SERVICE BONDS
FOR FINANCING PUBLIC UTILITIES

DR. MONZER KAHF

To be presented at the Seminar on Financing Government Enterprises from the Private Sector, King Abdul Aziz University, Jeddah 2-4 Rajab 1420h

SERVICE BONDS
FOR FINANCING PUBLIC UTILITIES

INTRODUCTION

Public utilities are produced by the Government in most Muslim countries and, generally speaking, they burden the Government budget with their financing and usually subsidized prices. The paper aims at proposing an alternative method of financing by throwing the financing burden on the users of these utilities and on investors in the private sector. The matter of subsidies will not be discussed.

The study covers financing the production and distribution of such utilities as water, electricity, public transportation, education, communication, radio and TV, postal services, Some of the public utility enterprises produce commodities, such as water; others produce services of their manpower, machinery and equipment, such as the communication service. Further, some service producing enterprises have their output in the form of services whose major input is labor or work, such as education and garbage collection, while others produce services whose main component is a result of the operation of machinery and equipment, such as electricity. The kind of securities that can be used for financing may, therefore, differ from one enterprise to another, depending on the nature of its output. From a Shariah point of view, this is mainly a result of the intrinsic differences between *Ijarah* and sale contracts.

The idea of *Sanadat al Muqaradah was discussed by* the Islamic *Fiqh* Academy and a decision was taken approving the basic principle of *Sanadat al Muqaradah* and stipulating certain conditions for their issuance and negotiability.[1] *Sanadat al Muqaradah* are derived from the *Mudarabah* (*Muqaradah*) contract. In *Mudarabah*, the owner of funds shares with the entrepreneur the net profit and bears all the losses. Thus, *Sanadat al Muqaradah* carry a high degree of risk and

---

[1] Decision No.5 of the 4th Annual Meeting of the *Fiqh* Academy, held in Jeddah, 18-23/6/1408H [6-11/2/19881].

depend heavily on the business ability, efficiency and trustworthiness of the entrepreneur. Until today no *Sanadat al Muqaradah* have ever been issued in any Muslim country.

On the other hand, *Muqaradah* serves as the cornerstone in the mobilization of resources for investment in the Islamic Banks all over the world and there is a great deal of deep-rooted experience in establishing unit funds on the basis of *Muqaradah* by several Islamic financial companies and by Islamic and conventional banks as well.[2]

The basic idea in this paper is based on the *Ijarah* contract. It is known in *Shari'ah* that *Ijarah* contract applies to the usufruct of long-lasting assets as well as to human services.[3]

A special kind of bonds (*sanadat*) will be proposed that is based on the Ijarah of human services and/or the usufruct of machinery and equipment. I will discuss the nature of service bonds, its *Shari'ah* foundation, the different forms they can take, their salient features, negotiability and issuance for financing public utilities whether owned by the Government or by the private sector. Service bonds will also be compared with other kinds of securities that can be used for financing public utilities.

In addition to this introduction, the paper has three sections as follows: Section I : Public Utilities and their Financing. In this section we will discuss the general definition of public utilities, especially from the point of view of the present paper. The public utilities financing needs will also be discussed especially from the angle of their effects in burdening the government budget. This will be done with the help of examples from a few Muslim countries.

Section II will focus on defining the service bonds and the implications that can be derived from their definition. The main characteristics of these bonds will also be discussed. In this section we will also discuss the *fiqhi* foundation on which these bonds are based and their characteristics are derived.

---

[2] Such as the *Mudarabah* funds of the Gulf Investment Companies, the specialized investment funds of Al Rajhi Banking Company for Investment and of Al-Barakah Group and a couple of funds by the National Commercial Bank in Saudi Arabia.

The crux of section III will center on comparing the service bonds with common shares and public debt bonds. We will also propose an approach for their application including pre-requisites for successful issuance and their negotiability in the financial markets.

The conclusion will sum up the main points of the paper.

---

[3] "Lasting" is a relative term that should be understood in relation to the period of *Ijarah* contract.

SECTION I

PUBLIC UTILITIES AND THEIR FINANCING

<u>A- PUBLIC UTILITIES</u>

The definition of public utilities vary from one writer to another and from one economy to another. Generally speaking, they include energy (electricity and gas), collection of garbage, sewerage, water and postal service. Some writers include telephone, Radio and TV., airlines and toll bridges. [4] Others may also include railroads and urban and intercity mass transportation. Some others may further include roads, seaports and metropolis street lighting. For the purpose of this study, we will take a broader and more loose meaning of public utilities. Hence, we will also add education at all its levels, and public health services for reasons which will be explained momentarily.

Public utilities are sometimes produced by public enterprises whose definition is equally loose, and they are sometimes produced by privately-owned firms. Many countries have even applied the concept of mixed enterprises to the production and distribution of many public utilities.

Although most of the above mentioned public utilities (and the like) touches on the welfare of many people in all societies, the standard definition of "public goods" can hardly apply to all of them. Public goods' definition is intrinsically connected to the principle of exclusivity, whereby the market fails to allocate their consumption through prices, and gives rise to allocation through a process of political choice.[5] Public utilities are not public goods in the above mentioned meaning.

Some or all of the public utilities have visible externalities that allow for a substantial social welfare element in them. For instance, garbage removal benefits thou neighbors in addition to improving health and environmental conditions. Most public utilities can sometimes be treated as merit goods where the social return from

---

[4] Dieter Bös, p.19.

