

Welfare Potential of Zakat: An Attempt to Estimate Economy wide Zakat Collection in Pakistan

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1. INTRODUCTION

In Pakistan, Naveed and Ali (2012) in a most recent study conclude that as many as 58.7 million people in Pakistan are living in multidimensional poverty with 46 percent of the rural population and 18 percent of the urban households falling below the poverty line. It is natural to ask what the government is doing for these poor people and how much it can expend to end extreme poverty in Pakistan. If we look at the fiscal position of the government, we see that Pakistan has a very low tax to GDP ratio, i.e. 9 percent. As a result of low tax to GDP ratio and high current expenditure, the government is suffering from a large budget deficit. Often, the development spending is curtailed to contain the large budget deficit due to high non-discretionary current expenditures in debt servicing and security expenditure.

Expenditure on health and education is not even 5 percent of GDP in Pakistan. Due to such a low expenditure on developing human capital and maintaining health of the masses, poor people remain uneducated and unhealthy and hence they find it very difficult to get out of the poverty trap.

After deregulation of the banking sector in the 90s, a lot of commercial banks started operations in the private sector. But, their outreach is very low in rural areas where most of the poverty exists. Microfinance penetration is also very low in Pakistan. According to Pakistan Bureau of Statistics, 2.35 million people out of 58.7 million poor people are served with Microfinance. It shows that only 4 percent of the potential target market is currently served with Microfinance. Hence, there is a need to mobilise more resources to end extreme poverty in Pakistan. If we compute the crude poverty gap by multiplying the number of estimated poor people in Pakistan with the minimum annual income required to qualify as a non-poor according to dollar a day poverty line, we see that Pakistan requires around Rs 2,142.5 billion or approximately 7 percent of GDP to have zero poverty. However, this crude measure is unrealistic since it assumes that every poor person has zero income. But, this crude measure gives us an approximate conservative requirement of funds to end poverty in Pakistan.

In this paper, we discuss how the institution of Zakat can help in generating development funds and contribute in reducing poverty. We estimate the potential aggregate Zakat collectible in Pakistan economy and compare it with the poverty gap.

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The analysis will show the potential of the institution of Zakat to contribute in ending extreme poverty in Pakistan.

We proceed as follows. In Section 2, we present brief review of theoretical and empirical literature on Zakat. In Section 3, we present the effects of Zakat on wealth redistribution. In Section 4, we discuss issues in the estimation of Zakat. In Section 5, we present the estimation results. Finally, in Section 6, we discuss the economic effects of the institution of Zakat on business cycle stabilisation, tax rate smoothing, market competitiveness and the flow of investment.

2. BRIEF LITERATURE REVIEW

Zakat is an important institution in an Islamic economic framework for poverty alleviation and economic welfare. In Islam, Zakat is a religious obligation to pay a part of wealth and production to the government. As per Islamic injunctions, the government has to spend the Zakat funds on specified heads mentioned in Chapter Tauba, verse 60. Wahid (1986) explains that Zakat is a compulsory payment on the part of Muslims as a share to the poor, having a wide variety of economic and social ramifications.

In its economic character, Zakat is a combination of a net worth levy and a production levy. In early empirical literature on welfare potential of Infaq to alleviate poverty in Pakistan, Malik, *et al.* (1994) use micro data to establish that Infaq does have significant impact on reducing poverty gap. In a recent empirical study for OIC countries, Shirazi and Amin (2009) estimate the resources required for poverty elimination under US \$1.25 a day and US \$2.0 a day respectively. Their estimates for Pakistan suggest that Pakistan needs 1 percent of GDP for poverty elimination under US \$1.25 a day and needs 6.77 percent of GDP for poverty elimination under US \$2 a day. For Pakistan, Kahf (1989) use different Zakat categories and according to his estimate, Zakat collection can be between 1.6 percent of GDP to 4.4 percent of GDP.

In a more recent study, Azam, *et al.* (2014) in an empirical study for Pakistan establish that Zakat significantly enhances the welfare of the households. M. Akram and Afzal (2014) in an empirical study for Pakistan argue that Zakat disbursement among the poor, needy, destitute, orphans and widows has played a significant role in poverty alleviation. Their results show that there is an inverse relationship between poverty and Zakat disbursement both in the short run and in the long run.

In another empirical study for Bangladesh, Hassan and Jauanyed (2007) estimate that Zakat funds can replace the government budgetary expenditures ranging from 21 percent of Annual Development Plan (ADP) in 1983-84 to 43 percent of ADP in 2004-2005. For Malaysia, Sadeq (1996) finds that about 73 percent of the estimated potential Zakat collection will be needed annually to change the status of hard-core households to a status of non-poor households in Malaysia. Ibrahim (2006) contends in an empirical study for Malaysia that Zakat distribution reduces income inequality. His analysis reveals that Zakat distribution reduces poverty incidence, reduces the extent of poverty and lessens the severity of poverty. Firdaus, *et al.* (2012) estimate the potential of Zakat in Indonesia by surveying 345 households. Their results show that Zakat collection could reach 3.4 percent of Indonesia's GDP.

