Zakah Economic Concept in the Determination of Pricing on Islamic Banking Products

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***Abstract*—Determining the selling price and the purchasing price in Islamic banking products has attracted much attention in the post-crisis discussion of how to make the Islamic financial system more firmly running the principles of sharia. This paper investigates and calibrates a Pricing Model Islamic Bank. The model Pricing is adopted from the simple model of general equilibrium. We argue that the theory of consumption Islamic intertemporal namely: Islam executed by the community, Zakat is obligatory, No usury in the economy. We argue that, has its own pricing model defeat interest rate provisions of the central bank in Islamic states within Positive Economy. They would have been in a better position to set prices. The allowances accumulated by means of the maximize the zakah for the welfare of the people The imposition of zakat fees either from the side of the household as the customer, the company side, or from the bank side. It would be the Islamic pricing model proposed expected into consideration by regulator.**

Keywords*—The Islamic Pricing Model, Zakah, Islamic consumption, Islamic banking*

1. Introduction

The growth of Islamic banking institutions is not in line with the understanding and knowledge about the operations of Islamic banking system as a whole. .Although Islamic banking continues to develop the types of transactions and operations follow the needs of the Muslim community every year, many people are still not familiar with and know what and how Islamic banking to run its business activities, how to obtain benefits, and how to set the purchase price and the selling of financial products Islamic banking. In general, people believe that the products offered by Islamic banking is simply a conventional bank products are polished with the application-contract agreement relating to *sharia*. So this would bring negative perception the public that the word *Sharia* being just a fashion trend in Islamic banking.

One effort is the development of Islamic products pricing banking products both purchase price nor selling price of financial products of Islamic banking and financial institutions simultaneously. It most contentious is the pricing of the products of Islamic banking services, good pricing (pricing) financing products and loan products, for their referral factor (the price of a conventional bank products) for comparison. Pointed to the present Islamic banking still use interest rates (conventional banks) as a reference in determining the price of its products, giving rise to dubious attitude towards Islamic banking activities as stated by [1] that between Islamic banks and conventional banks have significant difference is low.

The determination of prices related to supply and demand in which the market price should be happen in a competitive market and there should be no fraud, and for the establishment of a price ceiling should consider the subjective value of an object on the side of the buyer and the seller. Determinants of price are the forces of demand and supply; to quote comes from domestic production and imports, while demand from the tastes and incomes; changes in prices caused by production inefficiencies, reduction of imports of goods also requested or market pressures; or it could be due to the scarcity and abundance of goods that may be caused by the actions of fair or unfair practices also. The size of the price increase depends on the magnitude of changes in supply or demand. When the entire transaction is according to the rules, the price increase happens by the Will of Allah [3]

In the Islamic concept, meeting supply and demand must occur in the same willing, neither party feels compelled to make a transaction at this price. Allah says, "for believers, do not eat each other neighbour's property with a false way, except by way of commerce that applies to consensual among you. And do not kill yourselves; Allah is Most Merciful to you "(QS; 4:29).

Willingly same circumstances a reversal of state persecution, which is the state where one party happy over the grief of others. In terms of price, the jurist formulates it as the price of the equivalent (term in fiqih; *thaman al mithl*) that have important implications in economics as competitive market conditions [4]

*Zakah*is a very strategic pillar of Islam, zakah management is the responsibility of the State, because it can be a source of state revenue to help society, charity can be channeled to productive pattern in the form *qardhulhasan*. People who give alms will be free from sin and be rewarded. Furthermore the impact of *zakah*is to clean the property acquired and received a blessing. Increasing the amount of *zakah s*imultaneously with the increase in assets acquired. The purpose of collecting zakat is intended for community development and benefit of the people. If a similar vision of the concept of *zakah* and pricing concepts of Islamic banking products are combined, are expected to faith and the understanding of the existence of banking products are kosher (*halal*) and *kafaah* will increase the market share of Islamic banking. Islamic banking has two strategic objectives is to maximize profit and maximize *zakah.* The higher the profits which the Islamic bank, the higher the collected zakahIslamic bank, the more prosperous the people who received the blessing of the Islamic bank.

This paper tried to recall the function of pricing of banking products at maximization zakahin order to improve the economy of communities other than purely profit maximization to be achieved by the banks. The role of Islamic banking in the process of Islamization axiology achieved through understanding and sincerity in performing engineering application of pricing formulas banking products through the economic concept of *zakah.* This paper is organized as follows; literature review discusses the theories that became the benchmark study of this paper, on the methodology discussed problems of the theory of the method explained, the last part is a result that contains a solution of the formulation and proof form of the formula as the end result of this paper.

2. Literature Review

2.1. The Role of Financial Intermediaries

The first definition of an financial intermediaries (FIs) that may come to mind is that of an economic agent who specialises in the activities of buying and selling (at the same time) financial claims. This is analogous to the notion of intermediary (or retailer) in the theory of industrial organisation as an agent who buys certain goods or services from producers and sells them to final consumers. The justification given by the theory of industrial organisation for the existence of such intermediaries is the presence of frictions in transaction technologies (e.g. , transportation costs). Brokers and dealers, operating on financial markets, are a clear example of such intermediaries in the financial sector. This paradigm can also provide a (simplistic) description of banking activities. Roughly speaking, banks can be seen as retailers of financial securities: they buy the securities issued by borrowers (i.e. ., they grant loans), and they sell them to lenders (i.e., they collect deposits). However, banking activities are in general more complex, for at least two reasons:

Banks usually deal (at least partially) with financial contracts (loans and deposits), which cannot be easily resold , as opposed to financial securities (stocks and bonds), which are anonymous (in the sense that the identity of the holder is irrelevant) and thus easily marketable. Therefore, banks typically must hold these contracts in their balance sheets until the contracts expire. (This is also true to some extent for insurance companies.)

The characteristics of the contracts or securities issued by firms (borrowers) are usually different from those of the contracts or securities desired by investors (depositors). Therefore, as argued by [5], banks (and also mutual funds and insurance companies) are there to transform financial contracts and securities. Of course, in the ideal world of friction less and complete financial markets, both investors and borrowers would be able to diversify perfectly and obtain optimal risk sharing. But as soon as one introduces indivisibilities (even small) and non-convexities in transaction technologies, perfect diversification is no longer feasible and FIs are needed. This transaction costs approach does not in fact contradict the assumption of (approximately) complete markets. For instance, as argue d by [5], the role of insurance companies is that of mutualizing idiosyncratic risks so that insured

persons obtain approximately the same diversification as they would under complete markets. A similar description could be given of mutual funds' activity. FIs can therefore be seen as *coalitions* (mutuals) of individual lenders or borrowers who exploit economies of scale or economies of scope in the transaction technology. As a result of the activities of FIs, individuals obtain almost perfect diversification.

