Redistribution Adjusts Efficiency In Economy; Islamic Paradigm

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1. Introduction

The universe is created by Allah to be managed for the justice, welfare and sustainability of the lives of all the creatures in it (Az-Zarqa M. A., 1995). According to the Qur'an Al-Hasyr verse 7 "...so that it will not be a perpetual distribution among the rich from among you. And whatever the Messenger has given you – take; and what he has forbidden you – refrain from – And fear Allah; indeed, Allah is severe in penalty". Distribution of wealth in Islam is very detailed in the determination of the general principles of distribution and redistribution of wealth and economic resources. The concept of equitable distribution in Islam aims at four aspects, namely: (1) Da'wa; religious proselytizing of the symbols of Islamic kindness to the people who have not been touched by Islam. (2) Education; distribution and redistribution concept in Islam Muslims to educate mental avoiding of nature miserly, greedy, envious, spiteful greedy, selfish; and encourage the emergence of morality, charity, giving priority to others. (3) The social objective; expected that the principle of human solidarity, the bond of love and affection between the rich and the poor, erodes the hatred between the strong and the weak to the contrary, the creation of economic growth without oppressing the poor are weak. (4) The economy; through redistribution concept of zakat, infaq, shodaqoh, endowments, etc. can realize property development and wealth consecration, the reduction of unfair economic burden for the weak, through the concept of Ihya al Mawat can be realized efficiency of utilization of economic resources, the establishment of welfare measures which are not only related to the level of consumption but also the level of distribution. While in the process of realization of its objectives, the concept of Islam needs to be placed on the distribution of the three political base of distribution. These are: ownership Management, income distribution, and redistribution of income. These are management of a greater scope of goods that are in an individual with the better mechanism that able to manage. Whether caused more capable in terms of intelligence and access to resources. As for classes of individuals who are unable or weak, Islam has a very comprehensive concept of redistribution, as what included in many Quran verses. One of it is what mention in Quran Al-Hasyr Verse 7 “And what Allah restored to His Messenger from the people of the towns – it is for Allah and for the Messenger and for (his) near relatives and orphans and the (stranded) traveler...”. The quran verses imply that Islam regards all property, could be interpreted as a resource, and should be distributed to all economic actors, even when a person is an individual who is weak, must get their right to access the resource. Islamic paradigm has contributed a significant doctrine about redistribution. Islam redistribution concept appears after the rise of Islam brought by the Messenger of Allah, Muhammad. The Islamic economics activist has been formulated the redistribution concept based on Al-Quran, Hadith, Muslim clergy agreements. The concept of justice in distribution includes three things. They are: fair in the distribution of economic resources, the distribution of income factors of production, the distribution among community groups (rich vs. poor, the present generation versus future generations). While in the process of realization of its objectives, the concept of Islam needs to be placed on the distribution of the three political base of distribution. These are: ownership Management, income distribution, and redistribution of income (Al-Haritsa, 2003). The concept is similar to the concept of economic efficiency that is exalted by the economists of the world (Asutay, 2007) (Heidari, 2007) (Muhammad, Majid, Usman, & Lakhan, 2013).

In this discussion the term efficiency is taken of the efficiency concept initiated by Vilfredo Pareto (1848-1923). Efficiency is that the allocation of resources of a country that can allow each individual to obtain welfare without compromising the welfare of others. John Rawls, one of the economists philosopher who have the view about justice in economics and politics, states that resource should be distributed equally to achieve optimum economic efficiency, trough original position of fairness and equality among individual parties. Nicholas Barr (2012) summarize that increased welfare is the movement in the distribution toward the
optimal point whether factor supply is fixed or variable, there is a pay off between efficiency and equity in distribution. He concludes the best characteristics of optimal distribution assumptions where efficiency would come up with optimal distribution. The optimal distribution in the first-best economy characteristics are perfect competition; increasing return to scale; perfect information; maximization behavior of well-behaved utility and production functions; complete market; no distortionary taxation. It commonly named by invisible hand. Under appropriate conditions, market can achieve the efficiency objective. I.e. to achieve a given distribution without interfering with market allocation other than by transferring resources to bring out the desired set of initial endowments. Furthermore, the analysis in this paper will discuss the failure of one of these assumptions is “no distortionary taxation” as a redistribution scheme that represents the government intervene optimal distribution achievement.

