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The Role of the Rate of Profit Concept in Creating Islamic Financial Market Stability

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***Abstract*—This study aims to establish a concept of rate of profit on Islamic banking that can create economic justice and stability in the Islamic Financial Market. To determine the role of the rate of profit as the basis of the profit sharing system implemented in the Islamic financial system, we can see the connection of rate of profit in creating financial stability, especially in the asset-liability management of financial institutions that generate a stable net margin or the rate of profit that is not affected by the ups and downs of the market risk factors, including indirect effect on interest rates. Based on the data collected approach, this kind of research is qualitative and quantitative research. In this research, a study-case research is held to see the effects of the use of indirect form of interest rate to the rate of profit of Islamic Bank in the period of rising interest-rate from the period of 2004-2009 in Bank Syariah Mandiri. The model used is a model with multiple regression analysis to determine the effect of independent factors on the Net of Profit Margin of Islamic Bank. The result from the statistical analysis shows a relationship of Net Profit Margin (NM) and its independent factors i.e. the Islamic Bank Balance Sheet Structure, SBI (Interest rate) and Bank's Capital. This research suggests the Islamic Bank to use rate of profit concept instead of rate of interest because it will inherently bring stability to Islamic Financial Market.**

Keywords—rate of profit, economic stability, equitable distribution of income, equitable distribution of wealth.

I. INTRODUCTION

The application of the concept of rate of profit [1] as a replacement of the rate of interest concept (interest rates) in the banking and capital markets (bond) in the Sharia system often faces problems because there is no yardstick (benchmark) in determining the profit margin on the contract of sale like *Murabaha* and the rental costs on the contract of leasing like *Ijara* in Islamic banking transactions or on Islamic bond transactions [2]. As a result, all the applications of riba in Islamic financial institutions like the four-types of interest rate formula i.e. simple interest, compounded interest, fixed interest, and variable interest, which are all determined in advance (predetermined), are all applied in Islamic banking products, especially trade and leasing based financing like *Murabaha* and *Ijara* [3].

Empirically, there are differences amongst countries in the application of rate of profit on trade-based products. Some countries apply a fixed margin (rate of profit) *Murabaha* for long-term (over five years), whereas some other countries implemented only short-term *Murabaha* (less than two years). In Pakistan, *Murabaha* with fixed margins can be used in short-, medium- and long-term transactions. *Murabaha* can be used for financing transactions, such as the the purchase of raw materials, supplies, equipment, asset purchases, import financing, export financing (pre-shipment), consumer goods financing, mortgage (home) financing, the purchase of vehicles, purchase of land, the purchase of the store, buying a computer, purchasing tour packages, educational package purchase, the purchase of a package of health and asset securitization *Murabaha* [4]. In Bangladesh, *Murabaha* (here means balloon payment) is used only for short-term transactions, while the product of bay 'muajjal with installments is used for the purchase of long term assets [5]. In the UK, *Murabaha* even is used in home financing transactions with a very long period of 20 to 25 years. In short, different countries are applying different types of sale based contract [6].

Among the critical issues that are emphasized in the debate over the concept of rate of profit, as a replacement of the rate of interest concept, is that whether Islamic financial institutions have incorporated elements of *'iwadh* (counter value for a benefit of the good or service) or whether they just use *ziyadah* (profit creation in the absence of activity in the real sector) in the determination of its rate of profit. According to the theory of Islamic rate of profit, to take a legal profit a product must contain three elements, namely: 1) the value added or value addition in a product as a result of the element of work (*kasb*), 2) risk-taking (*ghurm*) due to the risk of price changes on goods that is traded and 3) underwriting liability in case there is a defects in goods sold (*dhaman*) [7].

Nowadays, Islamic banks in financial centers around the world continue to use LIBOR (London Inter-Bank Offered Rates), which are the average lending rates of the largest banks in London as a benchmark in quoting rate of profit to their products. The use of LIBOR as a benchmark is practiced in the determination of profit margin (rate of profit) of *Murabaha* or *Ijara* for home financing, leasing and other commercial financing, such as financing of cars, motorcycles

and other consumer goods, as well as pricing sukuk Al-*Ijara* (Islamic bond). In Indonesia, Islamic banking is still using SBI (Indonesia Central Bank Certificate) or JIBOR (Jakarta Interbank Offered Rate) i.e. interest rate average of the largest banks in Indonesia, in determining the Islamic financing price for mortgages, multipurpose loan and other financing, as well as in determining the *ujrah* (rental cost) on sukuk al-*Ijara* in the Capital Market. The use of LIBOR or JIBOR is essentially the interest rate charged by the five largest banks in global financial centers such as London and Jakarta, which is basically the loan transactions between banks in the money market (not profit from real market), and this rate is determined by the forces of supply and demand for money (money supply and demand) as the cost of funds and is not based on the price of rent or (rate of) profit in the market for goods and services.

