lilah (Charity in the Way of Allah)

Infaqfi Sabil Lilah includes: Charity (Al- Sadaqat al-Nafila) and Charity of Surplus. This is a monetary assistance which is provided by the affluent to the poor and is termed as *Sadaqa*. Islam condemns stinginess and miserly behavior and invites the people to spend their wealth in the way of Allah. Islam demands from an individual if he/she he has surplus money he is encouraged to spend it on poor and needy for the sake and pleasure of Allah. The basic purpose of “*Infaq al afv*” is to reduce concentration and promote the circulation of wealth and thus to remove the gap between haves and have-nots and to remove poverty. If every member of the society gives away his surplus wealth to the needy persons, not a single member of the society will remain poor and deprived of the necessities of life.

2.1.7 Trust (Waqf or Awqaf)

Things, movable or immovable, which are donated in the way of Allah, are called *Waqf* in Islamic terminology (Seoharwi, 1984). This institution has been playing a very effective role in the Muslim Community of every age. Poor houses to provide food and clothing to the beggars and the destitute, Charity Hospitals and many other pro poor institutions were were founded by the Muslims. Besides that a vast system of *Awqaf* was organized to look after the orphans, the poor, the blind, the destitute; and other helpless and afflicted people. The basic purpose of this system of *Awqaf* is to prevent the concentration of wealth in a few hands and to make the wealth to flow in a constant stream from the affluent to the poor so that the circulation of wealth in society should never cease but continue to accelerate. This concept of *Awqaf* can be used at present to alleviate poverty and the other economic problems.

2.1.8. Maniha (Private Gift of Land)

Maniha is transference of one's land to another person for a fixed period at the end of which or whenever he wills, he has the right to take it back. The transferee can invest his capital and labour on this land and becomes the proprietor of its produce. Later the land is returned to the real owner. It may be a house which is given to another for residence and expressly states that the house shall remain in the ownership of the donee and his heirs. This is another method of alleviation of poverty which shows how the people can help the poor relatives, fellows, neighbor and the other needy people.

2.1.9. Qati'ah (Gift of Land from the State)

There were ownerless lands in the past. The Islamic state has the right to give the state lands to the needy and poor people. This gift of land from the state is another method of alleviation of poverty. The poor by utilizing this land can eradicate their poverty besides the increase in production in the economy.

2.1.10. Hiba (Mutual Gift)

Hiba in its literal sense signifies the donation of a thing from which the donee may derive a benefit. In the language of law it means a transfer of property by one person to another, and accepted by the later. Hiba or gift is an important measure of Islamic Economic System for poverty alleviation. Jurists of Islam derive its permission from the saying of the Holy Prophet (P.B.U.H): "Exchange gift among you, it will create love among you".

2.1.11. Things of Collective Ownership

Lands adjacent to a habitation which are commonly used by the residents such as pastures or grooves or shrubs from which the inhabitants get fuel are common property. These are open to

use by all residents of the habitation. Similarly, lands in which salt, oil and tar coal deposits are found are not Mawat for these products of the soil are the need of all Muslims. Open salt mines and tar coal fields are also not Mawat but open to general use by every individual (Badai wa Sanai). In the same way oceans, rivers, lakes and ponds and all large reservoirs of water cannot be individually owned. Every individual, however, has the right to obtain water from them for various needs such as drinking or irrigation. Fish and other creatures in the reservoirs are also collective property and open to use by everyone (Siddiqui, 1973. p133-134). Likewise the individuals has the right to make a gift of his land, house or garden to another to make use of it for a fixed period of time.ⁱ

2.1.12. Civic Responsibility

Society like the individual is also accountable and answerable to Allah for the weak and poor living in its area. It is responsibility for strengthening the weak and providing sufficient means to poor to enable them to meet their basic need. It is also duty of the society to let not the gap between the rich and poor widen beyond natural limits; and if it does, it takes necessary steps to narrow down the difference in wealth to the natural and just limits. And if in protecting and safeguarding the rights of weak and the poor, it has to use force, or to go to war, it must go to these extremes in upholding the right principle: Allah says: “And what reasons have you not to light in the way of Allah and of the weak among the men and the women and the children” (Surah Al-Nisa).

2.2. The State Responsibility /Role of Islamic State in Poverty Alleviation

One of the most important responsibilities of the Islamic State is to remove poverty, destitution and concentration of wealth. It is the basic duty of the Islamic State to ensure the

provision of basic necessities of life to every individual so that no citizen residing within its borders should go without food. To fulfill this responsibility the Islamic State will educate, train, persuade and preach to the affluent class to supply the wants of the poor. However, if in spite of the above measures, the resources still fall short of meeting the basic needs of every citizen; the Islamic State can levy taxes on affluent classes. But this can only be done in emergencies. In normal circumstances such special taxation will have to be withdrawn.

2.3. Obligation of Zakat

Zakat is a monetary form of *ibadat* (worship) in Islam which has been made obligatory upon Muslims. This is the corner stone of the Islamic economic system and is one of the five pillars of Islam. *Zakat* was declared an obligation by former Prophets also. *Salah* and *Zakat* have been mentioned together at thirty-two places in the Holy Quran and an emphatic order has been given to pay *Zakat* at eighty-two places. There are about 103 Traditions (Ahadith) of the Holy Prophet (P.B.U.H) regarding *Zakat* only in Sahih Bukhari (1989). The establishment of a system of *Zakat* is one of the basic responsibilities of an Islamic state. In Sura Al-Hajj, Allah Almighty says: “*These are the people who, if We give them power in the land, will establish the Salah, pay the Zakat, enjoin what is right and forbid what is evil*”(Al-Hajj, 41). Every Muslim who owns a certain amount of wealth should give away an amount of his wealth as prescribed by Shariah to those who, in the eyes of the Shariah, are entitled to receive *Zakat*. There are different kinds of wealth on which *Zakat* is levied. The animals on which *Zakat* is leviable include camels, cows (including the oxen and the buffaloes) and goats. *Zakat* is also obligatory upon gold and silver. There are many traditions of The Holy Prophet (P.B.U.H) which describe this obligation. The Nisab of *Zakat* on the gold is 7.5 *Tola* and for silver 52.5 *Tola*. *Zakat* is also obligatory on trade goods. Trade goods imply all goods, which are sold and purchased for profit.