The concept of redistribution has been invoked extensively in discussions of distributive justice in both the domestic and global context. Indeed, the differences between popular recent approaches to distributive justice, such as libertarianism, prioritarianism, and so-called luck egalitarianism, are sometimes characterized in terms of their attitudes towards redistribution (Scheffler 2003). The classification of policies and institutional arrangements as redistributive in either of these senses, however, has been shown to depend on the moral assessment of these practices, and cannot thus be used as a basis for such assessments. Extreme poverty in developed and developing countries, for example, has led many to question whether affluent people or countries can and ought to "help" or "aid" the poor by redistributing resources to them, and whether they can be compelled by law to do so (for example, through the tax system) (Narveson 2002, 2003). The government intervening in many ways of redistribution resources, there are regulating, finance, other public intervene such like as taxation, monetary policies, welfare, land reform, charity, etc. (Atkinson & Stiglitz, 1980).

Various study of government intervening has been done in many researches to show how government policies give the influence to optimal efficiency changes. The changes of efficiency could be studied through the movements of contract points in the edge worth box analysis also could be studied by using partial equilibrium of each economics sectors; both of them are to see the optimal efficiency of resource allocation. Zakat and Taxation are two example of redistribution mechanism that has been done in many years by two different ideologies. So that This paper focuses on comparing how redistribution concept in Islam, zakat, and other redistribution concept, taxation, give efficiency adjustment on partial economic equilibrium, by using simulation of supply and demand curve adjustment.

Before we begin the efficiency analysis of both, zakat and taxation, we will discuss about Islamic redistribution concept. The discussion will placed in the second part of this paper. It will cover how the redistribution of income, the kind of redistribution and each explanation about what and how its mechanism. We will also put the investigation the characteristic of zakat, the regulation based on Islamic Law of Fiqh, so that we can get the clear view to make simulation in the future analysis.

The last part of this paper, furthermore, is the analysis about simulation how zakat mechanism adjusts the efficiency in economy through partial equilibrium analysis that represented by intersections of supply curve and demand curve. Simulation of taxation mechanism will coming up as the comparison view, to give the clearer illustration. There are two simulation of taxation mechanism in this analysis, which concludes how the taxation will affect supply curve only and how the taxation will affect both of supply and demand curves. The conclusion of this paper will be initial hypothesis for the further study in the redistribution mechanism evaluation.

2. The concept of Islam in regulating the redistribution of wealth
Islam has the constraints for human being in possessing economic resources. Adiwarman Karim named it as “multiple ownership”, that all of resources in whole world belong to two parties. First is God, the Creator, as the absolute and unconditional owner of universe. The second is human as executor and manager of resources utilization, namely as Khalifah fil-ardh (Karim, 2005). There are two ownership categories of resources. First is based on the restriction system of individual ownership quantity determination. The resources that cannot be owned by individual parties should be owned, managed, and protected by Amir (authority, hierarch, government, kingdom, etc). Second is based on principles of individual ownership utilization guideline that fit to Alquran and Alhadits.

2.1 Income Redistribution

The purpose of Islam is to realize the concept of distribution of real justice for all human beings. Management of a greater scope of goods that are in an individual that is better able to manage. Whether caused more capable in terms of intelligence and access to resources. As for classes of individuals who are unable or weak, Islam has a very comprehensive concept of redistribution.

Islamic distributive scheme is characterized by certainty and flexibility (Islahi, 1993). Islahi introduce in its institutional approach, that there are some compulsory measures which ensure permanent process of redistribution in the economy, there are a host of voluntary measures to supplement the compulsory ones, and in addition to them, there are certain provisions that check the avenues which add to inequalities and misdistribution of income and wealth, it is called as preventive measures. Following is a figure of each set of these measures.