[5] This definition itself is subject to the prevailing state of technology. For instance, the invention of broadcasting obscuring allows for the working of the principle of exclusivity in Radio and T.V.

them exceeds what could be their market competitive price. Therefore, they are sometimes labeled as socialized goods,[6] or communal goods.[7]

However, from the point of view of the present paper, what matters is the nature of the service produced by public utility enterprises, regardless of whether they are in the private or public ownership. Since we are, strictly, interested in the securitization of their services, any form of service that can be securitized may be included under the broad meaning of public utilities. An essential pre-requisite for this is that there must be some kind of "mass" demand of the service and the service is, or can be, standardized.

At any how, in most Muslim countries a great deal of public utilities is produced by governmental bodies and agencies or by independent entities owned by the state. Yet, even when such utilities are produced by the private sector, be it local or foreign, they usually are subjected to heavy governmental control, especially in the areas of labor compensations and pricing of their products.

Furthermore, some public utilities are produced by what can be tagged as natural monopolies. Such cases happen when the cost conditions, under the present state of technology, prevent the existence of more than one producer for the commodity or service.

Two kind of products are usually produced by public utility enterprises. Some of these enterprises offer for sale commodities that take the form of physical mobile assets, such as piped water, liquefied or natural gas or heating fuel. The ownership of these commodities is transferred to the consumer by means of a sale contract whereby the buyer can have possession of the purchased quantity in a stock form, such as piped water, or heating gas.[8] This kind of commodities can be stored if so desired by the purchaser in spite of the fact that some of them may require special storage facilities.

On the other hand, some public utility enterprises produce a pure service that can only be consumed through time and does not provide the potentiality to store or

---

6 Ibid., p.23.
7 Eytan Sheshinski, pp. 253-254.

to separate the moment of delivery from that of consumption. The obvious example of this kind of utilities is education, telephone services and TV viewing. The output of this kind of enterprises is only defined in term of a flow that can only be delivered at the moment of its consumption. This flow of services comes as a result of the operation of machines and other fixed assets, the expending of human energy and efforts, or a combination of both.

The distinction between these two kinds of public utilities is important from the point of view of the present study. Commodities can be exchanged by means of sale contracts (including *Salam* and *Istisna*') while services can be exchanged by means of *Ijarah* contracts. Each of these two contracts has its own characteristics that allow certain specific approach to financing.

Even for some of the first type of public utilities, i.e., the commodity producing enterprises, a closer analytical look may identify certain separable elements in the output that can be qualified as services. For instance, a gas or water supply process requires delivery of a certain quantity of gas by use of a piping network in a residential or industrial area in addition to the major pipeline system between the production facilities and the consumption quarters in the metropolitan centers. Thus, the final output of a gas supply company can be divided in two parts. The quantity of gas delivered and the transportation process of shipping that quantity from the production point to the consumer's place. The latter part of this public utility is an output that results from use of machines and time of operators. Thus, it can be defined as a service according to the above mentioned definition.

B) <u>FINANCING NEEDS OF PUBLIC UTILITY ENTERPRISES</u>

Most of public utility enterprises require huge financing for the production and transportation of their output. An electricity enterprise may produce electricity by means of a huge turbines installed under waterfalls from a dam or by use of fuel or atomic energy. The amount of investment required for the machinery is usually

[8] Although, we usually consume these commodities at the same time of delivery, by turning on the water foset or pushing the gas heater button.

huge. Add to it the amount of investment required for a distribution network which is equally enormous.

Similarly, telephone communication, gas production and distribution, water refining, filtration and distribution and other public utilities, all require large investments to the extent that many Muslim countries were lead to utilize large portion of their public revenues for investment in the production and distribution of public utilities, especially, that the market size and the ability to pay of their consumers do not allow market pricing of the output of such huge invested installations and equipment.

A quick look at some financial data extracted from the budgets of a few Muslim countries and given in table 1 below indicates that the

Table 1

Expenditures on some Public Utilities and Services (U&S) in a Few Muslim Countries*

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Country	Currency	Year	Educa-tion	Health	Hou-sing	Ener - gy	Trans. & Comm	Total 5-8	% of U&S to total budget expenditure	Bud-get Deficit	Subsi-dies & curr. transfer	% U&S to Budget Deficit	% Subsi-dies to Deficit
Bahrain	M.Dinars	1994	77.7	55.9	10.4	49.0	62.7	255.7	39.5	58.3	82.7	440	143
Egypt	B.Pounds	1993	6.9	1.4	3.4	0.1	1.7	13.5	24.1	2.7	14.0	500	516
Jordan	M.Dinars	1993	201.2	87.1	16.2	17.7	71.3	394.5	31.9	69.7	118.8	566	170
Kuwait	M.Dinars	1994	451	235	200	229	61	1176	28.5	1302	1384	90.3	106.3
Malaysia	B.Ringets	1995	10.2	2.6	2.9	[redacted]							
Turkey	T.Liras	1994	122.5	26.9	11.3	25.3	5.0(1990)	191.0	21.2	150.9	277.1	126	183
Indonesia	T.Rupiah	1993	5.5	1.5	0.9	3.2	5.3	16.4	30	2.0	7.4	820	370

Source : IMF, Government Finance Statistics, 1995.