The purpose of *Zakat* is not only to support the poor and the destitute and to bring the wealth in circulation, but as an obligatory act of worship it also purifies heart and soul and transforms man into a sincere and obedient servant of Allah. *Zakat* is an expression of gratitude for the bounties of Allah Almighty. The institution of *Zakat* eliminates niggardliness, miserliness, selfishness, spite, envy, callousness and exploitation from the society and inculcates in it the spirit of love, selflessness, benevolence, sincerity, considerateness, co-operation, brotherhood and companionship.

2.3.1. The Expenditure of *Zakat*

The persons entitled to receive *Zakat* have been clearly mentioned by Allah Almighty in Sura Al-Tauba: *“As a matter of fact, Zakat collections are only for the needy and the indigent and for those who are employed to collect them and for those whose hearts are to be won over and for the ransoming of slaves and for helping the debtors and for the way of Allah and for the hospitality of the way-farers. This is an obligatory duty from Allah: and Allah is All-Knowing, All-Wise”*(Al-Tauba, 60). This verse describes eight heads of expenditure of *Zakat*. It is unlawful to spend *Zakat* on any head except these eight.

2.3.2 Ushr

The literal meaning of Ushr is the tenth part. Technically it implies the *Zakat* of the land produce. The Ushr rate on the produce of arid lands is the tenth part and on irrigated lands is the twentieth part. The Order of Ushr is in the Holy Quran and Hadith. Ushr is not necessarily payable at the end of the year. If a land yields two crops a year, Ushr is payable at the harvesting of each crop. The heads of expenditure of the Ushr are the same as that of *Zakat*.

2.4. Role of the *Zakat* System in Poverty Alleviation

There is lot of benefits of this system. Besides the purification of heart and soul, *Zakat* not only purifies the wealth but also is the major tool distribution of wealth and elimination of poverty. Some of the benefits are described below.

Islam prescribes a legal share, in the wealth of affluent people, for the poor sections of the Society in the form of *Zakat*. Thus wealth starts flowing from the rich to the poor. Thus *Zakat* plays very important role in distribution of wealth and ultimately in alleviation of poverty; the payment of *Zakat* narrows the wide gulf between the rich and the poor, the standard of living of the poor people begins to improve. As a result the friction between the two classes disappears and their relations become harmonious.

The system of *Zakat* plays a very important role in employment generation. The jurists are of the opinion that professional people *i.e.*, tailors, iron smiths, launderers, butchers etc. may be given monetary grants to buy tools of their trade. A cultivator may be granted capital from the *Zakat* fund to buy a plot of land to grow crops. In this way the system of *Zakat* increases the employment opportunities for the people and helps in poverty alleviation. This system provides economic security to the poor, the destitute and the needy. Maududi (1984) describes *Zakat* as: “It is a cooperative society, an insurance company, a provident fund of the Muslims. It is a fund for the assistance of the unemployed. It is a means of livelihood for the disabled, the sick, the orphans, the widows and the jobless. It is a guarantee that no one shall lack necessities of life in the Muslim Community.”

Today capitalism is generating poverty on an increasing scale. On the one hand there are millions of deprived destitute and poor people and on the other godowns and shops are heaped up

with agricultural production and manufactured goods, which lie unsold. The system of *Zakat* gives purchasing power to the poor. This was demonstrated in the time of Hazrat Umar bin Abdul Aziz (R.A.) when the affluent people searched in vain for those who needed assistance from *Zakat* fund. In Islam all hoarded wealth is subject to *Zakat* and if it is not invested in a profitable business venture, it is likely to be exhausted in a few years. Hence in the Muslim community individuals would want to put this wealth in business enterprises such as private company, partnership or mudarbah firms. As a result economy will grow and expand and job opportunities will increase. This practice ultimately helps in poverty alleviation. So *Zakat* as the most important tool of social security can play a revolutionary role in poverty alleviation.

As one of the objectives of the present study is to explore whether the *Zakat* system implemented by government of Pakistan in 1980 is successful and is playing a significant role in poverty alleviation, analyses was done by using ARDL technique to seek the answer of our research question: Whether the *Zakat* system implemented in Pakistan is playing a significant role in poverty alleviation?

3. REVIEW OF LITERATURE

Poverty and poverty alleviation is given much importance by the scholars, economists, religious thinkers and writers. A plenty of literature is available on the topic. In this study literature review related to the *Islamic perception* of poverty and its strategy for poverty alleviation is presented.

Maududi (1984) describes *Zakat* system in Islam as it is a cooperative society, Insurance Company, a provident fund of the Muslims. Qardawi (1985) describes that the institution of *Zakat* has been playing a very effective role in the Muslim community of every age. He writes that poor

houses to provide food and clothing to the beggars and the destitute were founded by the Muslims out of *Zakat*. Ali (1985) claims that Ushr collection and disbursement can make half of the poor families to cross the poverty line. Siddiqi (1988) and Kahf (1989) estimated *Zakat* potential for eight Muslim countries. Ahmad (1991) describes that the Quran and Sunnah have repeatedly emphasized feeding of the hungry and fulfillment of nutritional requirements of everyone. Faiz (1991) analyzed that as a whole there was 2.16 percent reduction in poverty level due to *Zakat* and Ushr in Pakistan. Kahf (1991) stated that it is the state's responsibility to provide basic necessities of life to every citizen in an Islamic state. Sadeq (1992) suggests that the state should levy taxes when *Zakat* funds are not sufficient to fulfill the basic needs of the poor and needy.

Shirazi (1994) has explored the effect of *Infaq* (Charity in the way of Allah) on poverty alleviation. Jehle (1994) has presented empirical evidence on the extent to which *Zakat* achieves its intended objective in Pakistan. Shirazi (1994) discussed the effects of *Zakat* and Ushr on poverty alleviation. Hussain & Shirazi (1994) commented that the system of *Zakat* practiced in Pakistan was not capable to bridge the poverty gap. However the poverty gap could be reduced if *Zakat* is collected to its potential. Malik, Hussain & Shirazi (1994) conclude their study on poverty in Pakistan and its alleviation through *Infaq*. Ahmed (1994) has discussed the role of *Maniha* (i.e., free giving of productive assets to poor for a short period) to reduce the hardship of poor. Mannan (1995) describes that the obligatory and voluntary distributive measures can reduce disparities of income and wealth. Shirazi (1996) estimated the private *Zakat* transferred to the poor which was equal to 14.2 billion and this amount was about 1.4 percent of GDP. He mentioned that according to a study conducted by the *Aga Khan Development Network* an amount 70.5 billion Rupees were privately transferred to the charity institution. This amount was equal to 2.63 percent of the GDP in 1998. Sahibzada (1997) suggests that before elaborating on the Islamic concept of poverty

alleviation we need to be clear about certain facts and fundamental principles of Islam. Quraishi (1999) describes the economic impact of *Zakat* and says that when a certain percentage of one's wealth is spent annually over the foregoing eight categories as prescribed in the Qur'an, *Zakat* has a significant economic impact on society. Kahf (1999) estimated the *Zakat* collection in the officially *Zakat* implementing countries. He is of the view that actual collection of *Zakat* is very low compared to its potential collection. Ali & Tahir (1999) conclude their study that growth, {*ceteris Paribas*,} has always helped in poverty reduction.