2.2.1. Compulsory Redistribution Measures

In the compulsory measure category there are; (1) Zakat; It means to take out a part of one’s wealth at the year-end or on the completion of the year for the sake of Allah and give it to deserving and needy person and making him the owner of that part and having no claim of one on it. Zakat is the fortieth (40) part of wealth or equivalent to that. The more detail explanation will be discussed in part three. (2) Sadaqat al-fitr; every Muslim has to pay it on behalf of himself and his dependents if he has more than subsistence for himself and his dependents on the night of Eid al-fitr, with no prescribed minimum exemption limit. (3) Obligation of sacrifice; Well-to-do Muslims are required to offer animal sacrifice, a part of which should be distributed among the poor and hungry, it paid on every Dzulqa’dah 10th of Hijry Calendar. (4) Additional Demand for Finance; The purpose of such a levy will be both financing the government activities and achieving distributive justice. (5) Ushur or custom duties; The resident of the Islamic states were charged two and a half percent to five percent, while foreigners were charged ten percent. The rate may be decided in reciprocal to the other country. (6) Kaffarat or financial penalties on certain offences; offences on which financial penalties are prescribed which also serve function of re-distribution. (7) System of inheritance; According to the strict Qur’anic injunction, all assets of the deceased (be it little or big) have to be distributed among his legitimate heirs after paying his debts and fulfilling his bequest (wasiyah) if he has made any, valid up to one third of his property. (8) al-nafaqat al-wajibah; it is obligatory expenditure by relatives, father to family members, parent to son and daughter, son to parent, etc. The financial support of an indigent person devolves on those who would inherit him in case he died leaving some property, and that this responsibility is to be shared in the same proportion in which that inheritance would be shared. (9) Right to demand minimum standard of living; It is an established principle in Sharia that the basic needs of every human being must be fulfilled by individual himself, his near relatives, the neighborhood, and the society, all must recognize and fulfill their responsibilities in this regard. (10) Right to Acquire the Necessities of life; never let a person die of hunger, thirst or other necessities while others have a lot of means to satisfy these dire needs. The one who denies him such necessities, while having surplus with him, will be held responsible for his death in case he dies. (11) Ghanimah; it refers to movable possessions
taken in battle from the enemy. Four fifths of it are to be divided among the troops, and one fifth of it for Allah, and to the Messenger, and to the kinsman (who has need) and orphans and the needy and the wayfarer (12) Fai'; refers to booty surrendered by the enemy at war without fighting. The benefit of fai’ extends to the entire population and even to future generations, and cannot be returned to him who pay fai’. (13) Coercive sale at the just price; basically a seller is allowed to sell at whatever price he likes, but he may be forced to sell his goods at the just price to safeguard the interests of others.

2.2.2. Voluntary (optional) Redistribution Measures

It is not obligated, but it is well to do for every Muslim when they have fairly well wealth more than they need. They voluntarily to do these: (1) al-sadaqat al-nafilah; it is non-obligatory expenditures for the support of distant relatives or donations to welfare organizations, etc. (2) hibah; it is gift made for individuals or for some public purposes (3) al-ataya; it is a particular grant made by the government to its citizens is a form of transfer payment which the guided caliphs of Islam established and practiced. (4) wasiyah; or dying exhortation, last will and testament (spoken or written), provided that it is up to one third of the inheritance, it is generally in favor of those relatives who are not getting a share in the legacy or in favor of some public purposes. Fulfillment of a will becomes obligatory on the survivors and it gets priority over the legal inheritors. (5) al-`ariyah and al-qard; Al-`ariyah is to lend something for a certain period to enjoy its benefits, meanwhile al-qard is lending money without any material gain. (6) nadhr; or to vow to Allah by spiritual services which also includes services to humanity (7) waqf; taking the corpus of any property from personal ownership, transferring it permanently to the ownership of Allah and dedicating its usufruct to others. (8) infaq al`-afwa; `afw is defined as the extra amount a person has over and above his need, it is expenditure of the surplus for the sake of Allah. (9) Benevolence and sacrifice; to sacrifice, benevolence, fellow feeling, love for all living creatures, etc., encourage a Muslim to voluntarily look after the needs of others.