*(countries selected on the basis of availability of data)

size of spending on these kinds of services and utilities made 21% - 42% of total budget expenditures in seven Muslim countries. It is true that some of the services and utilities mentioned in table 1 are income generating, but it is equally true that the revenues of these utilities are usually a small fraction in relation to their huge expenditure burden. For instance, the Kuwaiti budget of 1991/93 showed a deficit of more than mKD 800 in some of these utilities and services.[9]

Consequently, table 1 shows that the ratio of five major items of utilities and services to the budget deficit in those countries was between 90% and 123%. This means that for the majority of the seven Muslim countries of table 1, an effort toward self reliance in those utilities and services can kick the budget deficit out for ever. To complete the picture, information given in columns 12, and 14, on government subsidies and current transfers, indicates that subsidies and current transfers exceed the deficit by 6% to 416% in the seven Muslim countries.[10]

Finally, this section can be concluded with the assertion of the enormity of the gap to help in its filling the proposed means of financing can be used, subject to willingness of applying *Shari'ah* compatible approaches and availability of resources that can be mobilized through the attractiveness of the means proposed in this paper.

[9] Total of expenditure on education, health, information, postal and telephone services, electricity, water, public works and airlines were mKD 818.5, while their revenues were only mKD 68.5. See al Qabas Newspaper, No.6132, Monday, January 13, 1992.

[10] Unfortunately, direct data of the government subsidies to the utilities and services is not readily available.

SECTION II
SERVICE BONDS AND THEIR *SHARI'AH* FOUNDATION

DEFINITION

Service bonds may be defined as:

> ***certificates or securities representing a well defined and standardized quantities of services produced by a public utility and issued at given denominations or given number of units.***

The important elements in this definition are the following:

1. Service bonds are securities based on the well known Shari'ah principle of securitization of owned rights. This principle implies that each right can be represented by a written document that provides the details and specifications of the right and the obligation implied. It also shows a full description of that right and indicates the legal or natural person who is obliged to make it available to the owner of the right, as represented by the security.
2. Ownership of the security means the ownership of the right mentioned in it. This means that the security is only a veil and for any transaction on the security, the conditions required for the same transaction on the right itself must be satisfied.
3. The security also represents a well defined obligation on the signatory. An obligation that requires to be fulfilled at a point, or within a span, of time in the future.
4. A detailed description of the service must be given in the security. Services may be derived mainly from machines and equipment such as the telephone services, or from the efforts of experts such as educators and physicians or from a combination of both such as postal services and garbage collection. The description of services should be accurate and undisputable, in terms of the kind of service and the number of units and the definition of each unit.

5. The amount of the value of the security, i.e., its sale price by the issuer should be announced and known to the public at the time of its issuance or sale. This price is the rent/wage of the equipment/human time represented by the security. The issuance price of the security needs not be mentioned on it because the security does not represent the amount paid for it but the service sold, which is at the same time pledged by the issuer.
6. The date of delivery of the service must be stated on the security. The date of delivery may be an exact date such as on the first of Muharram 1425H (e.g., for an airline Hajj service bond) or may be left to the user, with a validity time span. If a security is issued without a validity time limit, it means that the renter (beneficiary or buyer of security) can take the service on demand at any time after the purchase of the security. It works like a phone card that can be used any time after purchase. On the other hand, a security with a validity date or period means that the owner of the security can only receive the service after certain date such as after 1/1/1425H, or during a period of 1/1 to 30/12/1425H.

EXAMPLES OF THE USUFRUCT BONDS

There can be many examples of usufruct bonds. Some of them are the following:

1) **Telephone Bonds,** a telephone bond may, for instance, represent 1000 units of telephone services. A telephone service unit may be defined as, say 100 local calls or their equivalent of long distance and international calls. The bond may be sold with a condition that the service may be received during a given period of time, such as "phone bonds 2000 C.E." which allow their owners to utilize the service of the telephone company, in the number of units mentioned on the bond, during the year 2000. There can be telephone bonds 2005 or 2006, etc..

   Telephone bonds may be issued by the telephone company to mobilize funds for financing its present needs of working capital. Such bonds may be issued for short period and may be for small denomination (number of usufruct units), or for financing its long term development and growth. In such a case, telephone bonds may be issued for longer maturity and larger denomination.

2) **Postal Service Bonds,** a bond representing certain quantity of postal service such as delivery of 1000 domestic minimum -weight letters, or their equivalent of international and/or heavier letters.[11] The postal service bonds may be issued by the Post Office Department or company to finance long term needs of expansion or short term working capital. Accordingly, the maturity of the bonds and their denominations would be selected to provide a high degree of convenience to bond holders.

3) **Electricity Bonds** may also be issued for different denominations of the electric services as defined in terms of number of hour/kilowatts for different maturities and different quantities of electricity.

---

[11] This requires that the schedule of equivalence of different postal services with the service unit be announced at the time of issuance of bonds (e.g., on the back of the bond).

Electricity in this regard is treated as a service, not a commodity, from the point of view of contractual relationship between seller and buyer. Since electricity is consumable at the time of its receipt, it is the usufruct of turbines, generators, cable network and man power; it is, therefore, subject to *Ijarah* contract.

4) **Fly Bonds** can also be issued for air transportation of a number of service units, each unit must be defined in terms of a given load of merchandise for certain given distance, or to air transport a person through certain mileage. Fly bonds can also be issued for long or short term maturity and they can be redeemed by owners (holders) receiving actually the service during the maturity period from the airlines.

5) **Education Bonds** can also be issued for different levels of education and/or training with full description of the type and quantity of services the bond represents and the maturity period during which they can be redeemed. Proceeds of education bonds can be used for financing growth and development of educational institutions as well as for financing working capital. However, the maturity periods of the bonds may have to be different, so may be their denominations.