Some studies also show the comparative potential of Zakat as a superior tool for poverty alleviation. Debnath, *et al.* (2013) assess the effectiveness of Zakat as an

alternative to microcredit in alleviating poverty in Bangladesh. Through the Propensity Score Matching (PSM) techniques, the study reveals that the impact of Zakat scheme has proven greater than the microcredit programs. Besides that, the study also highlights that Zakat scheme significantly increases both income and expenditure of the recipients in comparison to the microcredit programs.

Some studies like Nadzri, *et al.* (2012) recommend integrating the various poverty alleviation and redistribution tools for creating synergies. The effectiveness of Zakat institutions may improve by collaborating with other institutions such as Microfinance institutions. Shirazi (2014) suggests that the institutions of Zakat and Waqf need to be integrated into the poverty reduction strategy of the IDB member countries. The proceeds of these institutions should be made as part of their pro-poor budgetary expenditures. Hassan (2010) suggests a model which combines Islamic Microfinance with two traditional Islamic tools of poverty alleviation such as Zakat and Waqf in an institutional setup. Hassan (2010) argues that the poor borrowers will have less debt burden as their capital investments will be partly met by funds from Zakat that does not require any repayment.

The institution of Zakat is very dynamic and flexible. In Umer (rta) and Abu Bakar (rta) period of government, Zakat was collected by the government. But, in Usman (rta) period, people were allowed to pay Zakat privately [Kuran (2003)]. Horses were exempted from Zakat in Prophet's time, but, Umer (rta) brought them in the Zakat net in His period. Similarly, Mahmud (2001) argues that the institution of Zakat is flexible to a certain degree as Umer (rta) levied Zakat on horses and skins and at the time when Arab was hit with a drought and famine, he exempted poor from Zakat and suspended Zakat from the rich. Usman (rta) also levied Zakat on the production in forests which was not the case in the earlier period [Nadvi (1996)]. Hence, a policy maker in a modern economy can use this institution flexibly to maximise the welfare benefits of the Zakat system.

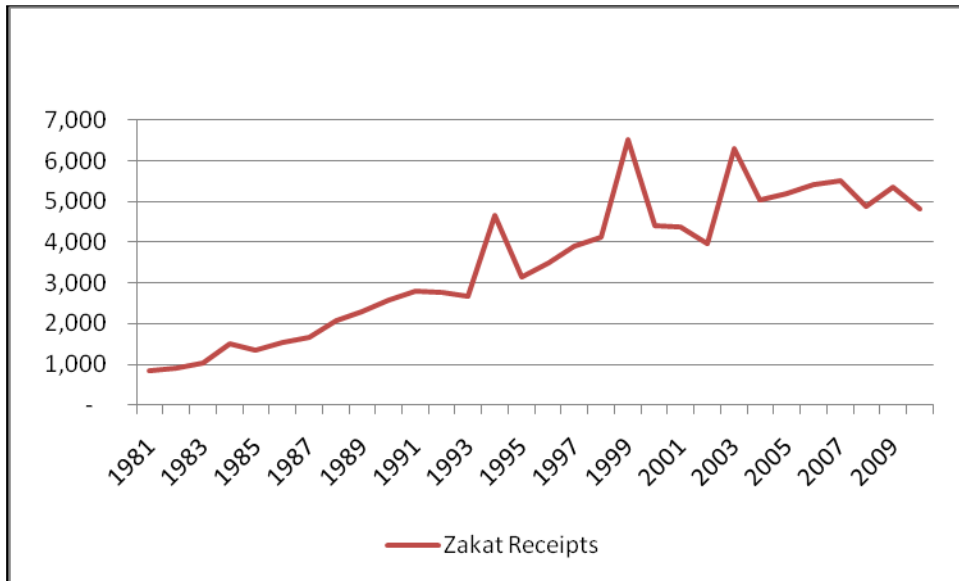
Nevertheless, Zakat is not collected by the government nowadays in most countries and is not considered a compulsory payment to the government [Powell (2009)]. Abu Bakar, *et al.* (2007) argue that there may be lack of proper implementation of Zakat in Muslim countries which limits the success of the noble aims of Zakat. Yusoff (2011) urges that every Muslim country must organise Zakat collection and Zakat spending in the most effective and efficient manner. Azam, *et al.* (2014) also suggest that there is a need to institutionalise the Zakat collection system to increase the overall Zakat collection.