Of course, this approach is not completely satisfactory because these transaction costs are given exogenously. The nature of these costs must be explored. Even if physical and technological costs may have played a historical role in the emergence of FIs, the progress experienced recently in telecommunications and computers, as well as the related development of sophisticated financial instruments, implies that FIs would be bound to disappear if a not her, more fundamental form of transaction costs were not present. Therefore, the subject of informational asymmetries — whether ex ante (adverse selection), interim (moral hazard), or ex post (costly state verification)—. These asymmetries generate market imperfections that can be seen as specific forms of transaction costs. These costs can be partially overcome by institutions that can be interpreted as FIs.

2.1.1. Transaction Costs

The simplest way to justify the existence of FIs is to emphasize the difference between their inputs and their outputs and to view their main activity as transformation of financial securities. For example, banks transform deposits of convenient maturity, such as demand deposits without any restriction on minimum amount and with low risk, into loans with a longer maturity, in larger amounts, and with credit risk. FIs may thus be viewed as providing services of assets transformation. Attractive as it may be, this scenario fails to explain why this assets transformation is not done by the borrowers themselves. A consistent model must include the assumptions of economies of scale or economies of scope that make it profitable for separate units (the banks) to specialize in transforming the financial assets issued by the borrowers. These economies of scale or scope come from the existence of transaction costs, which can be monetary but also include search costs as well as monitoring and auditing costs.

The present some of the classical transaction cost justifications of FIs by clarifying the implicit assumptions that each of them requires.

2.1.2. Economies of Scope

A primitive form of banking involved money changers who decided to offer deposit services because they had a comparative advantage in storing valuables. Having already a need for safe keeping places for their own inventories of coins and metals, they could easily offer analogous services to merchants and traders. The economies of scope existed between money-changing and safe keeping activities. However, this explanation is incomplete because the economies of scope mentioned concern essentially payment and deposit services. To explain the development of commercial banking, economies of scope must exist also between deposit and credit activities. Although frequently alluded to, these economies of scope are not easy to pinpoint, either at the empirical or the theoretical level. It is true that in a location model, in which agents are geographically dispersed and face transportation costs, it is efficient for the same firm or the same branch to offer deposit and credit services in a single location. Similarly, the same clerk is more efficiently employed if he or she takes care simultaneously of customers 'checking accounts and loan repayments. However, the same argument would also hold for any kind of services or activities; it is the ''central place'' story, which explains the existence of department stores or trade centers.

Something deeper must be involved in the economies-of- scope explanation of financial intermediation. A first explanation is given by portfolio theory. if some investors are much less risk-averse than the others, these investor s will in equilibrium short-sell (borrow) the riskless asset and invest more than their own wealth in the risky market portfolio. In a sense these investors have a comparative advantage in holding risky assets. A second source of scope economies is banks' expertise in managing liquidity risk, which allows them to offer credit lines as well as deposit services. This view has been put forward by [6]. A third explanation, also given by portfolio theory, is diversification. If a positive correlation exist s between the return s of two categories of securities, one having a positive expected excess return (over the riskless asset) and the other a negative expected excess return, the typical investor will hold a long position in the first one and a short position in the second one. If we call these investors banks, the first security loans, and the second one deposit, we have a diversification theory of financial intermediation [7].

However, these portfolio theories of financial intermediation are not completely satisfactory; because of limited liability it is not possible to assimilate a deposit offered by an FI and a short position in a riskless asset (unless deposits are fully insured). Similarly, the specificity of banks and insurance companies (as opposed to mutual funds) is that they deal essentially with nonmarketable securities: loan s and insurance contracts. Therefore, another approach is needed

for explaining economies of scope between, say, credit and deposit activities. This is where information asymmetries come in. If lenders have doubts on the credit worthiness of borrowers, they will trust more those borrowers that they know better (for instance, because they manage the borrowers' checking accounts and security portfolios). Similarly, if depositors are uncertain about the true value of risky projects, they may agree to participate in the financing of these projects if they know that their banker has a personal stake in them.

2.1.3. Economies of Scale

Of course, an obvious justification for intermediation is the presence of fixed transaction costs, or more generally, increasing returns in the transaction technology. For instance, if a fixed fee is associated with any financial transaction, depositors or borrowers will tend to form coalitions and buy or sell together in order to divide the transaction costs. (This argument does not work with proportional transaction costs.) Similarly, because of indivisibilities, a coalition of investors will be able to hold a more diversified (and thus less risky) portfolio than the ones individual investors would hold on their own.

Another type of scale economy is related to liquidity insurance a` la Diamond and Dybvig [8]. By the law of large numbers, a large coalition of investors will be able to invest in illiquid but more profitable securities while preserving enough liquidity to satisfy the needs of individual investors. This argument is not specific to the banking industry but also valid for insurance activities and, more generally, for inventory management. To have a genuine specificity of banks (as opposed to other intermediaries) informational asymmetries must again be introduced. These informational asymmetries are also crucial for explaining the superiority of bank s over financial markets in the provision of liquidity insurance.

2.2. Financial Architecture

The structure of Islamic financial model is particularly rich and complex. They provide a formal analysis of financial system where financial markets and banks coexist. The financial market equilibrium is reminiscent of [9] as informed traders face an exogenous liquidity demand. The way the banking industry is modeled is close to [10], except that banks emerge as coalitions of investors with monitoring ability, as in [11]. The model considers two types of agents: investors and firms. Investors have three different options: they can become a financial analyst (or informed trader), become a banker, or deposit their money in a bank. if they are all used at equilibrium, these three options must give the same net expected return. Since the informed trader and the banker options are costly, they must generate an expected excess return that covers exactly these costs. This condition determines the proportions of informed traders, bankers, and depositors in the economy. Firms are heterogeneous. They are characterised by an observable parameter θ(interpreted as their reputation). With probability θ they invest in projects with a positive NPV, but with the complement probability (1-θ) they are subject to moral hazard. They can then divert the funds to a negative NPV project that gives them private benefits.

Moral hazard can be avoided if a firm is monitored by a bank. the main result of Boot and Thakor's model is that good-reputation firms (such that $\theta>\theta$, where θ is endogenous*)* issue direct debt, and other firms borrow from banks. Banks and financial markets must consider the effect of information transmission via asset prices by assuming t*hat* firms have the option to make an additional investment, which is only profitable in a good environment, and that informed traders can assess this environment. Their information being partly reflected into asset prices, financial markets create an additional surplus, which benefits both firms and informed traders.

This model has an interesting implication regarding the relation between the level of financial market development and the choice of financing source (financial architecture). At an early stage of financial development, moral hazard dominates. This increases the value created by banks and decreases the value created by financial markets, which is only generated if good project are selected. At the same time, the initial lack of sophistication of financial market traders may imply that the cost they have to incur in order to assess the firm's environment is large. Therefore, in the early stages of financial development bank finance will dominate. Conversely, as the financial system evolves, credit ratings will decrease the importance of moral hazard [12], and the role of financial markets in the economy will expand.