6) Building occupancy bonds can be created to represent occupancy units of a building. This can be done especially with *Waqf* land for long term *Ijarah*. The proceeds of the bonds can be used for land development and construction and their return can be determined as a share of the total rental income of the project, or on the basis of renting it back, on consecutive contracts basis, to the *Awqaf* managing organization.

7), 8), 9) ...etc. bonds may be issued for units of medical services, goods transportation by land or by sea, urban public transportation, pumping water to household units, sewage services, garbage collection, etc..

CHARACTERISTICS OF SERVICE BONDS:

In this sub section we will discuss the basic characteristics of the service bonds and we will compare them with other kinds of securities.

Essentially, service bonds are based on the principle of securitization of financial rights. Securitization in Islam is encouraged since day one. The earliest form of securitization is the documentation of debts that is encouraged and enhanced in the Qur'an (2:282). Although this verse deals with documentation of debts, documentation of other financial rights is also encouraged by simple analogy.

Furthermore, by their very definition, usufruct bonds, depend on *Ijarah* contract in which an asset is leased or human services are hired, and the bonds come out of this kind of contract in a form of financial securities.

The implication of this introduction is that all the characteristics of service bonds are derived from, and based on, these two principles of securitization and *Ijarah* contract, as we will momentarily notice.

1) Service bonds represent ownership of well defined and clearly described service

Since the bonds come as a result of documentation of an *Ijarah* contract between the asset owner/service provider and the purchaser of the bonds, these bonds, thus, represent the right that is sold to bond holders.

This is a financial right in the sense that it represents an ownership of the services of assets and human beings, that is well defined and described in the contract.

Ijarah in *Shari'ah* is a form of sale whose object is not the asset itself but its utility. Therefore, the owner of the bond is an owner of the asset's utility or service. By the same token, when the *Ijarah* contract applies to human services, the bond represents ownership of the services.

The owner of the bond owns the utility itself. The immediate result is that the bond does not represent the amount of money for which it is bought. It rather represents a well defined quantity of services of assets and human beings. Such services must be well defined even if it requires clearly defining the asset that produces them and the period for which the is owned by the purchaser of the bond.

Once the period, during which the service is defined, lapses, the bond will vanish. In other word, in an *Ijarah* contract the lessor is required to enable the lessee to use the asset so that the latter can extract its services for the leased period. It is the responsibility of the lessee to extract that service. The lessor is only required to allow the bond holder to avail of the right she/he owns, but the actual use or benefit depends on the owner of the service (the bond holder).

2) Pricing of service bonds:

The issuance price is one that is subject to the market forces of supply and demand. The concern of *Shari'ah* centers only around the freedom of choice to enter into an exchange contract. The price the parties agree on is the price of the contract (bond) as long as they enter freely in the contract and the contract is not in violation of any of the *Shari'ah* rules.[12]

This means that service bonds can be issued at given prices, say the prevailing face value of the services. The can also be auctioned in the market the same way treasury bonds are auctioned weekly or monthly or at any other intervals.

The market determination of issuance price has many implications from the point of view of expected buyers. For instance, if a service bond is issued for the use of transportation facility, that expires in a short period of time. The mass of expected customers of such an issue would come basically from potential users of the service and their appetite to buy the bond and pay for it in advance would depend on the expected price that they may obtain in the market discounted for the term of the bond.

However, if the period of the service is defined to be after relatively a long span of time, such as an education bond that has a five year period for the beginning of the extraction of its services, the buyers would not be restricted to the potential users of that kind of service alone. Savers and investors would have also an appetite to buy these bonds and keep them until some time before maturity, when they can sell and make profit on their investment. This process depends on expected prices of the service, the discount rate and other conditions related to the supply of and demand for investible funds and the economy at large.

Once a bond is issued at a certain price, the sale of the service it represents becomes a right of the bond holder so that any price for further transaction on the bond will be subject to the market conditions and the individual wills of the contractors. In other word, an owner is fully authorized over whatever an owner owns and can, therefore, suggest the price that she/he feels suitable to sell the owned service for. This means that further transactions on the service bonds are also subject to market pricing and they depend on the general economic conditions in addition to the specific stipulations of a given issue of bonds, and the forces determining its supply and demand.

3) Issuers of the usufruct bonds:

Service bonds can be issued by the producers of a given service, i.e., air transport bonds can be issued by the airlines and postal service bonds can be issued by the postal agency. Issuing agencies may be public enterprises in the sense that they are owned by the government or may be private companies.

There are no restrictions, in *Shari'ah,* on the issuance of such bonds by any enterprises whether they produce the usufruct or not, i.e., bonds can also be issued by bodies that do not, themselves, produce the subject service of the bond, as long as they are able to give the pledge to get the service from others and deliver it to the bond holders at the maturity period. For instance, the Ministry of Finance or the Central Bank may issue railroad goods/people transport bonds on the national railroad company as long as once the bonds become mature, the Ministry of Finance or the Central Bank would be able to take necessary action that will allow the bond holders to avail of the service they paid for.

---

[12] Keeping in mind that excessive deviation of the contractual price from prevailing market price is always challengeable under the premise of *Al Ghabn Al Fahesh*.

Additionally, brokers or agents, such as travel agencies for air transport bonds, or shipping brokers for sea shipping bonds, are theoretically, capable of issuing service bonds on the same basis, i.e. as long as at the time of maturity they will be able to take necessary action that allow the bond holders to derive the service they own.

The pledge by the bond issuer to provide the service is sufficient for issuing service bonds. However, a necessary condition is that the bond issuers would be having the capabilities of standing behind their pledge. This can be done either on the basis of a line of authority as it may be between a national railroad corporation and the Ministry of Finance or on the basis of a contractual relationship between issuers of bonds and providers of services.