One of the potential reasons for this state of affairs is that the mainstream Islamic scholarship allows taxes to be levied other than Zakat for mobilising public finance. Maududi (1970) argues that Zakat is a religious obligation and is not a substitute of tax. Taxes other than Zakat can be imposed in an Islamic economy if these taxes are levied by the legislative council and used for public welfare. He contends that the taxes discouraged in Ahadith are those which were imposed by the autocratic kings for their own lavish consumption and this kind of usurpation of public property was discouraged in Islam.

Apart from weak administration and implementation of Zakat system, another reason why Zakat collection is low at the central level in Pakistan is that there is a big and

growing trust deficit between the central government and the people. This trust deficit is reflected in the meager Zakat collection at the government level. As can be seen from Figure 1, Zakat collection and its disbursement is very low in Pakistan at the government level.

Fig. 1. Zakat Receipts (in Million Rs)



Source: Pakistan Bureau of Statistics.

In this study, we attempt to estimate potential Zakat collection at the economy wide level to explore the welfare potential of the institution of Zakat.

3. MATHEMATICAL COMPUTATION OF ZAKAT

In this section, we present a simple mathematical representation of the effects of Zakat on wealth redistribution. To begin with, we can represent lifetime wealth Zakat function for an individual 'i' as:

$$Z_i = \sum_{t=1}^n 0.025 (NZW_t)$$

Here,

Z_i is Zakat liability of an individual 'i'.

Time period 't' runs from t=1 (current time period) to 'n' (terminal point of life).

NZW_t represents net Zakat wealth. It is computed as $(W_t - N_t)$.

Where W_t is the gross amount of wealth and N_t is the value of Nisaab amount.

Nisaab is the minimum threshold level of wealth which is not subject to Zakat.

Zakat function of an economy for a particular year can be represented as:

$$Z_T = \sum_{i=1}^n 0.025 (NZW_i)$$

For a particular individual 'i', net Zakat wealth at a point in time is given by:

$$W_t = I_t - 0.025(NZW_{t-1}) + W_{t-1} - C_t$$

Here,

I_t is the income of individual 'i' in time period 't'.

NZW_{t-1} is the base of wealth that will be used for Zakat deduction.

W_{t-1} is the wealth of individual 'i' in the previous time period.

C_t is the consumption in time period 't'.

Simplifying the above equation, we get:

$$W_t = I_t - 0.025(W_{t-1} - N_{t-1}) + W_{t-1} - C_t$$

$$W_t = I_t - 0.025W_{t-1} + W_{t-1} + 0.025N_{t-1} - C_t$$

$$W_t = I_t + 0.975W_{t-1} + 0.025N_{t-1} - C_t$$

Expanding it iteratively forward, we get

$$W_{t+1} = I_{t+1} + W_t - 0.025(W_t - N_t) - C_{t+1}$$

$$W_{t+1} = I_{t+1} + 0.975W_t + 0.025N_t - C_{t+1}$$

$$W_{t+1} = I_{t+1} + 0.975(I_t + 0.975W_{t-1} + 0.025N_{t-1} - C_t) + 0.025N_t - C_{t+1}$$

$$W_{t+1} = I_{t+1} + 0.975I_t + 0.950625W_{t-1} + 0.024375N_{t-1} + 0.025N_t - 0.975C_t - C_{t+1}$$

It can be seen that the wealth function will diminish wealth overtime and overall wealth can only increase with increase in income, labor plus non-labor.

4. ISSUES IN THE ESTIMATION OF ZAKAT

Shirazi and Amin (2009) argue that since there is no agreement among the scholars on the new wealth that may be brought under the Zakat net, there is an urgent need for the general agreement on the definition of the items, which may be taken as Zakatable items. This requires Ijmah of the ulama and other contemporary scholars on the issue.

On the need for extending the Zakat net by including all forms of wealth and produce, Qardawi (1999, p. 333) applies the methodology of qiyas (analogical reasoning) and reasons that the emerging and increasing types of wealth in the modern times such as bank deposits and financial securities like shares and bonds are also Zakatable [Qaradawi (1999)]. Abu Bakar, *et al.* (2007) also suggest that the 'illah' for Zakatability should no longer be productive property, but any property which is in excess of one's personal use.

That is why; wealth or assets subject to Zakat should include cash in hand or at bank, gold and silver, held-for trade inventory, real estate purchased for the purpose of resale and all types of financial investments in stocks, bonds, debentures, national saving schemes and mutual funds.

Likewise, production is not limited to agriculture nowadays. The major part of production comes from industries as well as services sector. Therefore, income from the industrial production could also be taxed just like agriculture. Services income could also be taxed on the same principle.