2.3. A Model of a Perfectly Competitive Banking Sector

2.3.1. The Model

The model banking activity is the production of deposit and loan services. Banking technology is represented by a cost function *C (D,L),* interpreted as the cost of managing a volume *D* of deposits and a volume *L* of loans. [13]

were among the first to use the microeconomic theory of the firm to build a rigorous model of banks 'production functions. In their approach, banks can be described as multiunit firms that use labor and physical capital as inputs for producing different financial services for

depositors and borrowers. The main specificity of banks (or more generally, depository financial institutions) with respect to industrial firms is that their outputs (namely, these financial services) can be measured only indirectly, through the volumes of deposits *D* and loans *L* they generated. The apparent cost function *C(D,L)* of the bank is obtained by finding the efficient combination of inputs that generates a given vector *(D,L)*.

There are *N*different banks (indexed by *n* = 1, …,*N)* with the same cost function *C(D,L)* that satisfies the usual assumptions of convexity (which implies decreasing returns to scale) and regularity (*C* is twice differentiable). The typical balance sheet of bank is therefore as follows:

Assets	Liabilities
Reserves R_n Loans L_n	Deposits D_n

more precisely, the dif ference R_n between the volume of deposits D_n that bank *n* has collected and the volume of loans L_n that the bank has granted is the divided into two terms: cash reserves C_n (transferred by bank *n* on its account at the central bank) and the bank's (net) position M_n (positive or negative) on the interbank market. The difference between these two terms is that C_n typically bears no interest and is therefore optimally chosen at its minimum level defined by the regulator. C_n equals a proportion α of deposits. Thus, for all *n* :

$$C_n = \alpha D_n$$

The coefficient α of compulsory reserves may be used as a policy instrument through which the Central bank tries to influence the quantity of money in circulation in the economy. To complete the picture, a description of the real sector is needed, which consists of three types of agents: the government (including the Central Bank), the firms, and the households. The role of commercial banks is to collect the savings *S* of households so as to finance the investment needs *I* of firms. Finally, the government finances its deficit *G* by issuing securities *B* (treasury bills) and high-powered money M_0 (the monetary base) used by commercial banks to finance their compulsory reserves at the Central Bank. The monetary base is the sum currency in circulation plus reserves held by the banks at the Central Bank. This model ignores currency (the cash holding of households and relations with foreign countries); money consists only of the sum of deposits collected by commercial banks *(D*= $\sum_{n=1}^{N} Dn$*)*. Similarly, the monetary base M_0 equals the sum of the reserves of commercial banks on their accounts at the Central banks (this is the equilibrium condition on the interbank market) :

Households	
Securities ΔB	Saving S
Deposit ΔD	

$$M_0 = \sum_{n=1}^{N} Cn = \alpha D$$

In this simplistic framework, the increments in the aggregated balances of each category of agents are as shown in formula :$C_n = \alpha D_n$

2.3.2. The Credit Multiplier Approach

The usual description of monetary policy that can be found in elementary macroeconomics textbooks relies on this aggregate description. In this view, a change of the monetary base M_0 or an open market operation (a change in *B*) has a direct effect on money and credit because by the preceding conditions :

$$D = \frac{Mo}{\alpha} = \frac{G-B}{\alpha}$$

$$L = M_o \left(\frac{1}{\alpha} - 1\right) = (G-B)\left(\frac{1}{\alpha} - 1\right)$$

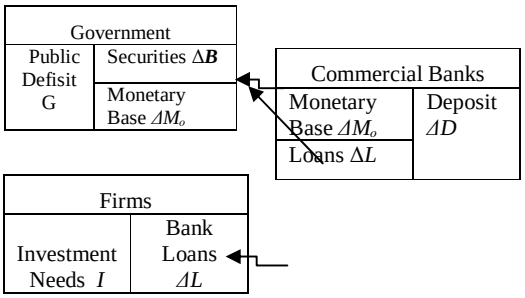
The money multiplier is defined by the effect of a marginal change in the monetary base (or an open market operation) on the quantity of money in circulation:

$$\frac{\partial D}{\partial Mo} = -\frac{\partial D}{\partial B} = \frac{1}{\alpha} > \mathbf{0}$$

Similarly, the credit multiplier is defined as the effect on credit of such marginal changes:

$$\frac{\partial L}{\partial Mo} = -\frac{\partial L}{\partial B} = \frac{1}{\alpha} > \mathbf{0}$$

The trouble with this simplistic description is that banks are taken as passive entities. Also, modern monetary policy is more accurately described as interventions on the rate *r* at which the Central Bank refinances commercial banks (assumed equal to the interbank rate). These interventions affect the behaviour of commercial banks and therefore the equilibrium interest rates on deposits (r_D) and loans (r_L). To analyze these effects need to model the individual behavior of commercial banks.



Figures 1.2. Increments in aggregated balances of various agents

2.3.3.The Behaviour of Individual Banks in a Competitive Sector

In a competitive model, banks are supposed to be price takers. They take as given the rate r_L of loans, the rate r_D of deposits, and the rate r on the interbank market. Taking into account the management costs, the profit of a bank is given by:

$$\pi = r_L L + rM - r_D D - C(D,L)$$

where M , the net position of the bank on the interbank market, is given by :

$$M = (1-\alpha)\, D - L$$

Therefore, π can be rewritten as :

$$\pi\ (D,L) = (r_L - r)L + (r(1-\alpha) - r_D)D - C(D,L)$$

Thus the bank's profit is the sum of the intermediation margins on loans and deposits, net of management costs. Because of the assumptions on the cost function C , profit- maximizing behavior is characterized by the first-order conditions:

$$\begin{cases} \frac{\partial \pi}{\partial L} = (r(1-\alpha) - r) - \frac{\partial C}{\partial L}(D,L) = 0 \\ \frac{\partial \pi}{\partial D} = (r_L - r) - r_D - \frac{\partial C}{\partial D}(D,L) = 0 \end{cases}$$

2.4. The Impact of Deposit Rate Regulation on Credit Rates

The Monti-Klein model concluded that if the markets for deposits and loans are independent, the impact on loan rates of imposing a maximum deposit rate is determined by the properties of the cost function of the bank. In particular, if this cost function is separable between deposits and loans, the pricing of loans is independent of the deposit rates. [16]have studied the same quest ion in a different context, in which the demands for loan and deposit services originate from the same consumers. They use an extension of the model which credit activity is introduced. Depositors are also borrowers, with an in elastic credit demand L at the individual level . Assume $L < 1$. The total (net) utility of a typical consumer (depositor-borrower) is therefore :

$$U = (1 + r_D) - t_D x_D - (1 + r_L)\, L - t_L x_L$$

where x_D(resp. x_L) is the distance from the bank where the consumer's cash has been deposited (resp. where the consumer's loan has been granted),r_L is the loan rate, and t_D and t_L are the transportation cost parameters for deposits and loans.