Ahmad (2000) is of the view that *Zakat* potential in Pakistan is 40 times more than the actual *Zakat* collection in 1999-2000. Yasin & Tahir (2002) have discussed the implication of abolition of interest and enforcement of *Zakat* on the reduction of income inequality and alleviation of poverty within the general equilibrium framework. They concluded that full Islamization of the economy will produce the best results for alleviating poverty and income distribution compared to the partial Islamization plans. Iqbal (2002) concludes his findings in the following words: "from the point of view of an Islamic system, which calls for the fulfillment of basic needs of everyone, this situation leaves a lot to be desired. It is high time that Islamic scholars and governments work together to design and implement a policy package that can solve this problem in a reasonable period of time. Shirazi (2003) discussed the redistributive effects of *Zakat* across the income groups and regions in Pakistan by utilizing the data collected in Household Integrated Economic Survey 1996-97. He concluded that the potential *Zakat* collection and distribution has significant impact on the household income in the lower-income group, ranging from 10.63 percent to 29.23 percent. Therefore, *Zakat* has its potential role but demands serious efforts on the part of the government.

Poverty Reduction Strategy Paper (2003) describes that a key instrument for social rehabilitation and reducing vulnerability to exogenous shocks is the revamped system of *Zakat*. The revitalized *Zakat* system provides funds to the beneficiaries not only to fulfill basic needs but also to rehabilitate permanently. Ahmad (2004) describes that *Zakah* is one of the fundamentals of Islam that has direct economic implications and the institutions of *Zakat* and *Waqf* are able to solve the problems of poverty. He suggests that *Zakat* and *Awqaf* should be incorporated in poverty reduction strategies adopted by developing countries. If used efficiently, they can play an important role in the redistribution of assets enabling the poor to become productive. Shirazi (2006) has estimated the resource shortfall and found that some of the low-income Muslim countries can meet their resource gap under USD 1 international poverty line with potential *Zakat* collection. Arif (2006) assessed the strategies adopted by government of Pakistan for poverty reduction. He says that almost all these Programmes were not able to achieve financial targets. He appreciates the success of *Zakat* system particularly in rural areas and suggests government to enhance the resources that are disbursed under the *Zakat* system, but after improving the flaws in the system. Ibrahim (2006) investigates the role of *Zakat* in poverty alleviation in context of Selangor (Malaysia). The empirical findings indicate the positive contributions of *Zakat* distribution in reducing income inequality. His study reveals that *Zakat* distribution can reduce poverty incidence, reduce the extent of poverty and lessen the severity of poverty. Shah, (2007) describes the importance of education in poverty alleviation by saying that one of the reasons of poverty among the Muslims is low literacy rate and less attention towards technical education. Naumani (2007) describes the system initiated by Umar Farooq (R.A.). He explained how Hadrat Umar Farooq (R.A.) combat poverty. Herani, Rajar, Wasim & Shaikh (2008) analyzed the reasons and trends of poverty in Pakistan. They are of the view that during 1980s poverty

decreased due to *Zakat* distribution, increase in remittances and growth in construction and services sector.

Dogarawa (2009) describes that *Zakah* helps to generate a flow of funds and recruit the necessary manpower and every individual in the society is assured of minimum means of livelihood, which provides social security system in an Islamic society. Ahmad (2012) describes the *Zakat* system in Malaysia that the amount of *Zakat* collected in the fourteen states of Malaysia which can influence the wellbeing of the country's Muslim society. Firdaus, Syauqi, Tonny, & Bambang (2012) discussed the establishment of *Zakat* fund in Indonesia. They have estimated the potential of *Zakat* in Indonesia and explored the relationship between demographic characteristics and *Zakat* payment. The study shows that education, occupation and income are important factors which influence respondent's frequency and choice of place when paying *Zakat* and alms. Yusoff and Densumite (2012) have examined the impact of *Zakat* on growth in federal territory of Malaysia. Gallant (2013) described his study regarding Islamic strategy to alleviate poverty. He says that Islam promotes economic activity, on condition that it is legitimate and within the laws of the Islamic system. Islam has a significant role to play in poverty alleviation. Khattak (2013) describes poverty as weapon of mass destruction. He says, "The aim of poverty alleviation can be attained in an Islamic economic system through reducing the inequality and using Islamic economics instruments to alleviate poverty". Siddiqui (2013) described that the *Zakat* is system of social security in Islam. Since it is a permanent and direct transfer of resources from rich to poor, incidence of poverty goes down rapidly. At present various Islamic states as Saudi Arabia, Sudan, Pakistan, Jordan, Libya, Kuwait, Malaysia, Indonesia, Iran and Bangladesh have introduced *Zakat* system in their respective countries at the state level, catering for needs of the millions of deserving people.

4. RESEARCH METHODOLOGY

The present study is of qualitative as well as of empirical nature. The qualitative aspect of the study is related with the theoretical aspect of the Islamic strategy for poverty alleviation, while quantitative aspect is related with one of the Islamic measure for poverty alleviation, i.e., *Zakat*.

Qualitative analysis is related with the Islamic strategy for poverty alleviation. In this context the following sources were used to explore the Islamic strategy: The original sources that is the Holy Quran and Sunnah of the Holy Prophet (P.B.U.H), and The Islamic literature written by the eminent scholars, and Research articles related to the topic of the study.

In this section all those ways and means has been discussed through which Islam combats poverty. These ways and means include Islamic emphasis and persuasions on work instead of begging, provision of funds and assets for business and safety nets which Islam has prescribed to provide the basic needs to every citizen of the Islamic state. All these ways and means have been discussed in the light of the above mentioned sources of Islamic teaching.