To summarize, Zakat should be levied as per the ceiling rates defined for each category of wealth or production. The classification is as follows:

- 2.5 percent on cash, wholesale value of held for trade inventory and wealth in excess of need. It is payable once a year at a particular set date.
- 5 percent on production value or any other income earning activity using both labour and capital. It is charged at the completion of the production process or realisation of income. Modern day analogous extension could be to use that to collect Zakat from manufacturing and service industries.
- 10 percent on production or any other income earning activity using either labour or capital. It is charged at the completion of the production process or realisation of income. Modern day analogous extension could be to use that to collect Zakat from income of self-employed practitioners, like lawyers, doctors, consultants, teachers or engineers. It could also include income from such sources where only capital is invested like equity investments in stocks, mutual funds and Real Estate Investment Trusts (REITs) etc.
- 20 percent on production using neither labour nor capital. This is applicable on treasure or any other natural gift obtained without using labour or capital. Modern day analogous extension could be to use that to collect Zakat from royalty income etc.

The derivation for production tax comes from the fact that the rain-fed lands were subject to a 10 percent production tax whereas, the irrigated land (which had to be provided with capital) were subject to a 5 percent production tax in Prophet's time.

Next, we discuss another important question that whether the investment in financial instruments shall be subject to wealth Zakat on total investment value or only the income from such financial investments shall be subject to income Zakat. Khan (2005) contends that investment in stocks should be interpreted as any other investment with some means of earning income. Investment in a stock is a means of earning dividend income or capital gains. Just like means of production/income are exempted from Zakat, investment in stocks should be exempted from wealth Zakat. Therefore, any income arising from investment in stocks must be subject to income Zakat. Similarly, this argument could be extended to introduce income Zakat on mutual funds, investment in National Savings Schemes (NSS), debentures, bonds etc. Furthermore, if a real estate is leased, the real estate becomes the means of earning rent for the owner. Hence, income Zakat could also be introduced on rental income.

However, if employees or directors are given bonuses in the form of stock ownership, they will have to pay 5 percent Zakat on income from investment in stocks. It is due to the fact that in this case, the participation in the business venture is not only by way of providing capital, but also by providing labour. One crucial advantage to this is that the directors will be willing to make the company grow and own its stock so as to benefit not only from dividend/capital gains, but also be able to pay less tax on that income i.e., 5 percent rather than 10 percent. This will also solve the agency problem as well in an effective way.

5. ESTIMATION OF ZAKAT

Starting with agriculture, we first present some data that gives us an idea of how much Zakat could be collected both with current level of production and with enhanced

level of production with efficient utilisation of land. It can be seen from the following data that land size of 8.31 million hectares is unutilised cultivable land in Pakistan. Using the principle of “Ahya-al-Muat” (cultivating idle land), we assume that this land shall be fully utilised through suitable land reforms. If agriculture’s share is approximately 21 percent of GDP utilising 22.04 million hectares, an addition in production through utilisation of that idle farm land can be computed assuming constant returns to scale on average.

Table 1

Land Utilisation (Million Hectares)

Year	Total Area Cultivated	Cultivable Waste
1991	20.96	8.85
1992	21.06	8.86
1993	21.4	8.83
1994	21.51	8.74
1995	21.55	8.91
1996	21.68	8.87
1997	21.98	9.06
1998	21.96	9.15
1999	21.93	9.23
2000	21.96	9.09
2001	22.13	9.17
2002	22.27	8.95
2003	22.21	8.95
2004	22.12	9.1
2005	22.13	8.94
2006	22.65	8.21
2007	21.88	8.3
2008	21.28	8.18
2009	21.38	8.19
2010	21.4	8.09
2011	22.03	8.98
2012	22.04	8.31
2013	22.04	8.31

Source: Ministry of Food, Agriculture and Livestock.

5.1. Calculation of Nisaab for Individuals (Exemption Amount)

In Table 2, we show Nisaab computation. Nisaab amount is computed by taking the market value of 612 grams of silver in Pakistan as on March 18, 2014.

Table 2

Nisaab Computation

Price of Silver (10 Grams) in Rs	670
Nisaab of Zakat in Silver (612 Grams) in Rs	41,017

5.2. Zakat Computation on Gold

It is difficult to obtain micro data on gold holdings in Pakistan from aggregate indicators. For this reason, we conducted a survey of approximately 100 families in Karachi. Based on the reported asset holdings, we estimate that given a family owns a housing unit with minimum 3 rooms in an urban locality, it will possess on average 200 grams of gold. Most definitely, some families will own more or less than this; but, for Pakistan, this assumption seems to be close to the mean value based on the survey results. With our estimates, we arrive at Rs 2.78 trillion as the Zakatable value of gold in Pakistan as reported in Table 3.