Note that transportation costs for loan s and deposits may be different (e.g., because the frequencies of these transactions are different) and that the consumer may use different banks for deposits and loans. A straightforward adaptation shows that if n banks enter, locate symmetrically on the circle, and compete in deposit rates and loan rates, the equilibrium is symmetric . All banks offer the same rates:

$$r^e{}_D = r - \frac{tD}{n}. \qquad r^e{}_L = r + \frac{tL}{nL}$$

They share the market equally and obtain a profit :

$$\pi^e = \frac{D(tD+tL)}{n^2}$$

The number of active banks in a free-entry equilibrium is determined by the equality between π^e and the entry cost F, which gives :

$$n^e = \sqrt{\frac{D(tD+tL)}{F}}$$

It is easy to see that loans and deposits are independently priced. If deposit rates are regulated (e.g. , if $r_D$is fixed at zero), this has no effect on r_L. The only thing that changes is that banks make more profit on deposits, so that more banks enter, which is welfare-decreasing.

However, another pattern appears if banks are allowed to offer tying contracts. Such contracts are defined by the fact that consumers can obtain credit from a bank only if they deposit their cash in the same bank (another possibility is that they get a lower credit rate if they do so). [15]show that such contracts would never emerge at equilibrium if banks were unregulated. However, if the remuneration of deposits is forbidden, attracting depositors is highly profitable to the banks. Therefore, they are ready to subsidize credit in order to do so.

2.5. The Role of Islamic Financial Intermediaries

The role of Islamic bank as an intermediary institution or retailer on the organization of the financial industry in economic theory should be committed to Islamic principles. The role of Islamic financial intermediaries according to Islamic economics is different and cannot be compromised; since it is based on the earthlife of view (*Weltanschauung)* is different. Islamic Economics incorporate God and human responsibility to God in the afterlife in the waking of thoughts and oriented to the life of the world and the hereafter (akhirat).

Islamic Financial Institutions as intermediary is expected to undertake a systematic

and continuous observation of the changes in the Islamic business environment and Islamic activity environment. According to contemporary economic schoolsthat the general principle and philosophy is based on five universal values, namely: *Tawheed*, *'adl* (justice), *Nubuwwah* (prophetic), *the Caliphate* (Government), and *Ma'ad* (Results). Of the five universal values of derivatives was built three principles that became characteristic and the forerunner of an Islamic economic system, namely: multitype ownership, freedom to act, and social justice. Values and principles are housed within a moral concept. Morals are the top position as the destination of Islam and proselytizing of the Prophet in refining the human character. Morals became a guide economic and business actors in conducting activities.

Islamic financial Institution as a business intermediary institution must begin to make their own pricing their products according to Islamic principles and rules of jurisprudence muamalah based on the Quran and theHaditof the Prophet *MuhammadSAW*. And aims to realise the benefit of mankind, then the Islamic bank must also keep five things contained in *maqashid ash shari'a*, which is guarding the treasure (*al maal*), soul (*an nafs)*, descent (*an nasl*), religion (*ad deen*) and sense (*al-aql*). Islamic teachings also have the principle of "*al ghorm bi ghonm"* (no return without risk) and *"al kharaj bi Dhaman*" (no pain no gain). Must not profit without risk, and may not get results without being sacrificed. Through this principle of Islam encouraged the people to take risks in life as long as it is done for the benefit (*maslahah)*, including in business. If this principle is practiced in the pricing of financial products banks, then every business transaction finance and Islamic banking will be protected from the elements tyranny and injustice.

Product development in Islamic financial institutions is often caught between the two rules which attract each other, the *sharia* and the positive law. There needs to be a concerted effort to find a way out, for example, draws up the rules and laws of its own Islamic finance and banks based on Islamic principles and rules of jurisprudence *muamalah*. It is very important that Islamic financial Institutions as intermediary institutions can show characteristic products from those of conventional financial institutions. Nowadays, Product development in Islamic financial institutions can follow the direction of conventional financial institutions, but the principles of Islamic products should not be abandoned. All compliant products can be applied to all kinds of categories, but must follow the consequences. The need for continued efforts to develop the Islamic financial engineering is to provide an alternative for Islamic financial products in the conventional world.

In Islamic pricing for financial product need to be involved early merger knowledge and science between life in the world and the hereafter [14]. Prices of products of Islamic financial are new variant in the Islamic financial institutions that has operational concept, purpose and values. The concept of *sharia* should be used as added value and achieve competitive differentiation in the market with conventional banks.

The role of Islamic banks and financial institutions are very supportive of progress in matters of payments, trade and economic development as instrumental in raising funds (savings) and a source of capital payments (financing) to the company. Bank as the management of a payment to encourage progress based trade barter into trade-based medium of exchange (money), and so on to trade with a loan or financing, so that economic development is advancing even banks are the heart and centre of economy which should be used by any company that wants to go forward.

The role of banks and Islamic financial institutions in the financial system [15] include: 1) The Transmutation of Asset is banks and financial institutions act as a diversion of assets that liquid from the unit lenders (lenders) to units of the borrower (Borrowers). 2) Transaction that banks and financial institutions to authorize economic operators to carry out transactions of goods and services. 3) Liquidity is the owner of the funds (surplus units) placing funds according to needs and interests and the bank or financial institution to authorize the management of liquidity to the liquidity shortage (deficit units). 4) skill and efficiency which acts as a broker bring together and simplify the parties need each other (debtors and creditors).

Basic principles and objectives of Islamic banks and financial institutions [16] are: (1) the prohibition of interest on each transaction; (2) the principle of partnership in all business activities are based on equality, justice and honesty; (3) only legitimate profit and solely kosher; (4) The financial management guidance to the public; (5) develop a healthy competition; (6) turn the zakat institution; (7) the establishment of a network of cooperation with other Islamic financial institutions.

2.6. The Islamic Finance and Bank Architecture

Islam postulates a unique relationship in an agreement between the Creator, human beings and society is based on the Law of the Godhead that directly affect the various fields of social work, political, economic and financial system. So to understand the way in economic matters became more organized in an Islamic system. Differences Islamic system with other systems is a unitary perspective that refuses to discriminate between this world and the hereafter with a force that all elements must be an overall balance. Consequently,

one cannot understand a particular aspect of the Islamic system as a comprehensive economic system.

In connection with the concept of macro and micro, Islamic economics refers to the theory of consumption inter temporal Islamic[17] that is Islam executed by the community, *Zakah* is obligatory, No usury in the economy, *Mudarabah* is a form of economy, Economic actors behave maximizing. The debtor in Islamic banks receive special attention, borrowers are required to be kind or tolerant of their debtors and give priority to the circumstances, the debtor termed receiver *zakah* and loans should be written as alms.