2.2.3. Preventive Redistribution Measures

This is the rule that give preventive for injustice resources distribution in the world. They are; (1) Prohibition of Riba; charging interest is in favour of lending class at the cost of the poor (2) Prohibition of hoarding; it is wrong doer to exploit people’s need and to create artificial shortage. (3) Prohibition of monopoly; it will cause inefficiency by limiting the freedom of others and close the doors of opportunities upon others (4) Prohibition of private ‘hima”; Al-hima means preserve or enclosure through which people are kept away from a land usable by all for such benefits as herbage, water, hunting, etc. (5) Prohibition of games of chance and lotteries; cause they result in an uncertain distribution of wealth and also cause hatred, enmity and disputes. (6) Bribery and kickback; it is prohibited in Islam offering something to officials to influence the judgment unduly or corrupt the conduct (7) Prohibition of stealing property and embezzlement of funds; it is prohibited to appropriate income and wealth by immoral ways. (8) Curb on demonstration effect; it is not recommended for Muslim to keep greedy in their personality.
Compulsory Measure

- Sadaqat al-fitr
- Obligation of sacrifice
- Additional Demand for Finance
- Ushur or custom duties
- Kaffarat or financial penalties on certain offences
- System of inheritance
- al-nafaqat al-wajibah
- Right to demand minimum standard of living
- Right to Acquire the Necessities of life
- Ghamimah
- Fai'
- Coercive sale at the just price

Voluntary Measures

- al-sadaqat al-nafilah
- hibah
- al-ataya
- wasiyah
- al-`ariyah or al-qard
- nadhr
- waqf
- Infaq al`-afwa
- Benevolence and sacrifice

Preventive Measures

- Prohibition of Riba
- Prohibition of hoarding
- Prohibition of monopoly
- Prohibition of private 'hima'
- Prohibition of games of chance and lotteries
- Bribery and kickback
- Prohibition of stealing property and embezzlement of funds
- Curb on demonstration effect
3. Examine how the concept of redistribution give the benefits of economic efficiency

Above are the concept of distribution and redistribution of economic resources in Islamic paradigm. In this opportunity, we will see how, one of Islamic redistribution concept, it is zakat, give the influence on efficiency of economic activities. Is it will give a different look from another concept, taxation and subsidies, as a control variable in this analysis?

Economic efficiency is represented by achievement of general equilibrium under perfect competition market. Efficiency idea made reference to equilibrium concept that had developed by Vilfredo Pareto (1909) and Abram Bergson (1938), and in its advance analysis made by welfare theorem of Arrow (1951) and Debreu (1951). That theorem clarify that there is an essence an equivalence (equilibrium, economic efficiency) between Pareto efficient outcomes and competitive price equilibriums.

Various studies has been done to show how government policies give the influence to equilibrium changes. There are two ways using general equilibrium model analysis. The first, by modeling parties of economic actors in interaction simulation. Using the simplified parties, such like to see how 2 countries interact with 2 products, 2 products interact with 2 producers. The second, by using data set computational analysis to see interaction among more complexes parties of economic actors. Government Policy used to be analyzed by partial equilibrium or general equilibrium. Basically partial equilibrium is not adequate for the policies that have effects in many sectors of economic. But in some cases, it is necessary to look deeper in partial equilibrium analysis to cope the more precise effect of policies in one sector of economic activities. This paper will use partial equilibrium model to study how zakat give the adjustment on equilibrium of aggregate demand-supply side, compared with how taxation and subsidies do.