Table 3

Estimation of Zakat in Gold

Total Housing Units in Pakistan (Source: WB 2009)	20,480,000
Total Housing Units in Pakistan (2014 Estimated)	22,000,000
Share of Urban Dwellings	32.20%
Share of Houses with Minimum 3 Rooms in Urban Areas	37.95%
Total Houses (Urban) with Minimum 3 Rooms (Source: PBS)	2,688,378
Per Housing Unit Gold Holdings in Grams	200
Amount of Gold in Grams	537,675,600
Price of 1 gram Gold (As on March 18, 2014)	Rs 5,168
Amount of Gold Value (in million Rs)	Rs 2,778,707

5.3. Zakat Computation on Tradable Inventory

It is very hard to compute the value of unsold inventory at a particular date. Wholesale and retail trade comprises 17 percent of total national income in Pakistan. Moreover, most of the informal sector is engaged in trading and that contribution does not usually show up in national income accounts.

To get a minimum estimate, we take the head 'change in inventories' from national income accounts. In national income accounting, 'inventory investment' represents value of production in a particular year that remains unsold during that year. It is assumed that the firm has itself purchased unsold inventory from itself. However, that figure in national income accounts gives an estimate of tradable inventory for production that had taken place only in

that year. The actual tradable inventory could be much more than that. In Table 4 as well as in 5, we report the estimation of Zakat on tradable inventory. We apply 2.5 percent rate of Zakat on the estimated value of tradable inventory.

5.4. Zakat Computation on Value of Produce

If potential Zakat collection is estimated using the classical method in which all liquid holdings like cash, bank deposits, equity investments, mutual fund investments, annuities investments and fixed income securities investments are subject to wealth Zakat, the estimation of Zakat is shown in Table 4. For estimating the value invested in stocks, mutual funds, national saving schemes, we take KSE market capitalisation, Assets Under Management (AUM) of mutual funds and outstanding balance of national saving schemes respectively.

However, if our proposal is applied, the results will be different as reported in Table 5. In our proposal, invested capital will be considered a means of earning income and only income from that invested capital shall be subject to Ushr (i.e. a 10 percent levy).

Likewise, produce from agriculture, industry and services shall also be subject to a 5 percent levy or Ushr. The production from irrigated lands shall be subject to a 5 percent levy. The production from rain-fed lands shall be subject to Ushr (i.e. a 10 percent levy). Since industries (manufacturing as well as services) are both labor and capital intensive, industrial production shall be subject to a 5 percent levy.

5.5. Zakat on Livestock

There are different rates of Zakat on different types of livestock. But, at least 2.5 percent Zakat is applied on different categories of livestock. Hence, we apply the conservative rate of 2.5 percent on livestock.

5.6. Estimation of Aggregate Zakat

5.6.1. Classical Method

In Table 4, we show the computation of aggregate Zakat from the classical method. Data on mutual funds assets is taken from Mutual Funds Association of Pakistan (MUFAP). Data on KSE market capitalisation is taken from Karachi Stock Exchange (KSE). Data on currency in circulation, outstanding volume of NSS, livestock population and agricultural produce is taken from Pakistan Bureau of Statistics (PBS).

Lastly, we add import duty in the estimation of potential source of public revenues. Umar (rta) charged a similar levy on imported goods into the state as was charged by other regions on the exported goods originating from the Islamic state. This method of reciprocal tariffs is analogous to the Most Favoured Nation (MFN) principle in World Trade Organisation (WTO). For potential import duty collection, we use the last reported weighted average import tariff rate in Pakistan, i.e. 9.53 percent.

Table 4

Estimation of Zakat Based on Classical Approach

Report Date	Category	Quantity	Amount (Mln Rs)	Zakat Collectible (Mln Rs)
Zakat on Wealth				
	Gold		2,778,707	
End-Jun 2013	Currency in Circulation		1,938,222	
End-Jun 2013	Deposits in Personal Category		3,516,096	
15-Mar-14	KSE Market Capitalisation		6,277,437	
18-Mar-14	Open End Funds		378,187	
18-Mar-14	Closed End Funds		19,894	
18-Mar-14	Pension Schemes		6,275	
End-Jun 2012	NSS		1,676,361	
14-Mar-14	Foreign Exchange Reserves		964,000	
End Jun 2013	Changes in Stocks/Inventories		366,545	
End-Jun 2013	Livestock Value (Cattle at Rs 40,000/Unit)	38,300,000	1,532,000	
End-Jun 2013	Livestock Value (Buffalo at Rs 40,000/Unit)	33,700,000	1,348,000	
End-Jun 2013	Livestock Value (Sheep at Rs 10,000/Unit)	28,800,000	1,152,000	
End-Jun 2013	Livestock Value (Goat at Rs 10,000/Unit)	64,900,000	2,596,000	
End-Jun 2013	Livestock Value (Camel at Rs 40,000/Unit)	1,000,000	40,000	
	Less: Nisaab Amount ($P_{MNA} \times MNA$)		492,204	
	Net Amount Subject to Zakat		24,097,521	
	Total Wealth Zakat			602,348
Zakat on Produce				
End-Jun 2013	Produce on Rain-fed Land		780,904	78,090
End-Jun 2013	Produce on Irrigated Land		2,342,711	117,136
	Total Zakat Collection by Classical Method			797,664
End-Jun 2013	Import Duty on Tariff		4,481,560	427,092
	Total Zakat Collection by Classical Method and Import Tariff			1,224,756