As mentioned above, Islam has given a comprehensive strategy to alleviate poverty. Out of the twenty four measures mentioned in this study, only *Zakat* has been made obligatory for the Islamic state to be implemented on the State level. So empirical analyses is possible only for measures for which data is available. *Zakat* system was implemented in Pakistan through the *Zakat* and Ushr Ordinance 1980 and total *Zakat* is collected by the government agencies. So data related to *Zakat* collection and disbursement can be collected from these institutions. So the empirical study of this system of *Zakat* is easily possible. This is why the empirical analysis of the *Zakat* system in alleviating Pakistan has been done.

4.1 MODEL SPECIFICATION

To determine the role of *Zakat* Disbursement (ZD_t) in alleviating poverty (HC_t), various specifications have been tested and the most appropriate functional form is presented below:

$$\ln HC_t = \alpha_0 + \alpha_1 \ln ZD_t + \alpha_2 \ln Y_t + \alpha_3 \ln P_t + \alpha_4 \ln Sch_t + u_1 \quad (1)$$

Where:

\ln = Natural logarithm.

HC_t = Head Count Index– a proxy used to measure the absolute poverty; This proxy to measure chronic poverty has been widely used by Afzal et.al. (2012), Afzal, Farooq, et. al., (2010), Amjad & Kemal (1997) and Vu & Baulch (2011).

Y_t = GDP at market price – a proxy used to measure the economic growth.

P_t = GDP deflator: one of the most important measure of inflation, as it was used by Afzal, et. al., (2013), Sachida et al. (2003), Alfaro (2005), Kim and Beladi (2005), Rajagopal (2007), Al Nasser et al. (2009) and Lin (2010).

Sch_t = Net School enrollment ratio in percentage as a measure of general school education. Janjua (2011) describes education that is measured by net enrolment as the most significant contributor to poverty alleviation. Net enrollment is a relatively better indicator to assess the inclination of parents towards education. Net school education enrollment ratio is derived by dividing total school enrollment (5-14 years) to the population of that age group. This proxy was used

by Afzal, Farooq, Ahmad, Begum and Quddus (2010) and Hassan and Ahmed (2008).

AUTOREGRESSIVE DISTRIBUTIVE LAG (ARDL) APPROACH TO COINTEGRATION

The ARDL approach has some advantages over other cointegration techniques.

- a. The ARDL technique is comparatively more robust in finite or small (30 to 80 observations) samples (Pattichis, 1999; Mah, 2000).
- b. This technique can be used irrespective of whether regressors are of $I(0)$ or $I(1)$ or mutually integrated. Its prerequisite is that none of the regressors is of $I(2)$ or higher order, *i.e.*, the ARDL procedure will, however, be inefficient in the existence of $I(2)$ or higher order series.
- c. ARDL model applies general-to-specific modeling framework by taking sufficient number of lags to capture the data generating process. It estimates $(p + 1)^k$ number of regressions in order to obtain an optimal lag length for each variable, where p is the maximum lag to be used, and k is the number of variables in the equation. Other traditional cointegration techniques may also face the problems of endogeneity, whereas the ARDL approach can distinguish between regressand and regressor and eliminate the problems that may arise due to the presence of autocorrelation and endogeneity.
- d. ARDL cointegration estimates SR and LR relationship simultaneously and provides unbiased and efficient estimates.

- e. The suitability of utilizing ARDL model is that the ARDL model is based on a single equation framework. This model takes sufficient numbers of lags and directs the data generating process in a general to specific modeling framework (Harvey, 1981).
- f. Unlike other multivariate cointegration techniques such as Johansen & Juselius (1988), ARDL model permits the cointegration relationship to be estimated by OLS once the lag order of the model is identified.
- g. Error Correction Model (ECM) can also be drawn from by ARDL approach (Sezgin & Yildirim, 2003). This ECM allows drawing outcome for LR estimates, while other traditional cointegration techniques do not provide such types of inferences. “ECM joins together SR adjustments with LR equilibrium without losing LR information” (Pesaran & Shin, 1999).

The above mentioned merits of using the ARDL technique over other standard cointegration techniques validate the utilization of ARDL approach in the present study to explore the role of *Zakat* on poverty alleviating in Pakistan.

The second step in the analysis is to “test the null hypothesis of no cointegration against the alternative hypothesis that there exists cointegration between all variables by using F-statistic. This test is sensitive to the number of lags employed on each first differenced variable (Bahmani-Oskooee, 1999)”. In the next step, SR and LR relationship is explored by using the Error Correction Model (ECM).

The SR and LR relationships among HC_t , ZD_t , Y_t , P_t and Sch_t were examined in the second stage of the study. The ECM description given in equation (2) of the ARDL model is applied to establish the SR and LR relationships among the included variables.

$$\Delta \ln HC_t = a + \sum_{i=1}^p b_i \Delta \ln HC_{t-i} + \sum_{i=1}^p c_i \Delta \ln ZD_{t-i} + \sum_{i=1}^p d_i \Delta \ln Y_{t-i} + \sum_{i=1}^p e_i \Delta \ln P_{t-i} + \sum_{i=1}^p f_i \Delta \ln Sc_{t-i} + \lambda_1 \ln HC_{t-1} + \lambda_2 \ln ZD_{t-1} + \lambda_3 \ln Y_{t-1} + \lambda_4 \ln P_{t-1} + \lambda_5 \ln Sch_{t-1} + \varepsilon_t \quad (2)$$

The coefficients b to f of the 1st part of the equation (2) shows the SR dynamics, while the λ_s stands for the long-run relationship among variables. In the ARDL model, as a first step, the LR relationship among variables is estimated by calculating partial ‘F’ test on the first differenced part of Unrestricted Error Correction Model (UECM) of equation (2). In this step the regression equation for HC_t is denoted as:

$$\Delta \ln HC_t = a + \sum_{i=1}^p b_i \Delta \ln HC_{t-i} + \sum_{i=1}^p c_i \Delta \ln ZD_{t-i} + \sum_{i=1}^p d_i \Delta \ln Y_{t-i} + \sum_{i=1}^p e_i \Delta \ln P_{t-i} + \sum_{i=1}^p f_i \Delta \ln Sch_{t-i}$$

To create Error Correction Mechanism, the 1st lag of the level of each variable is included to equation (3) and a variable addition test by using Microfit 4.2 is performed through F-test on the joint significance of all the added lagged level variables.