4) Proceeds of bonds issuing

The proceeds of the issuance of service bonds, i.e., the price of the services is fully and completely owned by the issuers of the bonds who have full authority over it. This means that proceeds of bonds' issuing can be utilized for financing working capital or fixed capital, expansion project or current expenses, they can be utilized to spend on the service producing agency or on other agencies.

For instance, if the government issues education bonds for a given number of credit hours in governmental universities, the proceeds of such an issue can be used for construction of new laboratories in these universities, for cleaning the streets of the capital, for salaries in a government-owned refinery, or any other use whether developmental or not, and whether related or not to the production of the service sold in bond issuance.

5) Negotiability of Service Bonds:

Since the bonds represent a well defined service that is to be delivered during a given period of time, owners of those services can always sell them at will, at any time, before maturity, i.e., before they actually avail of the service, as long as there remains sufficient time for the buyer to receive the service she/he is paying for. The sale price will be determined by the two parties, and affected by the supply and demand forces, regardless of how much different it might be from either the issuance price or the price paid by the seller when she/he bought it. This means that service bonds are fully negotiable. They can be sold and bought in the market at any time and by any buyer/seller. Other forms of disposition of one's property can also be performed on them such as making them part of a last will and testament (*wasiyah*), giving them as a gift, lending them to others free of any charge, using them as collateral in a lien, etc..

6) The End of a Service Bond:

A service bond comes to an end by either of two ways: (1) actual use or consumption by the user/owner of the bond during the maturity period, when the bond holder submits it to be exchanged for the actual service pledged in it. This will be simple when the issuer of the bond is the provider of the service. However, if the bond was issued by other than the service provider, the issuer remains contractually responsible for fulfillment of the pledged (mentioned in the bond) service. At the cost of the issuer, the bond holder would be transferred to a relevant service provider. An example of this may be a bond issued by a Ministry of Finance on a national, government-owned airlines. The Ministry must have suitable arrangement with the national airlines to provide the service upon presentation of the bond.

A service bond may also come to an end by revoking its contract (*iqalah*) via a new agreement between the issuer and the holder. *Iqalah* may be at the same issuance price or it may be at the prevailing sale price of the service at the time of maturity. The *Shari'ah* position on *Iqalah* will be discussed later.

7) Amortization of usufruct bonds:

Service bonds may also be amortized when the issuer buys them back from the market at prevailing prices. This allows the bonds to be used in open market operations by the Central Bank, especially, when the Central Bank issues them.

FIQHI **BASIS OF SERVICE BONDS**

Service bonds are based on the idea of transforming the ownership of services into financial assets. This transformation is essentially derived from the idea of documentation in writing of exchange and other contractual transactions, which is encouraged in the Qur'an (2:282).

The ownership of a service, as independent from the ownership of the rented asset and/or hired human hours, is based on the *Ijarah* contract.

Ijarah (lease) is a sale contract on a known service (*Manfa'ah*) of a defined or a well described asset/human for a given period of time. An *Ijarah* contract is an exchange contract in which the service is **sold** for a given and well-defined amount of money or any other valuable asset.

An *Ijarah* contract allows the lessee to become an owner of the service for which she/he pays the price. The service sold in *Ijarah* shall obviously be received by the lessee during a period of time or on sequential basis after the conclusion of the contract because time itself is an ingredient in the measurement of a service. Therefore, the nature of the possession in the sale of service (*Ijarah*) is different from that in sale of objects (*bay'*), although the same principle of possession still apply.

The three Schools of *Fiqh* (Shafi'i, Maliki and Hanbali) consider services similar to physical assets from the point of view of being an economically valuable asset (*Mal*). The Hanafis do not look at them as a *Mal*. However, with regard to a service owned by means of an *Ijarah* contract, they all agree that the lessee can dispose of the owned service before it is actually possessed, simply because a possession of a service can only be done by its consumption.[13]

The important implication of this is that a service owned by means of an *Ijarah* contract can be sold, given as a gift, bequest through inheritance or last will and be subjected to any other contractual relationships before its consumption (possession).[14]

---

[13] See: Al Zuhaily, Vol.4, p.763 and Abu Sulayman, p.34.
[14] Abu Sulayman, ibid.

Consequently, an *Ijarah* document can be handed over, or endorsed, to a third party in a form that represents a transfer of ownership against a price that can be freely determined between the owner of the service and the new buyer is a two party deal, to which the original price and its date of payment become irrelevant. This implies that a service bond is fully negotiable with no limitation in *Shari'ah.*[15]

Guarantee of the lessee in the second *Ijarah* contract

A re-sale of a service, owned as a result of an *Ijarah* contract, is obviously done by means of a new *Ijarah* contract (this can be performed by endorsement of the bond or by delivery if the bond is issued to bearer). This creates an issue related to the outcome of contractual relationships, as in each of these consecutive contracts the two parties are required to fulfill their mutual obligations. Thus, the lessor in a second *Ijarah* must guarantee the delivery of the service to the second lessee. Exactly by the same way the issuer of the bond guarantees her/him the delivery of the sold service as being the first lessee. By the same token, the new lessee guarantees delivery of the price to the lessor in the second contract as much as the latter guarantees the same to the issuer of the bond. This lessor's commitment of usufruct delivery is essential to any *Ijarah*, without which an *Ijarah* contact loses its basic characteristic of being a contract of exchange (*Mu'awadah*), and *Shari'ah* does not approve relaxing such a commitment.