5.6.2. Proposed Method

In Table 5, we show the computation of aggregate Zakat from the proposed method. In this method, the only change is that income from invested capital in bank accounts, stock market, mutual funds and national savings scheme is subject to Ushr (i.e. a 10 percent levy).

Table 5

Estimation of Zakat Based on Proposed Approach

Report Date	Category	Quantity	Amount (Mln Rs)	Zakat Collectible (Mln Rs)
Zakat on Wealth				
Estimated (2014)	Gold		2,778,707	
End-Jun 2013	Currency in Circulation		1,938,222	
14-Mar-14	Foreign Exchange Reserves		964,000	
End Jun 2013	Changes in Stocks/Inventories		366,545	
End-Jun 2013	Livestock Value (Cattle at Rs 40,000/Unit)	38,300,000	1,532,000	
End-Jun 2013	Livestock Value (Buffalo at Rs 40,000/Unit)	33,700,000	1,348,000	
End-Jun 2013	Livestock Value (Sheep at Rs 10,000/Unit)	28,800,000	1,152,000	
End-Jun 2013	Livestock Value (Goat at Rs 10,000/Unit)	64,900,000	2,596,000	
End-Jun 2013	Livestock Value (Camel at Rs 40,000/Unit)	1,000,000	40,000	
	Less: Nisaab Amount ($P_{MNA} \times MNA$)		492,204	
	Net Amount Subject to Zakat		12,223,270	
	Total Wealth Zakat			305,582
Zakat on Income/Production				
Ushr				
End-Feb 2014	Deposits in Personal Category		3,516,096	20,956
18-Mar-14	KSE Market Capitalisation		6,557,000	131,140
18-Mar-14	AUM in Open End Funds		378,187	4,916
18-Mar-14	AUM in Closed End Funds		19,894	259
18-Mar-14	AUM in Pension Schemes		6,275	82
End-Jun 2012	Outstanding Amount in NSS		2,011,263	20,113
End-Jun 2013	Produce on Rain-fed Land		780,904	78,090
Production Value / Income Subject to 5%				
End-Jun 2013	Produce on Irrigated Land		2,342,711	117,136
End-Jun 2013	Ushr on Industry		4,605,762	230,288
End-Jun 2013	Ushr on Services		13,054,909	652,745
	Total Zakat Collection			1,561,307
End-Jun 2013	Import Duty on Tariff		4,481,560	427,092
	Total Zakat Collection and Import Tariffs			1,988,399

The weighted average deposit rate of 5.96 percent is used from the data provided by State Bank of Pakistan (SBP) for the period of the study. Hence, we apply Ushr on this average yearly return on bank deposits in the personal category. Average yearly growth in KSE 100 index value has been around 20 percent during 1998-2013. Hence, we apply Ushr on this average yearly return. Since mutual funds try to have diversified portfolio with income and equity financial securities, we apply Ushr on average return on KSE 100 during 1998-2013 and weighted average deposit rate. Lastly, since NSS are usually long term savings instruments, we apply Ushr on an average mean return of 10 percent on NSS securities.

To deduct the Nisaab amount at the aggregate level, we have to make an estimate of how many people have the wealth from various sources mentioned above exceeding Nisaab amount. We take a conservative route to assume that people in the top income quintile of the labor force will have wealth exceeding Nisaab amount. If we assume that top 20 percent people in the labor force have the wealth exceeding Nisaab amount; then:

P_{MNA} = Number of people in the labor force x 20 percent

P_{MNA} = 60,000,000 x 20 percent

P_{MNA} = 12,000,000

MNA = Rs. 41,017 (as calculated above)

From Zakatable assets that are subject to wealth Zakat, we have to deduct the product [$P_{MNA} \times MNA$],

$P_{MNA} \times MNA$ = Rs 492.2 Billion

We make this deduction in the computation of Zakatable value of assets and wealth.