STATIONARITY OF THE DATA

Since the present study utilized time series data in its analysis, so Augmented Dickey–Fuller (ADF) and Phillip-Perron (PP) unit root tests were applied to check the stationarity of the data.

COINTEGRATION TEST

In literature, many a cointegration tests such as Engle-Granger (1987), Johansen (1988), Johansen-Juselius (1990), Saikkonen and Lutkepohl (2000), and ARDL approach given by Pesaran and Pesaran (2001) are available and applied by the researchers. To check the short run (SR) and long run (LR) association between HC_t and ZD_t , a more recent cointegration technique termed as Bounds Testing Approach to Cointegration in the ARDL framework was applied in the present study. The ARDL approach is described below.

The null hypothesis for no cointegration for the variable HC_t against alternative research is given as:

$$H_0: \lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = \lambda_5 = 0$$

$$H_1: \lambda_1 \neq \lambda_2 \neq \lambda_3 \neq \lambda_4 \neq \lambda_5 \neq 0$$

This is denoted as $F_{HC_t}(HC_t | ZD_t, Y_t, P_t, Sch_t)$. This hypothesis is tested by *partial F-test*. Pearson *et al.* (2001) have given two sets of critical values. One set assumes that all variables are of order $I(1)$, while the other set assumes that all are of $I(0)$. This provides a band covering all possible classifications of the variables into $I(0)$ or $I(1)$ or even fractionally integrated.

If the estimated *F-statistic* is higher than the upper bounds critical value, the null hypothesis of no cointegration is rejected. This establishes LR relationship among HC_t , ZD_t , Y_t , P_t and Sch_t and *vice versa* when HC_t is the dependent variable. If *F value* falls in between lower and upper bounds critical values, the test statistic will be inconclusive.

The reason for using only one of the measures of Islamic strategy for alleviation of poverty is that no cumulative data is available related to the other measures including *Fitra or Fitrane* etc. Even it is difficult to calculate the private *Zakat* disbursement by the individuals and the institution

to the poor, needy, destitute and institution like *Deeni Madaris* etc. that is the reason due to which this study is depending only on the data related to the *Zakat* collection and disbursement collected by the government level. This data has been collected from different sources including different issues of Pakistan Economic Survey, Annual reports and Hand Books of Pakistan economy published by the State Bank of Pakistan.

The other variables such as GDP, inflation and school enrolment that also influence absolute poverty in Pakistan are also included in the present empirical model. The data related to Headcount ratio (HC) as a measure of poverty, *Zakat* disbursement as the major measure for alleviation of poverty, GDP as an indicator of economic growth, GDP deflator as an indicator of inflation and net school enrolment as a measure of school enrolment were collected from the publications of Government of Pakistan, State Bank of Pakistan (SBP), World Bank, IMF, International Labour Organization (ILO), World Development Indicators Reports and internet sources.

The Excel Programme was used for the simple descriptive analysis of the data related to *Zakat* collection and disbursement in Pakistan. For the analysis of time series data for a period of thirty three years, Microfit 4.0 and EViews 7 were used.

5. EMPIRICAL RESULTS AND ANALYSIS

This section presents empirical results along with their analysis by using ARDL approach to cointegration. Before applying ARDL, the order of integration was examined by using different unit root tests like ADF and PP.

5.1 Unit Root (UR) Tests

To apply ARDL technique to cointegration, it is still very necessary to make sure that not a single time series variable under study is of $I(2)$ or higher order because the calculated F -statistic does not remain valid in the presence of $I(2)$ or higher order lags (Sezgin & Yildirm, 2003; Ouattara, 2004). For this purpose, order of integration of the variables under study is tested by using Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests.

The results of the ADF and PP tests are presented in Table 1. The results of both tests as seen by the Table 1 show that $\ln HC_t$, $\ln P_t$ and $\ln Sch_t$ are non stationary i.e., $I(1)$ and transformed to stationary by transforming the first difference. According to both of the ADF and PP tests, the $\ln Y_t$ and $\ln ZD_t$ are found to be stationary at level i.e., $I(0)$.

From the order of integration given in Table 1, it can easily be concluded that not a single variable being is $I(2)$ or higher order and the dependent variable is $I(1)$. Therefore, the most appropriate method to analyze the short run and long run role of *Zakat* on poverty alleviation is the ARDL cointegration technique.

Table 1: The Results of ADF and PP Unit Root Tests

Variables	ADF		PP		
	Intercept	Intercept & Trend	Intercept	Intercept & Trend	
$\ln HC_t$		-2.151		-2.072	$I(1)$
$\Delta \ln HC_t$	-6.219		-6.205		$I(0)$
$\ln Y_t$		-5.627		-5.655	$I(0)$
$\ln ZD_t$	-3.417		-3.434		$I(0)$
$\ln P_t$		-5.135		-1.451	$I(0)$
$\Delta \ln P_t$			-3.823		$I(0)$
$\ln Sch_t$		-1.556		-1.469	$I(1)$
$\Delta \ln Sch_t$	-5.389		-5.389		$I(0)$

5.2 COINTEGRATION ANALYSIS

To test cointegration status among $\ln HC_t$, $\ln ZD_t$, $\ln Y_t$, $\ln P_t$, and $\ln Sch_t$, the familiar bound was used. The calculated F-statistics for $\ln HC_t$ of model are given in Table 2. There exists at least one F value that is greater than the upper critical values. Cointegration established among $\ln HC_t$, $\ln ZD_t$, $\ln Y_t$, $\ln P_t$, and $\ln Sch_t$, when $\ln HC_t$ serves as the regressand in model 1 as the at least one value of partial F is higher than the upper bounds critical value given by Pesaran, Shin, & Smith (2001), and Narayan (2005), the null hypothesis of no cointegration is rejected, implying that there exists a LR relationship among $\ln HC_t$, $\ln ZD_t$, $\ln Y_t$, $\ln P_t$, and $\ln Sch_t$ when $\ln HC_t$ is the regressand.

Table 2: ARDL Model: Results of Bound F-Test for Cointegration

	Lag Length				Output
	1	2	3	4	
$\Delta \ln HC_t [F_{HC_t}(\ln HC_t \ln ZD_t, \ln Y_t, \ln P_t, \ln Sch_t)]$	2.591	2.671	3.739	4.343	Cointegration

Note: Lower and upper critical values for 1%, 5% and 10% significance level are 3.65-4.66, 2.79-3.67 and 2.37-3.20, respectively.