Business loans are usually short term, sometimes short-term loans such as medium-term loans. For long-term loans in a position of Islamic banks cannot provide loans directly and significantly expanded, short-term loans is dominated by the structure of its financial resources. So that it can contribute indirectly through the participation of investment funds. For that technique requires a different loan financing for different types of commodities.

To make the pricing of bank products, bank should pay attention to the difference in product mix of a bank (lending and fee-based services) because it can lead to different levels of volatility of bank earnings. The role of bank risk in price formation and products by Islamic banks should be better in theory than in conventional banks in balancing the absorption of external shocks due to the loss of bank financing partly absorbed by the depositor.

The wealth of a country is not determined by how much money you have, but is determined by the ability to produce goods and services, as well as efficiency in production. Elements interest rates are Oversimplification ; a) Rate of profit (theory Classical Adam Smith) resulting from the industry sector, b) Natural rate of interest (Theory Wicksellion) is determined by productivity and thrift, c) Marginal efficiency of Capital (Theory Keynes) is the present value of the annuity cash flow sector real (flow of profits) [17]. The government is the largest market, the mother of buyers and sellers with the main task is "*Haqqalghairumunafazun'alaihiSyar'an*" (giving the right to the seller and the buyer in determining the price at once protect both). Thus the concept of Value *Zakah*are 1) Net maximum profit is a means, the ultimate goal is *Zakah*, 2) Rules of games is *Sharia*, 3) combination of egoistic / selfish to altruistic / social ; Altruistic rather than self-interest.

2.7. Transaction Cost of Islamic Banking

As a business entity established within the scope of *Sharia* (Islamic law), Islamic banks are expected to be a guide for the purpose of Islamic economics, among others, to ensure that wealth is circulating naturally in various hands of many people without causing damage to the those who get legally by follows the various accounting standards and practices such as International Accounting Standards (IAS) and the standards issued bythe Accounting Auditing Organization for Islamic Financial Institutions (AAOIFI). This is required for Islamic banking because banking needs access *sharia*-compliant liquidity management where Islamic bank is not allowed to hold liquid assets such as treasury bills. Based on the reasons conventional bank began to accept deposits on the basis of a mark-up or *Murabaha* transactions.
Consequently non-Muslim British bankers become more expert in Islamic principles for innovative and imaginative teaching methods in response to client requests Muslim.

In case the principle of Islamic banking is actually implemented and market infrastructure provided complete, so the bankers will not have difficulty in pricing or pricing. Pricing in Islamic banking products include: the level of supply on the profit sharing ratio, margin *murabaha*, *Ijarah* fee, and fee-based income rates. For Pricing on the funding side products include: checking, savings, and time deposits. While on the financing side include product: financing based on buy-sell, rent, services, and investment [18].

In general, the factors that affect transaction cost in the pricing of banking products are as follows: 1) the condition / situation of the market; certain market conditions usually directly affects a bank's policies in the pricing of their products. Tight market conditions due to the crisis made banks relative increase the price of its products. 2) competition; in order to maintain market share in both product and business volume, pricing would optimally support the level of competition of a bank in the financial markets / banking. 3) government policies; in certain circumstances a bank will provide special prices on certain products in order to support government programs, such as micro-credit program or a simple housing loan. 4) regulations; provision of banking authorities for the purpose of maintaining the stability and health industry through its prudential banking regulation would directly be the determining factor pricing banking products. 5) the desired profit targets; certain income level is the target bank has always been one of the guidelines for the bank in determining the level of a certain price on their products. 6) period of time; product pricing also consider all aspects surrounding the time-related products (short term and long term). Where time is getting longer provide greater potential for the things that are not predicted or potential for problems in a banking product. 7) the company's reputation; under certain conditions, the bank is also considering its reputation in the market

and industry in determining the price of its products. 8) a very common element attached to the determinants price above is an element of risk, where the risk of becoming the most consistent element is present in each of the factors above.

2.8. Concept Economies Zakat

2.8.1. Concept zakah

The pillar of the economy mentioned in the Quran is zakat fiscal mechanism. "Take alms of their wealth, the charity that you cleanse and purify them, and pray for them, the real prayer you that the tranquility of life for them. And Allah is Hearing, Knowing. "(At-Tawbah (9): 103).

Zakat is a compulsory levy on people who own property obligatory zakat exceeding nishab (Muzakki), and distributed to the eight groups receiving donations (mustahik), namely: indigent, poor, fi sabilillah, ibnussabil, amyl, gharimin, bondsmen, and converts.

Zakat means *al-name'*, 'growth and development. Economically, zakat will increase aggregate demand and encourage wealth flowing into investment. The prohibition of usury will ensure investment flows into the optimal unabated, while the prohibition maysir will ensure investment flows to the real sector for productive purposes that would increase aggregate supply , "... an what you give in the form of zakat you mean to earn the pleasure of Allah, then that is people to double (reward)." (Al-Rum (30): 39).

The application of zakat system will have implications in various facets of life, among other things: 1) meet the needs of people who lack; 2) reduce the gap; 3) reduce the number of social problems; criminality, prostitution, homeless, beggars, and others; 4) maintain the ability to purchase (consumption) in order to maintain the public business sector so that the economy can continue to run; 5) encourage people to invest, not to accumulate wealth [19].

The system of zakat in Islamic economics is a provision or instrument specified Allah, which serves as a means of worship for those who pay zakat (*muzakk*i), which gives the benefit of an individual *(nafs*), and serves as an economic driver for the people in the environment that runs the system of zakat and provide collective benefit (*jama'i).*

2.8.2. Application of Zakah in Islamic Economic System

Zakah is an obligatory provision in the economic system of, so that its implementation through the official State institutions that have legal provisions.

The individual benefit of paying zakat is to cleanse and purify his/her heart of the nature of stinginess and excessive love of wealth, and enrich the properties of goodness in human hearts. This leads goodness zakat play its role as an instrument that provides collective benefits (*jama'i)* because zakat 'force' people who have sufficient wealth interact with other humans in need.

From the perspective of the collective and the economy, zakat can double the public treasure. This multiplication process occurs because of increased demand in the market and boost economic growth sparked public welfare. On the demand side is influenced by economic operators and the volume of the market, where the distribution of zakat to a class of poor people will be the revenue increased their purchasing power so that they contributed to the improving economy. Meanwhile, on the supply side occurs because the charity provides a disincentive for the accumulation of wealth by imposing silence 'chunks' that encourages treasure to be developed to investment in the real sector. So that charity plays a major role improving macro economy. Zakat funds ensure minimum consumption needs.