Hence, the total Zakat collection comes to be close to 7 percent of GDP in Pakistan. Since the heads of Zakat include poor and destitute, it will force the government to use this spending on the welfare of the poor masses and by establishing educational and health institutions for the poor in the society. This can help the government to scale up its welfare spending on the poor. If we use the simple methodology adopted by Ahmed (2004), the potential Zakat collection fulfills the need of actual funds required for poverty alleviation. Ahmed (2004) uses a conservative crude measure of poverty gap by multiplying the number of poor people with the average minimum annual income of \$365 or dollar a day per non-poor person. This is a conservative measure since it assumes that poor people have zero annual income [Shirazi and Amin (2009)].

6. ECONOMICS OF THE PROPOSED ZAKAT BASED TAXATION SYSTEM

Adam Smith in his monumental work "*An inquiry into the nature and causes of wealth of nations*" discusses the canons of taxation. The proposed Zakat based taxation system goes very well with Adam Smith's canons of taxation. It has a proportional tax and it does not tax production heavily. It is also simple and certain. It is convenient to collect and more so, because it is a religious obligation than just an involuntary tool for fetching wealth. It only taxes those who have the ability to pay i.e. it does not tax those who do not reach a minimum threshold of wealth in their hands.

On the macroeconomic front, proportional Zakat linked with income acts as an automatic stabiliser. When aggregate personal disposable income increases in economic booms, more Zakat is collected and more amount is available to the government for increasing transfer payments to *Fuqura* (poor and needy), *Masakeen* (extremely poor and needy) and *Gharimeen* (borrowers in trouble). When aggregate personal disposable income decreases in recessions, obligatory Zakat also decreases and thereby providing an automatic relief to the income earners when the incomes decline.

Besides the proportional income levy, Zakat on wealth redistributes wealth and reduces wealth concentration. So, if an economy is in disequilibrium and policies fail to immediately recover and boost incomes, wealth Zakat enables the distributive allocation that works independently of the business cycles and help stabilise the extremes of the business cycles. In this way, wealth Zakat acts as a permanent stabiliser.

When the personal disposable incomes decline in recessions, more people will become eligible for Zakat. Since Zakat is levied on both income and wealth, the

redistribution of wealth will always be functional and operative in an Islamic economy due to wealth Zakat. Transfer payments to the unemployed, poor, needy and debtors will continue even when the economy faces a recession.

Besides this, a consistent and credible low tax rate policy with broader Zakat base will help to minimise distortions, boost aggregate demand, encourage investment by decreasing costs of doing business and this could also simultaneously solve the microeconomic problems of imperfection in markets by increasing competition and reducing market power.

A uniform Zakat levy on wealth and produce can result in tax rate smoothing, stabilisation of business cycle and encourage long term investments and decision making without leaving the long term planner in the private sector to worry about fiscal policy reversals (i.e., Ricardian equivalence).

One possible question may arise here as to how such lenient tax rates would increase substantial public revenue. If the government has a fiscal deficit of 6 percent of GDP when corporate tax rates are 35 percent; then, how can reducing tax rates increase the revenue? The answer to this is given by the Laffer curve. Laffer (2004), a supply side economist, himself noted that Muslim philosopher Ibn Khaldun wrote about it in “The Muqaddimah”.

Higher tax rates discourage entrepreneurship as they decrease the incentive to produce. Lower tax rates encourage entrepreneurship and hence increase the size of the production sector and hence production. With the increase in production, tax revenue in amount increases because of a larger base. Hence, lower tax rates can still ensure high tax to GDP ratio. This is evident from Table 6 which lists countries with corporate tax rates below 20 percent and their tax to GDP ratio.

Table 6

Corporate Tax Rate and Tax to GDP Ratio

S. No.	Country	Tax to GDP Ratio	Corporate Tax Rate
1	Chile	17.1%	17%
2	Bulgaria	34.4%	10%
3	Czech Republic	36.3%	21%
4	Georgia	21.7%	15%
5	Greece	33.5%	22%
6	Hong Kong	12.8%	16.5%
7	Hungary	37.3%	16%
8	Iceland	40.4%	18%
9	Ireland	34%	12.5%
10	Kazakhstan	26.8%	15%
11	Netherlands	39.5%	20%
12	Poland	33.8%	19%
13	Romania	28.1%	16%
14	Russia	36.9%	20%
15	Serbia	34.1%	10%
16	Singapore	13%	17%
17	Slovakia	29.5%	19%
18	Switzerland	30.1%	13%-25%
19	Turkey	32.5%	20%
20	Uzbekistan	21%	12%

Source: International Tax and Business Guides- Economic Data – Statistics – Tax – EIU – The Economist.

If this system is enforced with sincerity by the government, along with the commitment of the general public and the public/private sector partnership, this can put an end to extreme poverty in Pakistan.