The use of LIBOR as a benchmark has raised pros and cons amongst Muslim economists. Mahmoud A. El-Gamal supports the conventional use of LIBOR as a benchmark or mark up on Islamic sale-based product like *Murabaha* [8]. According to the professor of Economics and Statistics and head of Islamic Economics, Finance and Management study at Rice University, the use of an "Islamic Benchmark" is unnecessary, impractical and dangerous because even though he acknowledges that the implicit rate (rate actually charged) in Islamic financial products differs with the rate of interest in nature, depending on the quality of the underlying asset, but Islamic benchmark in the Islamic financial market is not deep enough and did not have a good liquidity to form a uniform rate implicit (uniform) as a benchmark transaction. The differences of opinion among Islamic economists regarding the use of LIBOR and whether it can be used as a benchmark in the Islamic financial market in general, can be rooted in the use of LIBOR as a benchmark in the mark-up of sale-based products. They argue that LIBOR as a benchmark is treated only as a point of reference to the cost of capital in the Islamic financial market, which is currently co-existing with the conventional financial market that globally is using the time value concept of money. This is in contrast with the opinions of other Islamic economists that prefer to use the economic value of time concept, which refers to profit in the real sector.

The concept of rate of profit as a substitute for the concept of rate of interest is very important in Islamic finance theory, because it plays a very central role in assessing the price of any financial asset. In conventional finance, financial asset prices, especially bonds (including Sharia bond) is largely determined by the rise and fall of interest rates. If interest rates rise, the prices of financial assets with fixed interest (fixed coupon rate) will automatically fall, because the value of the present value or the current price of the assets are valued based on the discounted value of the cash flow of money to come, whereby interest rates are used as a measurement. So in essence, the rate of profit or margin on sale-based transactions, such as *Murabaha*, and the rental cost (ujrah) in *Ijara* transactions, basically follow the prevailing interest rate of conventional banks.

Malaysia and some other countries are using the LIBOR (London Interbank Offered Rate) as a reference in rental – based products like *Ijara* or leasing. While in Indonesia, based on research by the author, Permata Bank Syariah uses SBI plus premium in Indonesia Rupiah *Ijara* Transaction and SIBOR (Singapore Interbank Offered Rate) plus in US Dollar *Ijara* Transactions. Therefore, it is now very urgent to have a standard on Islamic Benchmark separated from conventional banks considering Islamic economics have different characteristics to conventional economies, especially in terms of determining the rate of profit as compared to rate of interest. Basically, the concept of rate of profit is the concept of ex-post (post determined-cash basis), while the interest is basically the concept of ex-ante or predetermined (accrual basis).

The determination of the rate of profit in Islamic financial products and Islamic bonds is a key to creating economic justice and stability in investment income and the welfare of the community. The justice issue can be seen in the form of a just (considerably low) business costs especially for the lower segment like micro entrepreneur when compared to using a system of interest (rate of interest). In the stability issue, unlike the conventional banking system, which is using interest rates, the rate of profit which will be used by Islamic Banks and Capital Markets (Bonds) should be guided by the rate of profit or gain in the real sector. In this paper, the author will focus on the rate of profit concept that can create stability in the financial system.

The big question that arises on the formulation of the problem in this research is: "How to realize the concept of rate of profit in the banking and capital markets (bonds) Sharia that can create economic stability". To answer the questions above then the question that follows is:

1) How is the role of the rate of profit in creating an equitable distribution of income measured by the net margin of the bank's asset liability management;
2) How is the role of the rate of profit in creating an equitable distribution of wealth which is measured by the volatility of financial assets such as Sharia Islamic bonds (*sukuk*) in the Islamic Capital Market?

II. RESEARCH METHODS

Types of Research and Approach.

Based on the scientific field, this research can be categorized as an Islamic Economic Research where research associated with the concepts of Islamic economics and then adjusted with the facts or practices in the field of Islamic economics. Based on the data collected approach, this kind of research is qualitative and quantitative research. The qualitative research is a research procedure that produces descriptive data in the form of words, relating to the understanding, meaning and value [9]. In this qualitative study, the author tried to explain the real facts occurred in the field on the application of the concept of rate of profit in Islamic banks both in the macro-economy and micro-economy levels. After that we see how the concept of Islamic

economics of the rate of profit in a comprehensive manner, by doing a research study on the Islamic Rate of Profit and the application of rate of profit which has been applied in the previous Islamic financial institutions [10]. Based on the level of achievement, this research can be categorized as a descriptive research and inferential research. Descriptive research is conducted to describe the phenomena that occur in Islamic financial institutions in terms of both macro and micro, in this case the banking and Islamic capital markets. Inferential research is done to find a solution as recommendation that the application rate of profit may bring justice and economic stability (equitable distribution of income) and the prosperity of the society (equitable distribution of wealth), both in the Islamic banking system and capital markets/bonds (Islamic Financial Market).

To complete this research, the author held a study-case quantitative research on the effects of the use of indirect form of interest rate to the rate of profit of Islamic Bank in the period of rising interest-rate from the period of 2004-2009 in Bank Syariah Mandiri. The purpose of this research is to analyze the concept of rate of profit that is used in Islamic Banking practice and its application as well as the influence of the rate of profit on the distribution of income and wealth (asset value) through the investment product and financing transactions in Bank Syariah Mandiri.