As far as the payment is concerned, this may be done at the time of sale or at a future date if each contract includes any form of financing granted to the lessee.[16] In the latter case, the second lessor may obtain any and all kinds of collaterals for payments for fulfillment of the obligation of price payment.

---

[15] Most of the *Fuqaha* consider that the original seller of the usufruct does not even have right to restrict such a secondary sale on the ground that first sale entitles the first lessee to full ownership rights including the right to sell what one owns, and any such restrictions would interfere with the general principle of ownership, thus, they are void and invalid. However, those *Fuqaha,* who do not accept such limitations require that the second lessee may not be a person who may put a heavier burden than usual or contracted, on the leased asset. The example they usually give is renting transport animals and they say that re-leasing by the first lessee should not be to a person heavier than her/him. See: the F*iqhi* Encyclopedia, Vol.1, *Ijarah*.

[16] In this case payment of the price of the usufruct will be after the actual receipt of the service/usufruct. However, the whole idea of usufruct bonds is to mobilize funds for the issuer of

This leaves the guarantee of service delivery to be more important of a problem than payment of its price, as it may hinder the negotiability of service bonds.

To solve this *Shari'ah*-posed problem, we suggest either of two ways:

a) To treat service bonds like commercial papers whose endorsement implies a guarantee by the endorser. In this case, the final user of the may have the right to sue any of the signatories on the back of the bond for delivery of the service. Obviously, all intermediary lessees/lessors are not usually producers of the service. Thus, such a guarantee would only take a monetary form by being responsible for compensating the final bond holder of the loss of service in case of default of the bond issuer.

b) On the other hand, an administrative solution can be arranged by the bond issuer, under law enforcement authority of the government. It consists of providing sufficient collateral and guarantee by the bond issuer to maintain its ability to deliver the service in the maturity period of the bond, in such a way that leaves no room for any possible default. Such an arrangement may be controlled by the government and its law enforcement capabilities.[17] This kind of administrative arrangement turns the legal (*Shari'ah*-based) responsibility of the consecutive service sellers redundant because it is easier for the last bond owner to follow the issuer of the bond than its respective sellers.

   Moreover, the bond may be issued to the bearer, which makes pursuing its previous holders difficult and costly. Finally, under this arrangement the issuer's guarantee may be stated on the bond itself and made transferable to any new holder, whether the bond is issued to the name of a buyer or to bearer.

   This kind of administrative arrangement may be supported by a Shariah-based analogy to the principle of Hawalah. In Hawalah the

---

the bonds. Thus, delay of full payment until after delivery of the usufruct does not make sense. However, second transaction on the bond may contain such financing.

[17] It must be noted that in a usufruct bond the usufruct/service is, itself, the subject matter of the *Ijarah* contract, being the sale of the usufruct. Therefore, the seller of the bond (even in a second lease) must guarantee the delivery of the usufruct since such guarantee is an essential element in legitimizing the secondary *Ijarah* contract, itself, and legalizing the receipt of its value by any secondary lessor.

transferee has no right to follow the transferor, as long as the payee of the transfer is able to pay.

Although the first suggestion is characteristic to the commercial papers and doesn't have much of a hampering to their negotiability, its application to service bonds poses a serious constrain, especially when these bonds have long term maturity and when they are made to the order of the bearer which may imply many transactions on the bond before its redemption to the last owner. Consequently, the second solution should be considered superior.

The *Ijarah* with Deferment of Delivery of the Service

The *Ijarah* contract can be concluded with the condition of postponement of delivery of the service to a future time or to make it during a future period of time. This is known in *Shari'ah* as "an *Ijarah* suspended on future time". This is approved by the three Schools of *Fiqh* (Hanafi, Maliki and Hanbali).[18] Moreover, an *Ijarah* can also be concluded in which the service is well-described without the existence of the service-producing asset at the time of the contract. Both these *Shari'ah* clauses allow for the creation of service bonds in which the described service can be benefited from in a future time on the basis of using the proceeds of the sale of the bonds for expanding the service-producing facilities.

Reversal of an *Ijarah* Contract (*Iqalah*)

The meaning of the term *Iqalah* in *Fiqh* is derived from its Arabic language meaning, whereby *Iqalah* means removal or reversal. *Iqalah* is, thus, a means of ending an exchange contract like *bay'* or *Ijarah*.

There are two views among *Fiqh* scholars on *Iqalah* (reversal of the contract): one view considers *Iqalah* as a removal of the contract and its elimination in such a way that would bring all parties' situations to their pre-contract status as if the contract never took place at all, i.e., the contract is annulled along with all its

[18] Zuhaily, Vol.4, pp.762-763 and Abu Sulayman, p.53). See: also the *Fiqhi* Encyclopedia of Kuwait, Vol.1.

effects. This is the view adopted by Shafi'is, Hanbalis and Muhammad of the Hanafis. Malik and Abu Yusuf looked at *Iqalah* as a new sale.[19]

Accordingly, while reversal of the *Ijarah* contract must be at the same price and other conditions of the original *Ijarah*, according to Shafi'i, Hanbali and Muhammad, Malik and Abu Yusuf allow for the *Iqalah* to be at a price different from the original contractual price.[20] This implies that should the issuer of the service bonds decide to withdraw the bonds from the market, an option is open to offer the bond holders an amount of money different from the issuance price for surrendering their bonds.