6.1. Effects of Proposed Zakat System on Property Market

In the proposed method, there will be a 10 percent income tax on the gain on sale of a property. If the gain on sale is less than 25 percent, the tax in amount will be more if the property is kept in ownership than when it is sold. This will increase the supply of land that was not presented for sale before. The increase in supply will bring the prices of properties down. Hence, affordable housing and commercial facilities will come in the reach of consumers and commercial enterprises respectively.

A simplified numerical example is presented below:

Property value at t_0 : PKR 1,000,000
Property Prices increase at t_1 by 10 percent: PKR 1,100,000
If property is kept at t_1 , 2.5 percent tax on property : PKR 27,500
If property sold at t_1 , 10 percent tax on gain on sale : PKR 10,000
Net Zakat Differential: PKR 17,500

If the property owner does not want to sell the property and wants to use it in the future and also wants to benefit from the fiscal incentive, then he can give the property to someone on rental basis for use. He will retain the ownership, but it will be considered an investment and hence instead of wealth tax, 10 percent income tax will be charged on rental income.

Property value at t_0 : PKR 1,000,000
Assume that property is given for use on rental basis @10 percent/year of property value
If property is kept at t_1 , 2.5 percent tax on property : PKR 25,000
If property is rented until t_1 , 10 percent tax on rent : PKR 10,000
Net Zakat Differential: PKR 15,000

6.2. Effects of Proposed Zakat System on Investment

Private sector investors including both local and foreign investors have an essential role to play in achieving the desired growth and development targets in an Islamic economy. The goal is not only to redistribute the pie, but to increase the pie as well. The lenient tax rates will decrease the tax expense of firms and allow them to have more resources for reinvestment and profit distribution among shareholders in the form of dividends. Lenient tax rates could also help in increasing the inflow of FDI.

It can be seen from the illustration presented above that if any form of wealth is put into investment, its nature for fiscal treatment changes and tax saving of at least 2.5 percent results on the gross investment value. For instance, if there is no income on an investment, then still 2.5 percent tax saving results and no income tax is to be paid since there is no income.

6.3. Effects of Proposed Zakat System on Capital Markets

In an interest free economy, the savers will have to make a choice between keeping their money idle and pay wealth tax or invest it in some asset or enterprise and pay the tax only on income if it is earned. A simplified numerical example is presented below:

Value of Stock of Company A at t_0 : PKR 100
Stock Prices increase at t_1 by 10 percent: PKR 110
If no investment in stock or other assets, wealth Zakat will be : PKR 2.75
If stock is owned and sold at t_1 , 10 percent tax on gain on sale will be : PKR 1
Net Zakat Differential: PKR 1.75

In the proposed approach, if Return on Investment (RoI) is below 25 percent, less Zakat is to be paid in monetary terms as compared to wealth Zakat in the classical approach. If the shareholder does not want to sell the stock, but still wants to benefit from the fiscal incentive, he can keep the stock in ownership and pay tax only on dividend income. Purchase of stocks for capital gain/dividend will be considered as an investment and hence instead of wealth tax on full investment value, only 10 percent income tax will be charged on actual income earned. A simplified numerical example is presented below:

Value of Stock of Company A at t_0 : PKR 100
Company A is profitable and pays 10 percent dividend
If no investment in stock or other assets, wealth Zakat will be : PKR 2.75
If stock is kept in ownership till t_1 , 10 percent tax on dividend : PKR 1
Net Zakat Differential: PKR 1.75

If Dividend Yield (DY) is 10 percent, less Zakat is paid in the proposed approach as compared to wealth Zakat in the classical approach. It shows that investment is encouraged rather than keeping idle wealth in an interest free economy in the presence of the institution of Zakat.

7. CONCLUSION

Islamic economics literature is rich in describing the welfare potential of Zakat, but very few empirical studies have undertaken the quantitative estimation of potential Zakat collection. In this study, we attempted to estimate potential Zakat collection at the economy wide level to document the welfare potential of the institution of Zakat. In our estimation exercise, we attempted to estimate economy wide Zakat collection by including heads like Zakat on agriculture produce, value of livestock, tradable inventory, currency in circulation, foreign exchange reserves, estimated gold and silver deposits and financial assets like investments in National Savings Scheme (NSS), mutual funds, stock market capitalization, pension schemes and bank deposits. Our estimates suggest that approximately Zakat collection in Pakistan could reach 7 percent of total GDP and is sufficient for covering poverty gap in Pakistan. We also discussed that the institution of

Zakat system can also have positive effects on the flow of investment, promoting entrepreneurship culture and making capital markets and real estate markets more competitive and liquid. At the macroeconomic level, we also discussed the role of institution of Zakat as stabiliser and a countercyclical support mechanism to deal with welfare issues.

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