Data Sources and Data Collection Methods

In this study, the types of data used are primary and secondary data. Primary data is data that is extracted from the main data, in this study because it deals with the concept of rate of profit, the primary data is taken from the literature of Islamic Economics. Secondary data is the data obtained through the processing of the primary data using statistical tools. On this study, the author used the secondary data retrieved from the data of rate of profit that is called The Net Margin (NM) of Bank Syariah Mandiri (BSM) from year 2004 to 2009 (5 years). The period is selected due to the ideal condition for this research where there is a period of rising interest rates.

Data Processing and Analysis Methods

The main method of the study analysis is documentary research for qualitative research and combined with quantitative research. The research was done by analyzing data or facts that are logically composed from a variety of data both primary and secondary. Other analytical methods that had been used is a survey method (analytic survey), i.e. the research conducted to draw a conclusions in order to obtain further meaning hidden behind the data. To find the concept of rate of profit that creates economic stability, the use of quantitative research on the effect of interest rate volatility as represented by the SBI (along with other factor such as the structure of the balance sheet) to Net Margin (the rate of profit of Islamic Bank)) in the BSM for 5 years i.e. 2004-2009 is being conducted.

III. RESULTS AND DISCUSSION

The concept of rate of profit that can realize the economic stability of the banking and Islamic capital market in this research means the concept of rate of profit that can create economic justice in the distribution of income and wealth. Rate of profit that creates economic stability can be achieved through its role in maintaining the stability of the financial system in which it is realizing the equitable distribution of income and wealth.

The Role rate of profit as the basis of distribution of profit sharing system implemented in the Islamic financial system can be seen in the connection of the rate of profit in creating financial stability, especially in the management of asset-liability of financial institutions like bank resulting in stable net margin or rate of profit to be shared out between the customer and financial institutions that are not affected by the ups and downs of the market risk factors, including the indirect effect of the interest rate. Therefore, we need to see:

1) The role of the rate of profit on the stability of the Islamic financial system as measured by the net margin on asset-liability management of Islamic banks (to create equitable distribution of income);
2) The role of the rate of profit on the stability of the Islamic financial market as measured by the volatility of the value of Islamic financial assets (to create equitable distribution of wealth);
3) Verification of the empirical results of the concept of rate of profit in Islamic banks, by using quantitative research methods, by analyzing data or facts that are logically arranged from both primary and secondary data.

A. Rate of Profit Role in Creating Equitable Distribution of Income Measured from the Net Income Margin of Islamic Bank Asset Liability Management

One of the most important tasks of banks including Islamic banks is to transform the maturities of its assets and liabilities. Almost all banks have assets in the form of financing (loans) and investments in marketable securities, which is funded by liabilities in the form of demand deposits, savings deposits, term deposit and the issuance of securities which has shorter maturity than the asset [11]. The occurrence of this balance sheet structure, we named it the so-called Gap (difference in repricing time period) in the assets and liabilities that will have the implications on the exposure of the rate of profit/net income (or in this research, we called it Net Margin) in the bank as a result on the changes in the market variables including indirect result of interest rate that affect the asset-liability of the bank. For example, the intermediary function of banks offering mortgage financing with a *Murabaha* contract with a mark-up or margin of 14% per year permanently (fixed) for 10 years. To finance this home financing bank offering an investment product in the form of short-term deposits with maturities varying between 1-6 months with an equivalent yield of 7% per year equivalent. Here there is a difference in repricing (gap) between assets that are fixed or, in other words

the bank facing a gap risk by a fixed rate in 10 years asset with the liability that will be repriced every 1-6 months. The net result of bank income (net margin) or other financial institution (in a conventional bank is referred to a net interest income-NII) at the beginning of the first year thus amounted to 7 percent per annum. If in the second year, there is an increase of interest rates by 1 percent (usually started from SBI rate), this will affect the bank to repriced its liability by 1%, then the bank in the second year have a decreasing net margin to 6% per annum. There has been a loss of 1%, as bank is not able to raise the price of the asset- as a result of fixed 10 years asset.

Risk arises in the rate of profit because of the change (indirect) market variables such as indirect effect of interest rates rise in Islamic banks due to the longer-repricing maturity assets than liabilities is referred to the risk of refinancing (refinancing risk) [12]. As a result of the reverse effect can also occur if the maturity of the asset is shorter than a liability, then the rate of profit or net bank margin (Sharia) may go down if a decline in bank earnings due to the indirect effects of the decline in market interest rates. This is often referred to as the risk of bank assets to invest or we call it as a reinvestment risk. In general, due to a decrease in the rate of profit as a result of the influence either directly or indirectly on the bank's interest rate is often referred to as the spread risk which is a difference between income (revenues) of the asset and the cost of liability [13]. The Effects of changes in market variables such as interest rates to the rate of profit or a net margin of Islamic banks has become very important because the structure of Islamic banks profit whereby 90-100% of the revenues derived from sale based financing products like *Murabaha* and *Ijara* that use interest rate benchmark (SBI or SIBOR). Any economic system needs a financial system that can maintain the level or rate of profit (margin) which is stable and sustainable to create the stability of the banking and capital market system.