The long run ARDL(1,0,0,0,0) model is estimated the results are presented below (P values are in the parenthesis);

$$\ln HC_t = 7.7790 - 0.4743 \ln Y_t - 0.1862 \ln ZD_t + 0.9476 \ln P_t - 0.5458 \ln Sch_t$$

[0.000]
[0.039]
[0.042]
[0.004]
[0.190]

All coefficients except $\ln Sch$ are significant at 5 percent level. The LR coefficient of GDP_t in models is negative. This implies that an increase in GDP_t leads to decline HC_t in the LR. The LR

elasticity coefficient of ZD_t in the model is also negative. This implies that an increase in ZD_t leads to decline HC_t . The LR coefficient of P_t is positive which implies that an increase in P_t leads to rise in HC_t in the LR. The LR elasticity coefficient of Sch_t is negative but statistically insignificant.

After having cointegration among variables and estimated long run model the dynamic ARDL (1, 0, 0, 0, 0) model of the $\ln HC_t$ by using Schwarz Bayesian Criterion (SBC) criterion is estimates and the model is presented in the following (p-value in parentheses);

$$\Delta \ln HC_t = 3.675 - 0.224 \Delta \ln Y_t - 0.088 \Delta \ln ZD_t + 0.448 \Delta \ln P_t - 0.258 \Delta \ln Sch_t - 0.472 ECM(-1)$$

$$\begin{matrix} [0.004] & [0.001] & [0.030] & [0.000] & [0.301] & [0.009] \end{matrix}$$

Diagnostic Tests

$R^2 = 0.86,$	F-statistic = 30.28 (0.000)	SBC = 65.12
Serial Correlation (LM) = 1.81(0.178)		Heteroscedasticity (LM) = 0.69 (0.405)
Ramsey's RESET Test = 0.71(0.399)		Normality (LM) = 2.24(0.327)

The results in Table 12 of the dynamic models 1 for HC_t demonstrate that the coefficients of all the variable are are significant and helpful in explaining the poverty in Pakistan. The model presented above also qualifies all the standard diagnostic tests. The value of R^2 depicts that the Error Correction Model fit the data reasonably well. Furthermore, the highly significant F-statistic for the ECM also confirms over all goodness of fit of model. The plots of “Cumulative Sum of Recursive Residuals (CUSUM)” and “Cumulative Sum of Squares Recursive Residuals (CUSUMSQ)” tests in Figure 1 (a) and (b) for determining the stability of the model depict that the model is stable.

FIGURE 1(a)

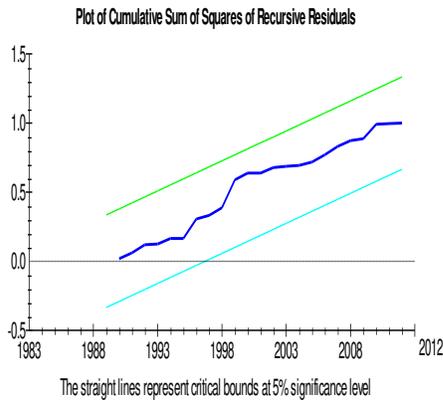
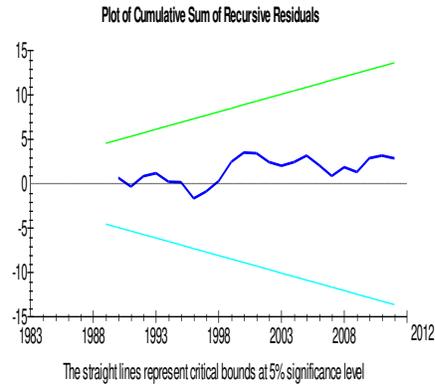


FIGURE 1 (b)



The coefficient of lagged Error Correction Term ($ECM(-1)$) indicates the speed of adjustment back to LR equilibrium after a SR shocks. Coefficient of $ECM(-1)$ is 47.9 percent. The absolute value of the coefficients of $ECM(-1)$ indicates that HC_t is relatively moderately adjusted to changes in component of the LR equilibrium. The $ECM(-1)$ is highly significant with correct negative sign, indicating the establishment of cointegration and LR causality (LR causality runs from ZD_t to HC_t) among the HC_t , ZD_t , Y_t , P_t , and Sch_t when HC_t is the regressand.

The SR elasticity coefficient of GDP_t in ARDL models is negative that implies that an increase in GDP_t leads to decline HC_t in the SR. The SR elasticity coefficient of ZD_t is negative. It implies that an increase in ZD_t leads to decline HC_t in the SR. The SR elasticity coefficient of P_t is positive. This implies that an increase in P_t leads to rise in HC_t in the SR. The elasticity coefficient of Sch_t towards HC_t is negative but statistically insignificant in SR as was in the LR. In conclusion, this study finds the role of Zakat disbursement at government level in alleviating chronic poverty in Pakistan in the short run as well as in the long run along with other variables including GDP, inflation and school education.

6. CONCLUSIONS AND POLICY RECOMMENDATIONS

This study is an attempt to explore the Islamic view on poverty, more specifically the Islamic strategy for alleviation of poverty in the light of the Holy Quran and the Sunnah of the Apostle of Allah (S.W.T.), and the Islamic literature. The present study shows that Islam has given a comprehensive solution for poverty alleviation. This system, if implemented in true spirit and totality, has the potential not only to alleviate poverty but also to increase economic activity, decrease unemployment and uplift the living standard of the people.

The impact of the *Zakat* and other determinants of poverty alleviation have been gauged through ARDL Cointegration approach. This study concludes that *Zakat* disbursement at government level has a positive role in alleviating chronic poverty in Pakistan in the short run as well as in the long run along with other variables including GDP, inflation and school education.

The study has proposed a strategy to correct the flaws in the present *Zakat* system implemented by the Government of Pakistan and also proposed a new plan to target the problem of poverty.

6.2 POLICY RECOMMENDATIONS

1. Holistic approach should be adopted in implementation of the Islamic teaching in all walks of life to get the best results and to save the people from hardships in their lives in this world and hereafter.