The effect of zakat to the economy can actually be explained by the monetary approach (MV = PT) owned monetarist flow in conventional economics. Monetarists mention that assuming the velocity of money (V) fixed and full employment (Y) are met, the economy will be affected by the policy of increasing the money stock (M) through an increase in the price (P) monetarist the quantity theory of money is indeed found money supply policy will not affect the real sector due to the increase in money supply would raise the price without any effect on the volume of production, employment and other real variables. Separation of monetary and real sector is known as the classical dichotomy. Monetarists believe that the real sector should increase through the addition of the factors of production or technology.

The positive impact of the application of zakat in the real sectors: 1) charity as a standard mechanism ensures the distribution of income and wealth, thus avoiding the accumulation of production factors inhibiting economic turnaround. 2) charity as a mechanism of economic turnaround can maintain the level of interaction of supply and demand indicated by MV = PT. 3) Zakat as accommodation citizens who do not have access to the market because it does not have the purchasing power. Zakat make them as active agents so that the volume of economic activity is still running. With the increase in aggregate demand and aggregate supply from time to time, then zakat in the economy can improve the welfare of the community.

2.8.3. Consumption Behaviour Theory of Inter-temporal

Referring to the theory of consumer behavior, namely the inter-temporal consumption

where consumption is done in two times, that is the present (first period) and depends also by expectations or the expectations and needs of future consumption (the second period), is mathematically written as follows:

a) Income (Y), consumption (C), saving (S), in the first period:

$$Y1 = C1 + S1$$

b) Income, consumption, saving in the second period:

$$Y2 = C2 + S2$$

[18] began his theory with the following assumptions: (1) Islam held by the public, (2) Zakat is obligatory, (3) there is no riba in the economy, (4) *Mudarabah* form in the economy, (5) economic actors act rationally to maximize the benefit. Applicability of several instruments in an Islamic economy would have an impact to change consumption behavior. Some instruments that may affect the volume of the amount of money allocated for consumption both during the period of one or two covers: 1) Zakat: the imposition of zakat in period 1 (Z_1) will reduce m_1 allocated to C_1. If there are no savings or borrowing in period 1 then the final spending $(m1 = FS = C1 + Z1)$ is equal to m_1. 2) donation or Sadaqah: donation or Sadaqah expenditure in the period 1 will reduce m_1 allocated to C_1. No savings or borrowing in period 1 then the final spending equal to m_1. 3) Rate of profit or revenue for the results *(rp);* if during the period 1 there are some m_1 allocated in the form of savings invested the final spending a period of 2 (FS_2) equals m_2 plus the number m_1 saved plus the rate of profit (rp) $(FS = m_2 + (1 + rp)\, m_1)$.

In the Islamic concept described by the hadith Rasulullah SAW whose meaning is "What you have is what you eat and what you have *Infaq*.", Then the income equation becomes:

$$Y = (C + Infak) + S$$

and simplified back into $Y = FS + S$

where: $FS = C + Infak$, FS is the final spending in the way of Allah.

Consumption in the concept of Islam is $(C + Infak)$, the symbol used is FS_1. The amount of savings the first period (S_1) is used as the second period consumption (C_{t+1}), then $S_t = C_{t+1}$. In the Islamic concept, a symbol used is FS_{t+1} or the equation becomes $St = FS_{t+1}$, because intertemporal consumption patterns is limited two periods (ie the period t and period $t + 1$), the revenue is assumed to only appeared in the first period alone, so it is not encountered Y_{t+1}.

3. Methodology

Islamic economic system methodology used in this paper, to consider the concept of utility of economic micro Islam on the side of demand, and the production concept of Islam on the side of supply. By paying attention to moral norms and shariah, elements sufficient condition, explanation and prediction based on theory with consideration of the rule of sharia, prediction of effect (with statistical and econometric), and does not distinguish between positive economics and normative economics. On the macroeconomic done by considering the concept of money which, according to the Islamic concept of money is a means of real sector transactions by avoiding usury Fadl, and considering that financial markets should always closely related to the goods market.

3.1. Banking in The Arrow-Debreu Model

In order to explain the earlier statement that a microeconomic theory of banks could not exist before the foundations of the economics of information were laid (in the early 1970s), a simple general equilibrium model a` la Arrow-Debreu, extended to include a banking sector. To put things as simply as possible, the model uses a deterministic framework, although uncertainty could be introduced without any substantial change in the results, under the assumption of complete financial markets. Each type of economic agents is denoted by a particular subscript: *f* for firms, *h* for households, and *b* for banks. For simplicity, the public sector (government and Central Bank) is omitted.

For simplicity, consider a two-date model (t = 1, 2) with a unique physical good, initially owned by the consumers and taken as a numeraire. Some of it will be consumed at date 1, the rest being invested by the firms to produce consumption at date 2. All agents behave competitively. To simplify notations, the model assumes a representative firm, a representative consumer, and a representative bank.

3.2. Problems

In the conventional financial system generally three economic actors are consumers (households), corporate, and the bank does not consider Zakat on any income. Similarly, donation or charity has not been considered in any expenses. So that the principles of Islamic economic system which is based on the theory of Islamic economics and housed within a character (Islamic behavior) was not disclosed clearly and firmly in the Islamic financial system. The fact now that the charity (*Zakat*), donation (*Infaq*) and alms (*shadaqoh*) charged performed only at the end of each financial transaction, and even then subject to voluntary and not included as an essential component in the formation of transaction costs as a unified Islamic

financial system, just as the complementary components of transactions just let you know that this product Islam.

3.2.1. The Consumer (Household)

The consumer chooses her consumption profile (C_1, C_2), and the allocation of her savings S between bank deposits D_h and securities (bonds) B_h, in a way that maximizes her utility function u under her budget constraints:

$$P_h \begin{cases} Max\ u\ (C_1, C_2) \\ C_1 + B_h + D_h = \omega_i \\ pC_2 = \Pi_f + \Pi_b + (1+r)B_h + (1+r_D)D_h \end{cases}$$

where$\omega_i$denotes her initial endowment of the consumption good, p denotes the price of C_2 , Π_f and Π_b represent respectively the profits of the firm and of the bank (distributed to the consumer-stockholder at t = 2), and r and r_D are the interest rates paid by bond s and deposits. Because, in this simplistic world, securities and bank deposits are perfect substitutes, it is clear that the consumer's program (P_h) has an interior solution only when these interest rates are equal: $r = r_D$

3.2.2. The Firm

The firm chooses its investment level I and its financing (through bank loans L_f and issuance of securities B_f) in a way that maximizes its profit:

$$P_f \begin{cases} Max\ \Pi_f \\ \Pi_f = pf(I) - (1+r)\ B_f - (1+r_L)\ L_f \\ I = B_f + L_f \end{cases}$$

where$f$ denotes the production function of the representative firm and r_L is the interest rate on bank loans. Again, because bank loans and bonds are here perfect substitutes, $P_f$has an interior solution only when: $r = r_L$.