3.1. Characteristic of zakat

Zakat is annual redistribution schema on four types of assets, amounted tithe (ushr) on treasure trove (rikaz), on crops; and amounted half of the title (nisf al-ushr) on animals (camels, cows and sheep); while on merchandise and on two precious metals, gold and silver it is amounted fortieth part of wealth or equivalent to that to replace it. It is compulsory paid by every Muslim with certain condition and will be given to other Muslim with the certain condition. The certain conditions in implementing Zakat mechanism are:

- Muslim that has to pay zakat (muzakky) is whose: (a) Muslim (b) Free (c) possessed the treasure for more than a year. (d) possessed the treasure for more than nisab (limit), the limits are: more than 750 kg for crops, more than 5 for camels, more than 30 for cows, more than 40 for sheep or goats, more than that equal to 612,35 gr of silver for merchandise or cash, more than 612,35 gr for silver, more than 87,50 gr for gold.
- Muslim that will be given zakat (mustahiq) is whose: (a) the poor, (b) the needy, (c) those who are employed in collection and management of zakah, (d) those whose hearts are to be reconciled, (e)to free the captives, (f) the debtors, (g) the man cause of Allah, and (h) the wayfarers.

3.2. Partial equilibrium adjustment of the implementation of zakat

By the observation of its characteristic, zakat taken from productivity activities when they are well established, and it assumed that the owner of treasury is the condition of properous. Is
zakat will change their productivity behavior of muzakky? Is zakat will change the consumer behavior of mustahiq? How is the implementation of zakat will change the equilibrium?

We do such a simple simulation of interaction between supply curve and demand curve in a partial equilibrium analysis. Supply curve represent aggregate supply (producer behavior) and the behavior of muzakky, and demand curve represent as whole aggregate demand (consumer behavior) and mustahiq. Under the perfect competition market, the initial equilibrium of a certain period is coordinated in A. Zakat is taken in a certain period when muzakky reach the certain condition as what sharia ruled, by then it would not change the production activities, production cost, or even production function. It means, producers will not obliged to pay zakat when they are not in the “muzakky” condition. So as when they have been in “muzakky” condition, they will pay the certain amount of zakat, without any changes in their behavior of production function. In the other hand, mustahiq will receive an amount of zakat, it will give additional budget line for mustahiq. Consequently the increase in revenue will cause the consumer behavior, assuming other factors are constant, demand curve will be shifted from D1 to D2 as much as redistribution of zakat from muzakky. While the supply curve is constant, equilibrium will shifted to the axis as much as supply can afford the new quantities of demand, new equilibrium will formed by shifting from old coordinate A to new equilibrium B. It is appropriated to the law of demand, in a constant supply curve, increasing of demand will increase the price. Furthermore, when redistributing of zakat still going, assuming all factors are constant, the pressure in demand will caused the price keep increasing. The increasing of price delivers new technology either new competitor to fulfill consumer demand. These will gradually increase the quantities of product, and will shift the supply curve S1 to the new supply curve S2. This change of supply curve will automatically match the new quantity of equilibrium Q2 with the same price as the price in initial equilibrium, formed by intersect of new supply curve of S2 and new demand curve D2. It is shown in the Figure 3.1, how zakat adjust the initial equilibrium to new equilibrium, with the increase of quantity (from Q_{initial} to Q_{2}) in the same price (from P_{initial} to P_{2}). The adjustment emphasized the efficiency of resources allocation formed by increasing quantity of product in the constant level of price.

3.3. Characteristic of tax and subsidy

As the comparison view, the adjustment of partial equilibrium formed by taxation and subsidies will come up in the following discussion. Since the taxation that happens to every
single sector of economy is complicated, it is better to make a focused observation of taxation characteristic. First group is tax on the producers, consumers and suppliers of factors. Taxation that implemented to the production of commodity will effect on the profits of producer, on the incomes of those who supply factors or intermediate products, and on the consumers of the product. To the extent the price of product rises. Second group, functional distribution (labor and capital), the effect of tax may be broken down into on the main factors of production. Third group is personal distribution; the effect of taxes or government expenditure may be investigated with respect to the position of individuals at each different social background and behavior. Does it benefit the positive income or the opposite? Fourth group, regional incidence, the tax or government expenditure may have different effects in different regions. Does it give a negative effect on consuming regions or the opposites? Fifth group, intergenerational incidence, tax or government spending may have a different impact on different generations. It may impose costs on the current generation but provide benefits to those alive after twenty-five years later.