2. Constitution of Pakistan suggests that no legislation can be done in Pakistan against the teachings of the Holy Quran and Sunnah of the Prophet (P.B.U.H) so it is also recommended that all those laws which are against the Islamic teaching including rules regarding interest etc., should be changed with the Islamic laws. This is the constitutional, religious and moral responsibility of the State. This will not only be helpful in enhancing economic activities in the country but also be helpful in more *Zakat* collection and hence in poverty alleviation.
3. Islam promotes education for all including men and women as education leads towards the recognition of the Lord of the worlds and self respect besides sense of responsibility among the masses. It pursues the people to earn their livelihood by adopting respectful means. So government should assure free and compulsory education to all children and the young persons. It is also recommended that technical and vocational institutions should be established in remote areas on priority basis along with urban areas. This will be helpful in alleviation of poverty in rural areas along with urban areas.
4. It is evident from the results of the present study that *Zakat* along with other variables has a significant impact on poverty. Past Islamic history and experience of Pakistan's *Zakat* system implemented in 1980 show that *Zakat* has a tendency to alleviate poverty. During the first decade of implementation of *Zakat* system there was a decreasing trend in poverty in Pakistan. However, afterwards this system could not depict the same results which were seen in the first decade. Due to the corruption in the disbursement of *Zakat*, nepotism, political influence in formation of *Zakat* committees and in disbursement of *Zakat* by these *Zakat* committees. The reason behind these problems is lack of an effective monitoring system. Another reason is that it is observed that majority of people don't want to pay *Zakat* through government due to the

lack of confidence in government institutions. That is why the *Zakat* proceedings are not compatible with the growth of incomes and wealth of the masses.

5. It is imperative that a system of this vast magnitude should not be allowed to fail. The shortcomings of this system must be removed, so that the society may once again enjoy the blessings which the *Zakat* system bestowed on the followers of Islam in the time of Hazrat Umar (R.A.) and Umar bin Abdul Aziz (R.A.).

It is suggested for further studies that a comprehensive survey may be conducted by some government or private institution to gauge the actual amount of *Zakat* disbursement by the individual people, institutions and businessmen. In the light of present study recommendations may be prepared to channelize the total *zakat* and *infaq* (charity) in some comprehensive system. If it is done surplus funds can be generated in the society which will fully eliminate poverty from the society.

REFERENCES

- Afzal, M., Ehsan, M. M., Begum, I., Sarwar, and Fatima, K., H. (2012). Relationship among Education, Poverty and Economic Growth in Pakistan: An Econometric Analysis. *Journal of Elementary Education*, 22(1), 23-45.
- Afzal, M., Ehsan, M. M., Butt, A. R., and Fatima, K. (2013). Openness, inflation and growth relationship in Pakistan: An application of ARDL bounds testing approach. *Pakistan Economic and Social Review*, 51(1), 13-53.
- Afzal, M., Farooq, M. S., Ahmad, H. K., Begum, I. and Quddus, M. A. (2010). Relationship between school education and economic growth in Pakistan: ARDL Bounds Testing Approach to Cointegration. *Pakistan Economic and Social Review*, 48(1), 39-60.

Ahmad, Z. (1991). *Islam, poverty & income distribution*. Leicester: The Islamic Foundation.

Ahmad, A., (1992). *Islami Bankari, Nazriyati Bunyadain awr umli Tajarbaat* (Urdu), Institute of Policy Studies, Islamabad.

Ahmad, H. (2004). *Role of Zakat & wqaf in poverty alleviation*. Jeddah: Islamic Research & Training Institute.

Ahmad, K. (1994). *Islamic approach to development*. Islamabad: Institute of Policy Studies.

Ahmad, W. M. W. (2012). *Zakat investment in Malaysia: A study of contemporary policy and practice in relation to shariah*. Unpublished thesis: The School of Literatures, Languages and Cultures College of Humanities and Social Science, The University of Edinburgh.

Akhtar, M. R. (2000). Poverty alleviation on a sustainable basis in the Islamic framework. *Pakistan Development Review*, 39(4), 631-647.

Al Jazeeri.(1979). *Al Fiqh Ala Mazahab Al-Arba'*. Lahore: Ulama Academy.

Al Qardavi, Y. (1985). *Fiqh-uz-Zakah*. Lahore: Al Badr Publications.

Al Nasser et al. (2009).The openness-inflation puzzle: Panel data evidence. *International Research Journal of Finance and Economics*, Issue 28, 169-181.

Ali, S. S. and Tahir, S. (1999). Dynamics of growth, poverty & inequality in Pakistan. *The Pakistan Development Review* 38(4), 837-858.

- Arif, G. M. (2006). *Targeting efficiency of poverty reduction Programmes in Pakistan*. Asian Development Bank. Working Paper No. 4.
- Badawi, M. A. Z. (1979). *Zakah & social justice- in the Muslim world & future economic order*. London: Islamic Council of Europe.
- Bukhari, I. (1989). *Sahih Bukhari*. Lahore: Amjad Academy.
- Dawood, I. (1962). *Sunnan Abu dawod*. Karachi: Saeed & Company.
- Dogarawa, A. B. (2009). *Poverty alleviation through Zakat and Waqf institutions: A case of Muslim ummah in Ghana*. Germany: University Library of Munich.
- Firdaus, M., Syauqi, B. I., Tonny, I., and Bambang, J. (2012). *Economic estimation and determinations of Zakat potential in Indonesia*. Jeddah: Islamic Research and Training Institute.
- Government of Pakistan (various issues). *Pakistan Economic Survey*. Islamabad: Finance Division, Economic Adviser's Wing.
- Government of Pakistan (1993-94, 1996-97 & 1998-99). *Household Integrated Economic Surveys*, Islamabad: Government of Pakistan.
- Government of Pakistan (2007-08). *Pakistan social and living standard measurement survey*. Federal Bureau of Statistics, Islamabad.
- Government of Pakistan (2010-11). *Financial Year Book. Ministry of Religious Affairs*. Islamabad: Government of Pakistan.