3.2.3. The Bank

The bank chooses its supply of loansL_b , its demand for deposits D_b, and its issuance of bonds B_b in a way that maximizes its profit:

$$P_b \quad \Pi_b = \begin{cases} Max\ \Pi_b \\ r_L L_b - rB_b - r_D D_b \\ L_b = B_b + D_b \end{cases}$$

4. **Results**

4.1. Solution

4.1.1. Determine C_1 and C_2 in the concept of Islam

Income *(Y)* is the sum of consumption (*C)* and savings *(S)* in the first period:

$$Y_1 = C_1 + S_1$$

$$If\ C_1 < Y_1\ then:\ C_1 = Y_1 - S_1$$

When consumption is smaller than the opinion of the first period, there will be a saving and consumption is greater in the second period:

$$Y_2 = C_2 + S_2$$
$$Y_2 = (C_2 + S_1) + S_2$$
$$-C_2 = -Y_2 + S_1 + S_2$$
$$C_2 = Y_2 - S_1 - S_2$$

Consumption is assumed to be a period of 1 *(C_1)* and period 2 *(C_2)* is determined by the nominal amount of money *(m*) which is in the hands, then: $m_1 = m_2 = C_1\ and\ C_2$

Consumption in the Islamic concept known *(C + Infak*) symbol used is FS (Final Spending in Allah SWT. If there are no savings or borrowing in period 1, then:

$$m_1 = FS_1 = C_1 + Infaq\ /\ Zakat$$

When the first period there were some m1 allocated in the form of savings invested the final spending in the period 2 (FS2) equals m1 m2 plus the amount saved plus the rate of profit (rp), then:

$$FS_2 = m_2 + (1 + rp)\ m_1$$

Total savings in period 1 (S_1) which is used as consumption in period 2 (C_{t+1}) or in other words: $S_t = C_{t+1}$ in the Islamic concept becomes: $S_t = FS_{t+1}$

4.1.2. Profit Concept and Zakat Firm

Efforts to maximize profits also means maximizing producer surplus, and also means maximizing zakat must be paid. Object charity did not give effect to the average total cost *(ATC)*, which also means there is no effect on the profit generated. Similarly to the marginal cost *(MC)*, zakat does not give effect to the supply curve.

In the Science of Islamic economics, zakat object is quasi rent or producer surplus. The difference between the total revenue to total variable cost. Mathematically, the total revenue is the product of price and quantity *(PxQ)*. While the total variable cost *(TVC*) is the product of the average variable cost *(AVC)* and quantity *(Q)*.difference both represented by the shaded rectangle that is the product of the (P-AVC) with Q, is called producer surplus

$$Producer\ Surplus = TR - TVC$$
$$= (P\ x\ Q) - (AVC\ x\ Q)$$
$$= (P - AVC)\ x\ Q$$

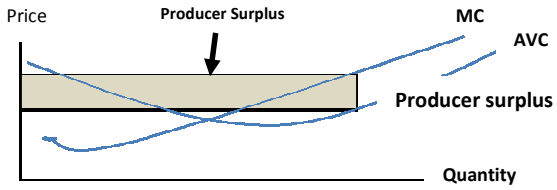


Figure 3.1. Producer Surplus/Quasi Rent

To profit is also called economic rent, the calculation is *Profit = (P-ATC) x Q, if (P-ATC)* rose, and *Q* increases, the profit will go up anyway. Profit maximizing behavior often encourages employers to apply mayhem, for example by transferring the costs to be borne to the other party in order to increase their profits. It needs to be reminded about the concept of economic justice in Islam that forbids do four things: do *mafsadah, gharar* transaction, the transaction of usury and gambling transactions.

Profit earned by pricing in the concept of Islamic economics conducted by market forces, namely the forces of demand and power supply. The jurist formulate it as the price of the equivalent, this concept has important implications in economics, namely the competitive state of the market.

To protect the rights of buyers and sellers, Islam allows and obliges the government intervention price when the price increases due to the distortion of genuine demand and supply genuine. Caliph Umar ibnKhatabr.a. never perform intervention price; when it went to a market and found that Habib bin AbiBalta 'sell dried grapes at a price below the market price. Umar r.a. immediately admonished: "raise your price, or leave our market." So the intervention price is allowed in Islam, for: 1) the public interest, namely to protect the seller in terms of profit margins, also protects the buyer in terms of purchasing power. 2) protect the attitude ikhtikar or ghabanfaa-hisy, where the seller is oppressing the buyer.

So the imposition of zakat to the producer surplus or quaci rent companies (QR_F) are: Liabilities Infak / zakat multiplied quasi rent *(infak x Qr)*. Then maximize the surplus produce firm (QR_F) that has been subject to *infak* is:

$$(P- AVC) \times Q - Infak\ (P\text{-}AVC) \times Q = Qr - Infaq\ (Qr_f)$$

or : $Quasi\ rent_f - Infak\ (Qr_f) = QR_f$

where : QR_f is producer surplus or quasi rent of firm has been subject *infak*.

If the investment firm is derived from the issuance of Islamic bonds $B_f$and bank financing Lf then the investment will also add a quasi rent (QR_F), which means that every firm at the start of his business has been started into account some useful benefits (beneficiaries) for the company and the community, for the donation and charity also in the calculation of its business plan:

Investment firm : $I = B_f + L_f$

Investment firm with Islamic : $I = B_f + L_f + Qr_f$

For the results to investors holding Islamic Bond (securities firm), and for the results to bank financing is the level of profits generated r_B and $r_L$firm and not based on the interest rate but the total system revenue. Both were obtained from managing investment B_f Islamic bond in the form of total revenue sharing system (revenue sharing) TR_{RS} which has a degree of uncertainty/ risk is lower from the standpoint of the owner of the funds. And manage investments coming from Lf obtain bank financing system for the benefit of total revenue (profit sharing) TR_{PS} have a level of uncertainty / risk is higher. both are added together as a profit or gain which must be divided and paid to investors and banks:

Profit or Total Revenue : *Total Revenue* $= TR_{BL} = (P\text{- }ATC) \times Q$

Profit or total revenue firm : $TR_{BL} = TR_{BRS} + TR_{LPS}$

Total Revenue bond and financing : $TR_{BL} = ((P - ATC) \times Q)_{BRS} + ((P - ATC) \times Q)_{LPS}$

Furthermore TR_{BL} reduced by infak firm : $TR_{BL} = TR_{BL} - infak\ (Qr_f)$

4.1.3. The concept of the Islamic Bank Profit

Approach to transaction costs presented exogenously used in this paper to explain the assumptions implicit role of banks in the transaction activity and proficiency of Islamic banks conducting economies of scope that is expected to maximize the results with a variety of output products of Islamic banks so that the average cost of products shrinking and revenue increased. On the assumption that economies of scale Islamic banks also expected to increase the output volume of products so that the average cost of the product is also getting smaller and increasing the bank's revenue.