Another risk that is often occurred due to the difference in the maturity of asset-liability re-pricing period of financial institutions is called mismatching that can create liquidity problem. Mismatching is the difference due to the principal amount of assets and liabilities of Islamic banks. Looking at the maturity of assets in the bank either in the form of investment or financing has an average maturity of over 1 year compared to an average maturity of liability with the majority in 1 month period. This has led the bank running the risk of mismatch which causing liquidity risk that may lead to subsequent risks which is more crucial called the reputation risk. This is because banks are not able to provide liquidity in a timely manner resulting in a run-off of massive liquidity so that the banks can't operate anymore because it ran out of cash. From the above facts it can be concluded that the management of net profit margin or the rate of profit of Islamic banks becomes very important in maintaining the stability of the financial sector so that an economic system as a whole can work well. Some theories can be developed to manage the net margin of Islamic banks to be stable and has sustainable growth at such repricing gap models and maturity gap models that adjusted the net margin of the bank to be stable.

In addition, the risk of a decrease in net margin due to the changes in interest rates could lead to the collapse of the asset value (market value) of the assets of fixed income in the bank so that it can lead to instability in the financial sector even worse. The theory that has been developed to manage the market value or the value of the bank's assets is duration and convexity gap models. Financial stability in an economic system can be seen from several factors: 1) The absence of a guarantee of a return on the principal of the placement; 2) Have a positive cash flow in the growing economy condition; 3) Do not face the asset-liability gap and mismatch and 4) Do not connected in the structure of loans (financing) with another bank so as to cause a domino effect [14]. Four of these factors greatly affect the stability of an economic system.

In today's Islamic bank assets and liability management techniques, known as Asset Liability Management (ALMA), that uses the ratio of Rate Sensitive Asset (RSA) and The Rate Sensitive Liability (RSL) as a representation of bank's balance sheet structure is basically the same as in conventional banks. Especially if we are looking at the balance sheet structure of Islamic banks' asset and liability that are dominated by the sale based product, the gap and mismatch of the asset and liability nature basically the same with its conventional counter party [15]. Therefore, in order to solve this instability risk in the net margin, Hosein Askari in the opinion that the asset liability model of Islamic banks are ideal when there is no Islamic bank products that are based on the contract of sale and lease such as *Murabaha, Istisna*, *Salam* and *Ijara*. In the Islamic Bank ideal model which is developed by Hosein Askari, he described that ideally the assets and liability in Islamic Bank balance sheet should be only *Mudaraba* or *Musharaka* (equity based financing) products which is based on profit sharing scheme. This will create a perfect mirroring structure of balance sheet resulting in no gap and mismatch risk that will create instability in the bank net margin.

However, practices which are majority prevalent in today's Islamic banking, in order to finance any project, *Murabaha* is used with the the rate of profit or mark-up which is fixed for long periods of time and they are using an interest rate benchmark such as LIBOR from conventional banks or SBI (in US we call it Fed Funds). The creation of the Asset Liability mismatch in Islamic banks which is the same pattern as conventional banks would create ALMA risk that will be strongly influenced by interest rates. If we use the financial measurement tools such as Duration and Convexity as a measure of market risk as a result from changes in interest rates, it can be ascertained that the duration of Islamic banks would always be away above zero. This is because that the majority (70-80%) of assets of Islamic banks are based on the sale based product with a fixed mark-up (rate of profit) for long term. In theory, the ALMA structure of Islamic banks, on the other way around, should produce a "duration and convexity" that is close to zero (risk neutral) as to create stability in net profit of the bank.

The use of margin (rate of profit) in long-term fixed assets of Islamic banks in the *Murabaha* product massively, has create the negative gap of structure of the balance sheet (Rate Sensitive Asset / Liability Rate Sensitive < 0) or also called positive net refinancing. In the conditions of interest rate rises rapidly then this condition will result in adverse effect on the net margin of the banks because banks are not able to make changes in the rate of profit of the assets (already fixed in the long term). These events are called "negative spread" in conventional banking whereby the rising interest expenses exceed the interest income of the Bank. In a state of economic overheating, as it did in 1998 in Indonesia, the "negative spread" phenomenon is prolonged and the loss had been continuously eroded bank capital resulting in almost all banks have to be rescued by Bank Indonesia Liquidity Assistance (BLBI). The banks that had to be bailed out by the central bank rescued by issuing Government Recapitalization Bonds (Recap Bond) amounting up to Rupiah 650 trillion [16]. This condition has to be expensively paid through the taxes by all of the people of Indonesia up to now.