However, it must be noted, in this regard, that resemblance to *Riba* must be avoided by regulatory instructions, so that no benefit may generate to a party in an exchange contract without a substitute (*'Iwadh)*.[21] This means that an *Iqalah* if it ever happens must be based on real difficulties in fulfilling the promised delivery of service, and the regulatory authorities must organize the bonds in such a way that prevents their issuance by any party that may not be capable of delivering the pledged service.

[19] While Abu Hanifa considers its annulment with regard to relations between the two parties of the exchange and a new sale with regard to relations with others.
[20] *Fiqh* Encyclopedia of Kuwait, Vol.5, pp.324-331).
[21] The *Fiqhi* Encyclopedia, Vol.5, p.329.

SECTION III
ECONOMICS OF SERVICE BONDS

RELEVANCE OF PUBLIC UTILITIES TO SERVICE BONDS

Service bonds can be issued for the service of any long-living asset or for human services. The bond may become like a simple commercial bill, just an IOU, stating that some one is in debt to some other by a given amount of service.

The economic importance of service bonds arises from applying them to public utilities, especially as a tool for resource mobilization of small savings from masses. Public utilities usually enjoy a relatively stable and steadily growing demand, especially in the developing countries. This demand is affected mainly by steadily stable factors such as population rate of growth, long term rate of growth of GDP, urbanization and rate of technological transfer to the developing countries.

Additionally, most public utility enterprises are major landmarks in the economies of many countries, especially developing ones. Many of them are either owned by the state or under its heavy control. Their prices are usually stable and determined with a long-run perspective. These prices are generally more sticky than the prices of other industrial products and their changes are usually slow and subject to lengthy procedural arrangements and public control.

Besides being compatible with the believes and values of the people in Muslim countries, service bonds may be able to raise public interests because they touch on matters related to the daily life of all people. Every one spends a considerable part of one's income on public utilities and is directly affected by one public utility or the other.

SERVICE BONDS AND SHARES

Service bonds are simply ownership documents. Yet at the same time what is owned is to be provided by some other party, so the bond represents a marketwise-valuable right on some other party: the issuer. This dual character of the bond: representing a real asset and an obligation on others is the source of its unique treatment in *Shari'ah* and the origin of its amenability to serve as a negotiable form of bonds within the limits of *Shari'ah*.

Therefore, service bonds can be treated like special kind of shares from the point of view of their ability to be priced and sold in the market. But unlike common shares, they do not represent partial ownership of an asset or group of assets. The fulfillment of the pledged financial right represented in a service bond to any specific bond holder is completely independent and not related at all, by any means, to the pledge given by the issuer to other bond holders even of the same issuance, same service/usufruct and same denomination. Furthermore, unlike common shares, the relationship and the pledged right are absolutely independent of the performance and profitability of either the bond issuer or the service provider.

Similar to shares whose return is not known in advance, the service bonds' return is also not known in advance, especially, when we talk about long term service bonds. What attracts buyers of service bonds is, in fact, the difference between the expected price of the service at the time of maturity and the issued price of the bonds. Undoubtedly, the expected price of the bond during the maturity period depends on many factors that include, in addition to the current service price, expected changes in technology, especially, in the field of the concerned service, the size of expected supply of and demand for the service during the maturity period, present and expected rate of interest and other opportunity cost of investible funds, inflation rate and the general economic environment in the country.

Consequently, unless potential buyers are convinced that the expected price of the service during the maturity period is higher than its current price by a differential that is substantial enough to reward investors on competitive grounds.

Furthermore, like shares in common stock companies service bonds provide a protection against inflation whether anticipated or not. This is due to the fact that the bond represents the ownership of a real service. Therefore, if the general level of prices is expected to increase, carrying with it the expected prices of concerned service, the market price of the bond may witness an upward push.

SERVICE BONDS AND PUBLIC DEBT BONDS

Service bonds issued by the government are similar to public debt bonds from the point of view that the proceeds of the bond can be used for any purpose at the discretion of the state. Therefore, service bond can be a good Islamically accepted substitute of public debt bond from the point of view that proceeds of sale of bonds can fill in the deficit gap in the government general and/or special budgets.

Service bonds are also similar to public debt bonds from another angle that both end up with burdening future tax payers in the amount of funds advanced to the government. In service bonds the government will be required to pay in the form of services or to buy the bonds back from the market at the prevailing price. In both cases future tax payers will carry the burden.

However, while the public debt bonds[22] require the government to periodically pay interest to the bond holders, service bonds postpone the whole payment until the maturity period. Thus, service bonds are closer to zero coupon bonds than to regular bonds. Lastly, both service bonds and public debt bonds represent a public debt that the government is required to settle some time in the future.

On the other hand, during inflation public debt bonds, unless indexed to certain price index, are characterized by wearing out the wealth of the creditors, while service bonds do not do that but instead they provide a shelter from inflation.

Also like public debt bonds, service bonds may be issued for short term or long term, especially, that the providers of services for which bonds may be issued have, usually, price increases slower than the general rate of inflation because most public utilities are usually subject to some form of price control or another. Furthermore, if such bonds are issued against public-sector provided services, the government, who issues the usufruct bonds, may have certain leverage in controlling the prices of such services.

[22] Like treasury bonds, treasury notes or other public indebtedness bonds.

THE EFFECT OF GOVERNMENT POLICIES ON PRICING SERVICE BONDS

The market pricing of service bonds depends on the forces of supply and demand which are, in turn, influenced by the general economic conditions, the special circumstances of the industry for which the bonds are issued and more important the design of the bond issuance and its focus points of attraction.