3.4. Partial equilibrium adjustment of the implementation of tax and subsidy

Based on the macroeconomics principles, it is widely modeled that business taxes increase the cost of production and shift the supply curve to the left. While subsidies decrease the cost of production and shift supply curve to the right (Atkinson & Stiglitz, 1980). While zakat collection will cause no changing in production cost, then load characteristic will shift supply curve nowhere. We observe how tax and subsidy adjust the equilibrium, by using partial equilibrium analysis. We do two simulation of equilibrium adjustment in the following Figure 3.2 and Figure 3.3.

3.4.1. Equilibrium adjustment in supply and demand.

We do a simulation on how producer behavior correspond the taxation effect, and how the consumer behavior correspond to subsidy effect under perfect market competition equilibrium. The simulation illustrated on figure 3.2. show the initial equilibrium reached in coordinate A, with quantity amounted as $Q_{\text{initial}}$, and level of price on $P_{\text{initial}}$. At a given period of taxation implementation by the government on production sector, as mentioned before, it would rise up the cost of production and automatically will increase the price. The supply curve will be shifted up to left, from $S_1$ to $S_2$ as much as production sector taxation. In the constant demand curve assumption, this shifting followed by the shifting of equilibrium coordinates from A to B. Assuming that government income will be allocated for some government expenditure that give positive effect to various group, by then will give positive effect to consumer income, and so the demand curve will be shift up from $D_1$ to $D_2$. The positive effect will lead to the increase quantity of demand, consequently will match the new supply curve $S_2$ and new demand curve $D_2$, and forming new equilibrium in the same quantity as amounted as quantity of initial equilibrium, with the higher level of price amounted as $P_2$. It is shown that there was an inefficiency of economy in where the equilibrium adjustments deliver new level of price in producing the same quantity of product.

3.4.2. Equilibrium adjustment in supply side.

The figure 3.3 illustrates the second simulation is held to show how taxation will give an effect on producer behavior, and then government expenditure on subsidy will give effect on producer behavior, by keeping the demand side factors are constant. Under the perfect competition market equilibrium, the initial supply curve and demand curve match in coordinate F. The simulation of taxation begins with how producers shift their supply curve from $S_1$ to $S_2$ as a given amount of taxation implementation by government in a given period. The producers respond of taxation followed by changing in initial equilibrium coordinates from F to G, we see that it means there increasing of price from $P_{\text{initial}}$ to $P_{\text{tax}}$, and decreasing equilibrium quantity from $Q_{\text{initial}}$ to $Q_{\text{tax}}$. We can call it inefficiency economy, where the resources allocation delivers the higher price with the smaller quantity of product. By then, government expenditure may give positive effect on personal distribution (labor or capital)
and regional incidence that will reduce production cost. With that, the supply curve may be shifted down to right, but not amounted more than what it takes from taxation increase the price. This supply curve shifting appears from $S_2$ to the new supply curve $S_3$, and the new equilibrium coordinates on $H$, with quantity of product amounted as $Q_2$ on the amounted price on $P_2$. There is a fewer inefficiency of economy than the previous discussion.

![Figure 3.2. Taxes Shift Supply Curve to The Left and Subsidies Shift Demand Curve to The right](image1)

![Figure 3.3. Taxes Shift Supply Curve to The Left and Subsidies Shift Supply Curve to The Right](image2)

### 3.5. Conclusion.

The conclusion is formed under releasing the last assumption of the optimal distribution in the first-best economy characteristics (perfect competition; increasing return to scale; perfect information; maximization behavior of well-behaved utility and production functions; complete market; no distortionary taxation – zakat include).

3.5.1. Zakat mechanism will not lead inefficiency in economy, because the shifts of demand and supply curve result the larger amount of quantity of product in the same price level.

3.5.2. Taxation and subsidy mechanism will lead inefficiency in economy, because the shifts of supply and demand curve result the smaller amount of quantity of product in the higher level of price.