The concept of Islamic banks profit in economic transactions according to [33] must meet the elements' *Iwad* understood as equivalent counter value in avoiding usury. Elements' *Iwad*it consists of: the risk (*ghurmi*), work and effort

(*Kasb),* and dependents or responsibility (Daman). Bank Islam in its function facilitate the economic mechanisms of the real sector have values of *sharia* macro such as: justice, *maslahah*, the system of *zakat*, free of interest (*riba)*, free of speculative activity nonproductive like gambling (*maysir*), free of things that are not clear and dubious (*gharar*), free from the corrupt or invalid (false), and the use of money as a medium of exchange. While the value of *sharia* micro programs are: the noble qualities that are exemplified by the Prophet Muhammad are *Siddiq*, trust, sermons, and *fathonah* owned by the banking agents (consumer, firm, and banks). Generally, banks determine the price aims to maximize the profit as the following equation :

$$\Pi_b = r_L L_b - rB_b - r_D D_b$$

In the Islamic concept of bank profits derived from income (revenue) r_L. income of bank financing $r_L L_b$ divided into several types of financing $L_b$namely:

- Income (revenue) *r* financing with patterns of deposit (*wadiah: Amanah and yadyadDhamanah): rw*
- financing income with loan patterns *(qardh): rq*
- financing revenue sharing pattern *(Musharaka and Mudaraba): rm*
- Income on exchange financing (*Murabaha, salam, Istishna): rmsi*
- lease financing revenue patterns (*Ijara, IjaramuntahiyaBittamlik): ri*
- Other financing income patterns *(wakalah, kafalah, hawalah, Rahn, Sharf, ujr): rl*

Then the income from Islamic bank financing are:

$$r_L L_b = rw + rq + rm + rmsi + ri + rl$$

rate of profit of Islamic bond that invest in bank rB_b reduced income Islamic bank are Total revenue sharing bond : TR_{BRS}

rate of profit deposit $r_D D_b$ reduced income bank are final spending (deposit) at second period : $rpFS_{2D}$

Considerate maximizes profit bank with pattern and infak Islamic is :

$$\Pi_b = (rw + rq + rm + rmsi + ri + rl)L_b - TR_{BRS} - rpFS_{2D}$$

The banks chooses its supply of loans L_{PS} , its demand for deposits FS_{2D} and issuance of Islamic bond B_{RS} :

$$L_{PS} = B_{RS} + FS_{2D} \quad (45)$$

5. Calibration Results

The Calibration results of Price formulas is a price as the result for each economic actor in microeconomics of Islamic banking is already taking into account Zakah base on sharia concept. The details of the formula on each microeconomic actors are as follows:

5.1. The Consumer (Household)

Maximizing the corresponding consumption of Islamic morality after Zakah is :

$$\mathscr{P}_h \begin{cases} Max\ u\ (m_1, FS_2) & (46) \\ m_1 + FS_{2B} + FS_{2D} = \omega_i \\ pFS_2 = \Pi_f + \Pi_b + (1+r)FS_{2B} + (1+rp)FS_{2D} \end{cases}$$

Islamic households generally have the main purpose of maximizing their utility at the level of consumption without having a savings by paying zakat with m_1 notation, as well as the level of consumption by having savings by having to pay zakat denoted by FS_2.

ω_i Demonstrates a good endowment of good consumption according to sharia principles that keep sharing to others through zakat during consumption (m_1) , saving (FS_{2D}), or lending (FS_{2B}).

p denotes the price of FS_2 , Π_f and Π_b represent respectively the profits of the firm and of the bank (distributed to the consumer-stockholder at $t = 2$), And in Islamic finance the interest rate paid is a revenue share agreed by all parties in bonds is $(1+r)FS_{2B}$ and deposits is $(1+rp)FS_{2D}$. Bank securities and savings must take into account the zakah paid from the profit sharing it receives as perfection of sharia transactions, so that the price for household savers and lenders for banks can be clearly shown ($\mathscr{P}_h$).

5.2. The Firm

where *f* denotes the production function of the representative firm and Maximize profits by managing their investments level *I* from the Islamic bond (issuance of a security company) denoted by $pf(I) - (B_f + TR_{BRS})$ and bank financing ($L_f + TR_{LPS}$). Price for firm is P_f has an interior solution only when firm will take into account the producer surplus to be generated plus the liabilities donation for the benefit of society denoted by *Zakah* (Qr_f). The firm also takes into account the profit in the form of total revenue with the Islamic concepts that will be paid to investors holding bonds and to bank financing provider (QR_f).

$$\mathcal{P}_f \begin{cases} Max\ QR_f & (47) \\ QR_f = pf(I) - (B_f + TR_{BRS}) - (L_f + TR_{LPS}) - Zakah\ (Qr_f) \\ I = B_f + L_f + Qr_f \end{cases}$$

5.3. The Bank

The Islamic bank can chooses its supply of loans with zakah (L_{PS}) , its demand for deposits with zakah (FS_{2D}), and its issuance of bonds with zakat Π_b in a way that maximizes its profit and Intended to contribute to the welfare of the ummah denoted by $(rw + rq + rm + rmsi + ri + rl)L_{PS} - TR_{BRS} - rp\ FS_{2D}$. Then the formula becomes as follows :

$$\mathcal{P}_b \begin{cases} Max\ \Pi_b & (48) \\ \Pi_b = (rw + rq + rm + rmsi + ri + rl)L_{PS} - TR_{BRS} - rp\ FS_{2D} \\ L_{PS} = B_{RS} + FS_{2D} \end{cases}$$

Bank to maximize the benefits of the results of operations include: offering the liquidity and payment services, transforming assets, managing risks, processing information and monitoring Borrowers, as the bank's transaction costs.

6. Conclusions

The proofed Price formulas is a price as the result for each economic actor in microeconomics of Islamic banking is already taking into account Zakah base on sharia concept.

The house hold have to maximizing the corresponding consumption of Islamic morality after Zakah. The Price formulas demonstrates a good endowment of good consumption according to sharia principles that keep sharing to others through zakah during consumption, saving, and lending.

The production function of the representative firm and Maximize profits by managing their investments from the Islamic bond (issuance of a security company) and bank financing. Price for firm has an interior solution only when firm will take into account the producer surplus to be generated plus the liabilities donation for the benefit of society by *Zakah*

The Islamic bank can chooses its supply of loans with zakah, its demand for deposits with zakah, and its issuance of bonds with zakah, in a way that maximizes its profit and Intended to contribute to the welfare of the ummah.

Bank to maximize the benefits of the results of operations include: offering the liquidity and payment services, transforming assets, managing risks, processing information and monitoring Borrowers, as the bank's transaction costs. To maximize profits Islamic banks within economies of scope banks to conduct a financial services product differentiation without usury nature and nature *gharar*. While on economies of scale of banks to increase the volume of products focused banking products without *maysir* nature and the nature of falsehood

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