In Islamic banking practices, the wrong application in the use of *Murabaha* transactions occurred in Home Ownership Financing Product with fixed and long term margin (rate of profit) for 10-15 years which create high volatility if we use duration and convexity risk measurement. This practice is certainly contrary to the principles of Economic Value of Time concept in the theory of Islamic Finance as a replacement of Time Value of Money principle. *Murabaha* margin (rate of profit) is inherently based on the principle of Economic Value of Time should be based on short term profit in the real market (goods market not money market) and should be used for short-term financing. Rate of profit used in *Murabaha* transactions as the economic value of a short-term profit then should be reprice according to the nature of the transactions in the real sector. For *Murabaha* the profit rate should be benchmarked against the rental cost of the goods periodically. For instance, in car transaction it could be repriced once a month but for home financing it could be at least once a year like in home rental transactions. This would create a risk neutral balance sheet transactions in Islamic Bank, because *Murabaha* transactions now quoted in fixed profit rate but periodically repriced in shorter term that will create value "duration" equal to zero. Almost similar to this practice was *Murabaha* products with a capped system and can be repriced according to market rate (money market rate like JIBOR) was ever introduced and applied by Bank Syariah Mandiri. The difference with the concept of rate of profit is, they based/benchmarked on money market rate, like SBI plus, JIBOR or ATD (Average Time Deposit quoted by the State Banks) that is not based on the profit in the goods market like rental cost in house/car transactions.

The argument that why the majority of the Islamic Banks today is still using the sale based products (*Murabaha*, *Istisna* and Salam), contrary to the Islamic economist against this transactions, said that these transactions are allowed by the majority scholar (*jumhur ulama*) [17]. Naturally, this transactions are also needed by the Islamic Banks in order to offer a different product variants in the middle of the demands of customer demand that very wide and that the duty of the bank to create a stable asset-liability. Based on the principles of Islamic rate of profit, the transaction based on the contract of Sale Based Product or *Ijara*, the profit rate quoted either in the terminology of margin or rental cost (*ujrah*) are not used for long-term transactions. In risk management perspective, the longer the period the greater the duration of its value, so the more unstable the change in rate of profit resulting in the more risk in revenue that can cause income and capital loss.

As a solution, Islamic Bank can use variations in contracts with the same financing purpose. For example in financing home or car purchases, instead of using *Murabaha*, Islamic Bank can use the contract called *Musyarakah Mutanaqishah* (MMQ) and *Ijara Muntahia Bittamlik* (IMBT), where by the rate of profit (*ujrah*) repriced periodically according to the profit in the goods market. In the study of the rate of profit concept, these transactions then can be used as a solution for creating a just and stable distribution of income as its rate of profit can be adjusted (reprice) according to the rate of profit in the real sector. Based on this principle, the supposed margin in *Murabaha* transactions as well as the rental cost charged to the customer in MMQ and IMBT will be the same and also the nature of the rate of profit. In practice *Murabaha* rate charged to customers different in nature with a rental rate that is charged on transactions of MMQ and IMBT. *Murabaha* quoted in fixed and long term rate meanwhile MMQ and IMBT quoted floating and reprice-able based on JIBOR or SBI even though both transactions were used for the same purpose of financing.

Based on the principle of Islamic economics, in accordance with the rules of Islamic Law, the practice of using *Murabaha* for long term transaction also violate the basic principles of *riba al-fadl* (excessive/exploitative profit). Based on this principle, Islamic banks will manage the rate of profit of the product based on the maturity nature of the transaction. The practice of this principle will separate the management of Islamic banks into short-term assets (*Murabaha*, *Istisna* and *Salam*), medium term investment (*Ijara* and *Istisna*), and long-term partnerships (*Mudaraba*, *Musharaka*) portfolio [18]. With this asset-liability management system, the net profit/income of Islamic banks will not fluctuate due to changes in money market variables. In risk management theory, asset-liability structure with same repricing profile period on both side will create duration approaching to zero or risk neutral, so that it will be immune to the changes in market variables such as indirect interest rates (since Islamic Bank uses interest rate as a benchmark). Asset-liability management that implemented matched repricing profile will also have a sustainable rate of profit growth in line with the asset growth which will be distributed to the *Mudaraba* Deposits customer every month.

Furthermore, the rate of profit concept will be useful in determining the price of Islamic Bank assets like Financing. In its application, Islamic Bank uses the theory of Capital Asset Pricing Model (CAPM) and tries to adjust it with Islamic principles. CAPM theory states that in determining the

rate of profit (return) of an investment can be divided into two formulas, namely: (1) Formula represents the risk free return or RF, (2) formula represents the risk premium as a compensation for additional risk bearing for the investor on an investment in a certain time period. The CAPM final formula is: RF + β (Rm - RF)) [19]. The first formula is essentially to replace the element of the time value of money concept and the second is the formula concerning the risks associated with an investment in a project or the securities that are selected. If we viewed from the theory on how to determine the rate of profit based on this CAPM theory, the first element is basically based on the rate of interest concept which is the risk free interest rate. In terms of Indonesia case the risk free rate can be represented by Bank Indonesia Certificates (SBI) which is determined in the supply and demand of money in money market (market trade instrument below 1 year maturity). SBI interest rate then is used as the base interest rate (base rate) and benchmark rate in case of Islamic Bank for pricing *ujrah* or margin in the financial markets product and coupon for Indonesian bond product [20]. SBI considered as having no risk of default due to the consideration that the central bank as the issuer is part of the Government of the Republic of Indonesia.