This means that the success of service bonds as an instrument for mobilization of savings depends on the government action and the public confidence in the stability of government policies. The attraction to savers lies in the price difference between the time of buying and the time of selling or availing of the service offered for sale in the bonds.

Consequently, the issuance price of the bond and the stability of the price of the service for which it is issued are the two most important variables that affect savers' decisions toward service bonds. Both these elements are determined by the government if the bonds are issued for publicly owned enterprises or publicly produced services which is the case in most Muslim countries.

On the other hand, one may argue that under the conditions of mixed economies in which the market institution is strong and predominant, prices of public services and public utilities are usually more sticky than prices of other commodities and services, because of reasons discussed earlier in this paper. This means that a prudent issuance of service bonds under those conditions would be expected to reasonably mobilize financial resources for the implementation and expansion of public services/utilities if there ever exists such potential resources that can be mobilized. What should always be kept in mind is that in most Muslim countries the behavior of government toward service bonds would be most essential for their success.

APPLICATION OF SERVICE BONDS

Service bonds represent an idea put forward as an instrument for mobilization of funds to finance the production and expansion of public services. This idea has not yet been tested or applied in any Muslim country.

However, a very close example of the application of such an idea is the telephone card that has been used in abundance in most countries. A telephone card is sold by telephone companies (we can imagine its issuance by any other party that offers the calling services for which the card issuer contracts a producer of telephone services) for a price that is paid in cash at the time of issuing the card. Presently, this card can be used immediately and is, usually, issued in small denomination of 20, 50 and 100 units of the local currency. The card does not, usually, offer any concession on the prices of the concerned services (although it may give its users the benefit of selecting lower fare of direct calling as compared to the fare of using the help of an operator). It also gives the card holder an immediate access, at wish, to the telephone services. Although phone cards can be, and they actually are, sold by their holders to other people, presently there is no organized market for selling and buying these cards. Therefore, the phone cards are not presently used for funds mobilization and they do not have any built-in attraction for placement of savings.

Now let us imagine a telephone card that is issued with a condition of deferred access to the calling services and it is sold at a discounted price, so that savers are attracted to buy this card instead of holding their funds in cash form, or in any other less attractive form of investment. This amended form of the telephone card would make an exemplary usufruct bond, and would create its own market under a suitable legal framework.

For a useful application of the idea of service bonds in any society, especially, in developing countries where the institutional and legal set up is not fully conducive toward the use of this kind of financial instruments, we believe that there is a need to provide a legal framework for the issuance and administration of the service bonds. Such a legal framework must deal with the different aspects, conditions, guarantees, supervision, control, etc., related to a successful introduction of this idea in actual application.

The legal framework must also follow some kind of conservative prudence in order to avoid the emerging of fictitious service bonds that do not rely on a real service that has been, or can realistically be, produced or at least guaranteed by the issuer of the service bonds. In other word, there ought to be certain legal conditions that restrict the access to issue service bonds to only the real factual producers of the service for which the bond is issued or to parties that can provide sufficient collaterals and guarantees that the given service is going to be factually produced in the economy.

A second pre-requisite for the success of service bonds in application is to introduce the idea to the masses of savers in the Muslim countries and inform them about its *Shari'ah* and economic characteristics and aspects.

The third pre-requisite for the success of this idea is to take it in a gradual manner so that the market would be tested by the issuance of one usufruct bond by a strong and reputed producer of a public service such as electricity or telephone services.

CONCLUSION

In this paper we discussed the idea of service bonds as an instrument for funds mobilization to finance both fixed and working capital of public services' enterprises within the limits of *Shari'ah*.

We have noticed that the idea of service bonds has many merits. The absolutely most important advantage of the bonds is their negotiability while they are still compatible with the Islamic norms, values and injunctions.

We have also showed that the service bonds can be used to finance most, or practically all, of public utility production and distribution.

We also discussed the details of the *Fiqhi* aspects of the idea of service bonds and showed how a combination of the principles of documentation and *Ijarah* can produce service bonds as a security, or financial asset that is *Shari'ah* compatible.

Finally, we discussed the economies of the service bonds and compared them with shares and public-debt bonds, and looked into the effects of governmental policies of their pricing and the pre-requisites for implementing this idea in the real life of the Muslim countries.

BIBLIOGRAPHY

1. Abu Sulayman, *Ijarah Contract as a Mode of Islamic Financing*, IRTI, 1992 (Arabic).

2. *al Fiqh al Islami and its Supporting Evidence*, Vol.4, Dar al Fikr, Damascus, 1983.

3. Bös Dieter, *Public Enterprise Economics*, North-Holland, 1986.

4. Ministry of *Awqaf*, Kuwait, *Fiqh Encyclopedia*, Vol.5, Kuwait, no date.

5. FitzGerald E.V.K., *Public Sector Investment Planning for Developing Countries*, MaCMilland, U.K., 1998.

6. Ghafur Abdul and Chowdhury Omar H., *Financing Public Sector Development Expenditure in Selected Countries - Bangladesh*, Asian Development Bank, Manella,1988.

7. Hamid Javed, Chaudhry Shahid Amjad, Ahmad Muntazar Bashir and Hauqe Ehsan ul, *Financing Public Sector Development Expenditure in Selected Countries - Pakistan*, Asian Development Bank, Manella,1988.

8. Rees Ray, *Public Enterprise Economics*, 2nd ed., Werdenfeld and Nicolson, U.K., 1976.

9. Soesastro M. Hadi, Simandjuntak D.S. and Silalahi P.R., *Financing Public Sector Development Expenditure in Selected Countries - Indonesia*, Asian Development Bank, Manella,1988.