- Government of Pakistan (2012). *Poverty Reduction, Annual Plan 2011-12*, Retrieved from [http://www.pc.gov.pk/annual%20plans/chapter-14 poverty reduction.pdf](http://www.pc.gov.pk/annual%20plans/chapter-14%20poverty%20reduction.pdf) in poverty perspective.
- Herani, G. M., Rajar, A. Y. W. P., and Ahmad, S. R. (2008). The nature of poverty and its Prospects: Pakistan evidence. *Journal of Global Economy*, 3(4), 183-194.
- Hussain, M., & Shirazi, N.S., (1994). *Role of Zakat & Ushr in rural development*. Islamabad: International Institute of Islamic Economics.
- Ibrahim, P. B. (2006). *Economic role of Zakat in reducing income inequality and poverty in Selangor*. Unpublished thesis. Malaysia: The School of Graduate Studies, Putra University.
- Iqbal, M. (2002). *Islamic economic institutions and the elimination of poverty*. Leicester: The Islamic Foundation.
- Iqbal, M. (2005). *Poverty elimination in Islamic perspective: An applied general equilibrium approach*. Islamic Institutions.
- Jahri, A., and Ali, M. (1984). Towards an Islamic macro model of distribution. *Journal of Research in Islamic Economics (JRIE)*, 2(2).
- Janjua, P. Z. and Kamal, U.A. (2011). The role of education and income in poverty alleviation: A cross-country analysis. *The Lahore Journal of Economics*, 1.
- Kahf, M. (1989). *Zakat: Unresolved issues in the contemporary fiqh*. *Journal of Islamic Economics*, 2(1).

Kahf, M. (1991). *Fiscal and monetary policies in an Islamic economy*. Jeddah: International Center for Research in Islamic Economics (ICRIE).

Kahf, M. (1998). *Zakah and obligatory expenditures in Islam*. *Lessons in Islamic Economics*, 2, 538-540.

Khan, A., H. (1995). *Incidence of unemployment & poverty*. Islamabad: Friedrich Ebert Stiftung.

Khattak, N. (2013). *Poverty alleviation: An aim of Islamic Economics*. Retrieved from www.Islamichouse.com.

Malik, K. (2013). *Human Development Report: 10 The Rise of the South: Human Progress in Diverse World 2013*, p161.

Manan, M. A. (1989). *Economic development and social peace in Islam*. London: Ta-Ha Publishers Ltd.

Mannan, M., A. (1994). *Islamic economics: Theory and practice*. Lahore: Sh. Muhammad Ashraf Publication.

Maududi, S., A., A. (1984). *The economic system of Islam*. Lahore: Islamic Publications Ltd.

Mohammad, K. (1968). *Welfare state: A case study of Pakistan*. Karachi: Royal Book.

Muhammad, Faiz (1991) *Prospects Of Poverty Eradication Through the Existing Zakat System In Pakistan*, *The Pakistan Development Review*. 30: 4 part II (winter 1991) pp1119-1129.

Muhammad, Faiz (1992) *Prospects Of Poverty Eradication Through the Existing Zakat System In Pakistan*, *The Pakistan Development Review*. 30: 4 part II (winter 1991) pp1119-1129.

- Naumani, S. (2007). *Al-Farooq*. Lahore: Maktaba Islamia.
- Naveed, A., and Ali, N. (2012). *Clustered deprivation: District profile of poverty in Pakistan*, SDPI, 37.
- Naveed, A., and Islam, T. (2010). *Estimating multidimensional poverty and identifying the poor in Pakistan: An alternative approach*. RECOUP Working Paper Series No. 28.
- Nissai, I. (1962). *Sunnan Nissa'i*. Karachi: Saeed & Company.
- Pesaran, H. M., Y. Shin and R. J. Smith (2001). Bounds testing approaches to the analysis of long-run relationships. *Journal of Applied Econometrics*, 16, 289-326.
- Pesaran, M. H. and Shin, Y. (1999). An autoregressive distributed lag modeling approach to cointegration analysis. In *Strom, S. (ed.), Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium*. Cambridge: Cambridge University Press.
- Qardawi, Y., A. (2004). *Islam mein gharibi ka elaj*. Lahor: Maktaba Islamia.
- Quraishi, M., A. (1999). The Institution of *Zakat* and its Impact on Society, *Islamic finance* ,Retrieved from <http://ifp.law.harvard.edu/login/contact>
- Sadeq, A. H. (1992). *A Survey of the institutions of Zakat: Issues, theories and administration*. Jeddah: Islamic Research and Training Institute, Islamic Development Bank.
- Seoharwi. (1984). *Islam Ka Iqtisadi Nizam*. Lahore: Idara Islamiyat. P126

- Shah, M., S. (2007). *Poverty Alleviation in the Light of the Teachings of the Holy Prophet (P.B.U.H)*. Al-Ma'arif, Gunj Bakhsh Road, Lahore.
- Shirazi, N. S. (1994). Determinants of poverty in Pakistan. *Pakistan Economic & Social Review*, 1(2), 91-110.
- Shirazi, N., S. (1995). *An analysis of Pakistan's poverty problem and its alleviation through infaq*. Unpublished Ph.D. Dissertation, International Islamic University, Islamabad.
- Shirazi, N., S. (2006). Providing for resource shortfall for poverty elimination through the institution of *Zakat* in low income Muslim countries. *Journal of Economics and Management*, 14 (1),1-27.
- Siddiqi, M., N. (1988). *Guarantee of a minimum level of living in an Islamic state*. UK: Islamic Foundation.
- Siddiqi, S. (2013). *Islamic economic system and poverty reduction*. Retrieved from www.pta.yogyakarta.go.id.
- Toor, I., A. & Nasar, A. (2004). Zakah as a social safety net, Pakistan economic & social safety net: Exploring the impact on household welfare in Pakistan. *Pakistan Economic & Social Review*, 1(2), 87-102.
- UNDP (2013). *Human development report 2010*. New York: United Nations Development Programme.
- Vu, L. and Baulch, B. (2011). Assessing Alternative Poverty Proxy Methods in Rural Vietnam.
- Webster (1989) Webster's Encyclopedic Dictionary of English Language, New York, Gramely Books, p.127.

World Bank (1990). *World development report 1990*. New York: Oxford University Press.

World Bank (1990). *The World Bank Annual Report 1990*. Washington, D.C.: The Bank.

World Bank (2001). *World development report 2000-01 attacking poverty*. New York: Oxford University Press.

World Bank (2001). *Poverty in Pakistan in the 1990's: An interim assessment report*. Islamabad: Pakistan Human Development Forum.

Yasin, M., H., and Tahir, S. (2002). *Poverty elimination in Islamic perspective: An applied general equilibrium approach*. Leicester: The Islamic Foundation.

Yusoff, M., and Densumite, S. (2012). *Zakat distribution and growth in the federal territory of Malaysia*. *Journal of Economics and Behavioral Studies*, 4(8), 449-456.

Zarqa, M. A. (1992). *Distributive Justice in Islam*. Jeddah: Lectures on Islamic Economics IDB.