Furthermore, using the basic theory of CAPM, Islamic bank extents this concepts for calculating the financing product such as other cost elements i.e. as operating costs (overhead costs), return on equity for stake holder and risk premium for default risk to be charged to the customer. Structurally, all the interests of "profit" are determined exactly in front. Cost of funds component is the compensation given to depositors, whose value approaches the risk free rate of return at a different levels of maturity. This is in line with the Keynes's liquidity preference theory. Demand deposit, Savings and Time Deposits, at different levels of interest rates is in accordance with the purpose of the transaction and the time period. Demand deposit is used for transactional purposes get the lowest interest rates compared to the savings that are usually used as a precaution transaction and deposits for investment (speculation according to the terms of Keynes). Deposits interest rates varying in its yield curve in accordance with the expectations of interest rate and the liquidity premium added if the product to be quoted fixed rate for long term like *Murabaha* originally based on the theory developed by Hicks and Hansen.

Islamic banks that only know the rate of profit for their product then use the benchmark cost of funds from conventional banks which are speculative and its volatility based on the dynamics of the financial markets certainly does not fit with the character of the rate of profit that is guided by the real sector profits. While risk premium component that also added in the formula reflecting the additional burden to the company or the debtor, as an anticipation of bad credit or default risk costs which vary according to the type of industry. In practice, small customer like micro entrepreneur get the higher risk premium charge from the bank resulting in unjust treatment for this segment as they will pay expensive rate of profit. Finally, added by the management profit as represented by the Spread, the asset pricing formula becomes:

Cost of fund + Overhead Cost + Risk Premium + Spread [21]

In practice, the components of risk premium imposed on the segment of micro and small businesses far exceeded the other components such as the cost of funds, overhead costs and the spread (ROA). Other additional practice is often applied in Islamic Banking called Term Premium which is basically an extra charged due to the fixed pricing quoted for its rate of profit because of the long maturity of the financing such as *Murabaha*. The longer the maturity, the greater the additional premium will be. With the percentage of bad loans are small, then from all the components of the income that earned from financing, the portion of a risk premium, the return on asset for the banker and the term premium is the most dominant component when we compared to other components, so that the financial system such as this would create an unfair income distribution or in terms of the Quran, only circulated among the wealthy amongst you.

In Islamic financial institutions, the term of the cost of funds is not known because it is predetermined and calculated based on the simple or compounded time value of money considered as usury transaction which benefit only the investors. The risk premium is added to address the risk of uncertainty/default risk (according to the opinion of Paul Samuelson) which is charged to the loans taker to ensure the return of the loan [22]. This practice against the Islamic principle because it would mean eliminating the element of risk which is one of the legal reason to allow the profit-making ('*iwadh*) by *the rabb al-maal* (owner of the funds) in the real sector transactions. Samuelson opinion is contrary to the opinion of Muhammad Baqir al-Sadr stating that the risk of uncertainty/default (risk premium) is not a factor of production and therefore the additional profit is not legal to be charged as a compensation for this risk [23]. Profit component to compensate business risk actually can be represented by the spread or return on asset components, i.e. the appropriate level of risk being taken for profit which is allowed by Islamic principles ('*iwadh*), as long as not persecute one another or exploitative.

In determining the rate of profit, Islamic Bank should have the real profit proxy that will used as a benchmark which is not speculative (real) and not exploitative, taken from gains in the goods market or the real sector. In taking profit proxy from cash transactions, for example Islamic Bank should not take interest rates in the money market as a benchmark. GDP which is calculated based on the value added of the national production of goods can represent (proxy) a minimum profit rate (rate of profit) nationally, as it is a measure of the level of output of 19 goods produced in the country. This opinion is basically in line with the opinion of Piero Sraffa as the basis for the calculation of the rate of profit [24]. After that in calculating the price of financial assets in Islamic banks, we can add other factors like the cost that should be recovered such as: Over Head Cost (OHC) and the profit rate coming

from asset turnover in the period of financing (Return on Assets) expected by management at the appropriate reasonable industry level. So based on this theory, the price of financial assets at Islamic financial institutions, according to the author should be:

$$GDP + OHC + ROA$$

Thus, based on the above general formula, the rate of profit in Islamic Bank should be cheaper and provide *maslahah* than conventional banking because it creates an equitable income distribution when compared to lending rates in conventional bank loans.

B. Rate of Profit Role in Creating Equitable Distribution of Wealth Measured by the Volatility of Asset Value of Islamic Finance

Basically, all financial assets have cash flow in the form of cash inflows and outflows. Cash inflows can be in the form of installments in the financing contract in Islamic banks, coupons paid by the issuer of Islamic securities and income from investments in the real sector. Cash inflows and outflows can include cash flows that are fixed and predetermined (fixed and ex ante) and cash flows that are not fixed and determined at the rear (variable and ex post). In the Islamic financial system, the cash flow that is fixed and predetermined can be seen on the sale based transaction such as *Murabaha*, *Istisna* and Salam as well as the transactions that are based on the rental agreement such as: *Ijara* and *Ijara Muntahia bit Tamlik* (IMBT). It's fixed and predetermined, because margin or mark-up (in this paper we call it as a rate of profit of the sale based product) is determined ahead and remain unchanged within the prescribed period.

From the characteristics of the transactions that generate cash flows that are fixed and pre-determined like this sale based transactions, then the value of a financial asset can be measured. The stability of the financial assets can thus be measured by the value of the asset changes to the change in the benchmark used in determining the transaction price (such as margin, mark up, *ujrah* and all kind of rate of profit) which involved rate of interest as the benchmark such as SBI (if the instrument denominated in Rupiah) and LIBOR (London Interbank Offered Rate) if the instrument denominated in US Dollar. In theory, the measurement of the value of a financial asset can be determined by Duration theory [25]. The risk of financial instability can be measured by the volatility of financial asset prices derived from the formula:

$$(dV /V) = -n (dR / 1 + R)$$

In other words, changes in the value of financial assets (including Islamic Financial Asset) can be affected by the changes in the benchmarks used to assess an asset. For example if interest rate is used as a benchmark on the formula in *Ijara* or *Murabaha* contract, any change in interest rates at 1%, it will cause changes in the value of an asset or assets by: -1 (0.01 / 1.1) for assets with a maturity of one year or at -0.91%. If a period longer used for example 5 years, the risk of price changes becomes larger assets, namely: -5 (.01 / 1.1) = -4.55%. So the management of financial assets with the interest rate benchmark is very vulnerable to the decline of asset price, which means that it will decrease the public wealth (the investor of the financial asset) in the form of the decline in the value of financial assets.

From this theory can be concluded that the Long Term *Murabaha* financing transactions, for example to finance home ownership, which is usually take a period of 15-20 years have a very large volatility i.e : 13.65% for *Murabaha* with a maturity of 15 years and 18.2% for *Murabaha* with a maturity of 20 years. Here the author concluded that the use of interest rates in Islamic transactions causing instability in the value of financial assets that can be detrimental to investors and lead to instability of the financial system as a whole, i.e both in financial institutions and Islamic bonds like Sukuk. For instance Government *Ijara* Sukuk SR01 Series with 12 percent p.a. coupon payment with a maturity on February 25, 2012 has ever reached the price of 107.7199 or appreciation of 7.7199 percent above the par (initial) level. While the Government Sukuk Series IF8 price with a coupon of 8.8 pct maturing March 15, 2020 had reached 98.50 price or suffer a capital loss of 1.5% of their principal amount [26]. The price movements of financial assets that can suffer a capital loss (the wealth decline) will lead to instability of the Islamic financial system, due to instability in asset-liability management of Islamic banks, which in turn affects the wealth of the society who invest funds in Islamic banks.

According to the Global Association of Risk Professionals, the interest rate charged on a loan is determined by a number of factors such as time period, namely: 1) Cost of Fund; 2) Spread / margin required for such products; 3) Market Conditions (how much is paid by competitors); 4) The period of the instrument [27]. Bank charges interest (rate of interest) on the credit transaction or financing for various ranges of period. Problems on the fourth factor in Islamic Banking because the loan interest rate is calculated based on the theory of Fischer's (The Theory Of Expectation), in which the determination of long-term rates based on the expectations of short-term rates in the future [28]. The Expectation theory is based on the calculation which create structure of interest rates or commonly known as the yield curve in the bond market (capital markets) in the form of positive slope (the longer the period, the interest rate will be higher). The determination of an additional element of term premium as a time-element component is made at the initial stage of agreement without any basis or guided by the profit or loss (rate of profit) in the real sector. Additional premium term is just following the trend prevailing interest rates in the money market and is linear based on the concept of the time value of money. In other words the concept of rate of profit used in *Murabaha* margin has followed the concept of rate of interest.

According to Islamic profit theory, the rate of profit taken in front in the Islamic transactions like sale-based products should be based on cyclical gains (circular repricing pattern) per transaction according to its economic value. If this concept is applied, the rate of profit in a long-term deal,

Islamic Bank has to do a mark to the market (MTM) process (the comparison with the rate of profit in the real sector) periodically. In other words, the price adjustment should be carried out periodically as compared to the level of profits in the goods market (repricing) in order to avoid the practice of adding without *illat / 'iwadh* according to the rules of Islamic jurisprudence.

In general, the current imposition of *Murabaha* profit based on money market rates plus a fixed term premium, basically based on Islamic Bank decision to overcome fears of rising interest rates on the long-term. Therefore, if interest rate unchanged, in practice Islamic banks will give *muqasah* (discount) every month or every year [29]. So muqasah is provided as a means for adjusting the gain (rate of profit) with market rates (rate of interest). According to the author, based on the analysis of *iwadh* (legal profit), the uses of risk premium and term premium as additional price component in Islamic Bank, are groundless. Instead of using fixed and long term rate of profit, we should use a circular/periodic rate of profit appropriate to the level of profit in the real sector. Rate of profit is circular (as opposed to interest rates that are linear), as a gain in the trading transaction in the period of sale of goods or services. Turn-over of goods sometimes fast and sometimes slow [30]. If it is faster, the gain will be big. If it is slow, the gain will be little. So, the gain or rate of profit will follow the pattern of an economic growth.

Empirical Study of Financial Stability in the Asset Liability Management in Islamic Banking

To support this qualitative research (related to the concept), author conducted a quantitative verification by empirical studies on the influence of interest rates on the rate of profit of one of the biggest Islamic bank in Indonesia (a case study). For empirical studies, author took the data of rate of profit growth of Bank Syariah Mandiri (BSM) from May 2004 to May 2009. The year 2004-2009 is chosen because at that period there was an interest rate hike from 7.25 % to 12.25 % due to the financial crisis in United State of America. This condition is ideal when we want to look at the effect of interest rate hike on the rate of profit of Islamic Bank. In a study conducted at Bank Syariah Mandiri from 2004 to 2009 author study the bank's rate of profit which is calculated from the portion of a Islamic bank profit apart from the customer portion represented by Net Margin (NM). The model used in this study is multiple regression time series model, because in this study there is only one dependent variable and more than one independent individual variable. In this analysis we will look on how big the influence of independent variables on the dependent variable. In this study, the independent variable is a numeric variable, since the independent variables were taken from the data of the financial statements of Bank Syariah Mandiri and Bank Indonesia publication data. The type of data is a time series data in the period of May 2004 to May 2009 (5 years).

The model used is a model with multiple regression analysis to determine the effect of 5 Factors i.e. : Balance Sheet Structure of Islamic Bank represented by the ratio of RSA/RSL (Rate Sensitive Assets / Rate Sensitive Liabilities), Islamic Bank Investment in Real Sector represented by the ratio FDR (Financing to Deposit Ratio), Interest Rate represented by the SBI (Bank Indonesia Certificate), Islamic Bank Capital represented by the CAR (Capital Adequacy Ratio) and Islamic Bank Credit Default represented by the NPF (Non Performing Financing) to rate of profit of Islamic Bank represented by the Net Margin to Deposit (NM) of Bank Syariah Mandiri. From the research results shows that the Net Margin of Islamic banks turned out to get affected by the interest rate movement. In this research we are using the interest rate of SBI (Bank Indonesia Certificate) as a comparison. Research models also illustrate the instability of BSM net margin/income to changes in interest rates, represented by the SBI and other independent factors as below:

$$\text{Net Margin} = \alpha + \beta 1\ \text{RSA / RSL} + \beta 2\ \text{SBI} + \beta 3\ \text{FDR} + \beta 4\ \text{CAR} + \beta 5\ \text{NPF} + \upsilon$$

The result from the statistical analysis shows a relationship of Net Margin and its independent factors i.e. the Islamic Bank Balance Sheet Structure, SBI (Interest rate) and Capital as below:

$$\begin{gathered}\text{NM} = 11270\text{-}0015\ \text{RSA / RSL} - \text{SBI}\ 0228 - 0225\ \text{CAR} \\ t\ (30.285)\ (-3.272)\ (-10.072)\ (-8.405) \\ se\ (0{,}372)\ (0{,}004)\ (0.0023)\ (0{,}027) \\ R^2 = 0.801\end{gathered}$$

From the above model it can be interpreted that every 1% increase in the SBI rates will cause a decrease in the rate of profit of BSM amounted to 0.228%. From this empirical data it can be concluded that the nature of the instability of Islamic banks to interest rates hike with the balance sheet structure (RSA / RSL) below zero (negative gap), will produce the same risk with conventional banks, namely the decline in the rate of profit of Islamic banks. In other words that the rate of profit character of Islamic banks is the same as the character of NIM (Net Interest Margin) of Conventional Banks with the Interest Rate System. Therefore the rate of profit in Islamic banks and Islamic bonds in the capital market should refer to the Islamic Benchmark referring to the profits in the real sector which inherently have low duration (volatility) as it will bring stability to the economy both in the banking system as well as the Islamic capital market.

IV. CONCLUSIONS

In conclusion, the stability on Islamic Financial Market which is measured from the equitable distribution of income and wealth of financial asset will be determined by:

a) The rate of profit in Islamic Bank that creates an equitable distribution of income as measured by the stability of the Net Margin on Asset-Liability Management of Islamic banks, can be achieved by separating the management of Islamic banks profit repricing profile based on short-term assets (*Murabaha*, *Istisna* and *salam*), medium term

investment (*Ijara*, *Istisna*) and long-term partnerships (*Mudaraba*, *Musharaka*). If the Asset-Liability Management in Islamic Banking follows the concept of an Islamic Rate of Profit , whereby the profit will always be marked to the market with profit in real sector and this will result in the net duration or volatility of the Islamic Bank balance sheet will be approach to zero or risk neutral so that it will be immune to the changes in market variables such as interest rates.

b) The rate of profit that creates an equitable distribution of wealth in the Islamic capital market can be seen from the volatility of financial assets such Sharia Islamic bonds (sukuk) that is more stable when it is using the concept in accordance with Islamic principles. From the economic analysis, we can see the main factor is a component of risk and term premium for long term being added in the pricing structure of Islamic financial assets such as Islamic bonds which is basically the same additional charged on the loan pricing structure for compensation due to the credibility of the borrower's. This risk premium along with the long term premium structure creates price volatility which comes from the high duration factor. With the concept of rate of profit which is accordance with Islamic principles, the rate of profit will be corresponding to the profit in the real sector and has always adjusted to the changes in the price in the real market (mark to the market methodology) so that the price of the *sukuk* will be more stable.

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