Agency Problems in Mudharabah Financing
The Case of Sharia [Rural] Banks, Indonesia.

Assoc. Prof. Dr. Muhammad Akhyar Adnan
Department of Accounting
Kulliyyah of Economics & Management Sciences (KENMS)
International Islamic University Malaysia
P.O Box 10 50728, Kuala Lumpur Malaysia
akhyar@iiu.edu.my

Muhammad
Universitas Islam Indonesia

ABSTRACT

The study is concerned with the agency problems that have arisen in the mudharabah financing in the Rural Sharia Banks, Indonesia. It has been focused to search (1) the projects attributes might be considered by the banks in dealing with mudharabah financing; and (2) the mudharibs' attributes which will be financed by the banks.

The research is basically explorative in nature, due to limited research has been done on this topic. Because of this reason, the combined qualitative as well as quantitative approaches were undertaken. The qualitative approach is trying to identify the factors which are deemed by the banks to deal with, both from projects' and mudharib points of view. The quantitative method is then applied to examine the factors considered statistically.

The study was conducted to 84 out of 89 Islamic or Sharia Rural Banks in Indonesia. 64 of respondents (76.19%) have returned the questionnaires. Selected numbers of banks' managers were also interviewed deeply. The returned questionnaires were adequate to be examined statistically.

The study has found that there are six attributes considered from the mudharabah projects point of view, which include the prospect of project, availability of collateral, robustness of project, project's financial statements, clarity of contract conditions, and projects' of time period. In regard to mudharib attributes, the study has also concluded five characteristics which are considered important. They include the business capacity, [personal] collateral, mudharibs' reputation and family background, and their business commitments. Further examination of those 11 attributes resulted five most significant factors: project's financial statements and time period of contract, mudharibs' skill, commitment and reputation.

Keywords: Agency problem, Mudharabah, Rural Islamic Banks, Indonesia.

Research Background

The existence of Islamic [or commonly stated as Sharia] Banks in Indonesia started from 1991. The establishment was initiated by Bank Mualamat Indonesia (BMI) in 1992 after the Parliament of the country passed and accepted the Banking Act No. 7, 1992, and particularly after the Government issued the Government Regulation No. 72, 1992. The growth of the industry became more progressive after the Bank Act No. 7 was amended by the Banking Act No.10 in 1998.

According to the Banking Act No.10 1998, Banking Industry is classified into two levels. They are General [Sharia] Bank, and Rural Sharia Banks. The Bank Indonesia (Central Bank) Statistic shows that in July 2006 there are now three full pledge Sharia Banks, 10 Sharia Banking Units[1] and 94 Rural Sharia Banks. These do not include about more than 3000 other Baitul Maal wat Tamweels (BMT), the micro finance industry which used to be operated under Cooperative Act, but they function like Sharia Banks. Legally, the BMT cannot be classified as Sharia Bank.

Although the market share of industry are relatively small, the growth shown by the industry is remarkable. The following table shows the market share development by the industry in comparison to aggregate industry until July 2006.

Table 1: Islamic Banks' Share to All Banks In Indonesia
(As per July 2006)

	Islamic Banks		Total Banks
	Nominal	Share	
Total Assets	22.86	1.51%	1517.06
Deposit Fund	16.51	1.42%	1161.04
Credit / Financing Extended	18.53	2.58%	716.79
LDR / FDR*)	112.23%		61.74%
NPL	4.71%		8.10%

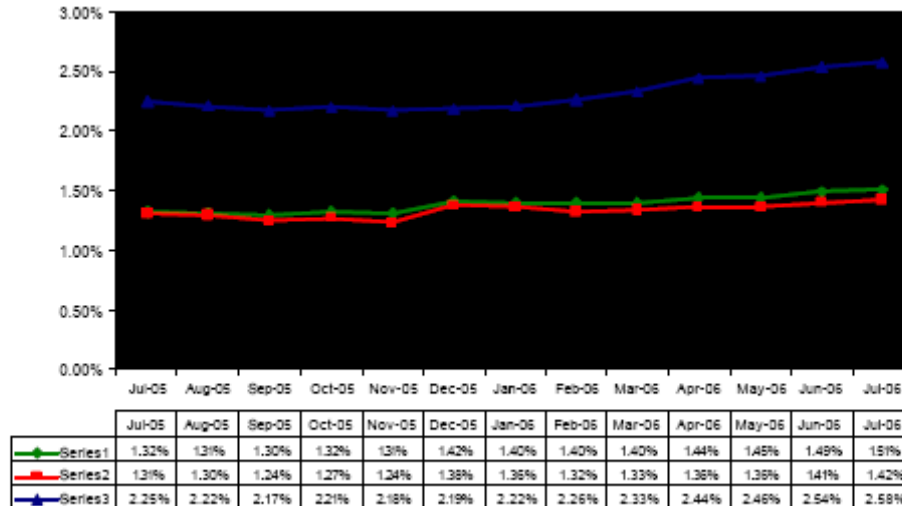LDR: Loan (credit) extended to Deposit Ratio
FDR: Financing extended to Deposit Ratio
<u>Source</u>: Bank Indonesia (August 2006) *Islamic Banking Statistic*

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[1] These Unit Sharia Banks are belong to Conventional [General] Banks which are given the rights and operate the Sharia Division in the form of branches.

The following table shows the month-to-month growth of Sharia Bank in comparison to conventional banks from July 2005 to July 2006.

Figure 1:
Islamic Banks' Share to all Banks (as per July 2006)

	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06
Series1	1.32%	1.31%	1.30%	1.32%	1.31%	1.42%	1.40%	1.40%	1.40%	1.44%	1.45%	1.49%	1.51%
Series2	1.31%	1.30%	1.24%	1.27%	1.24%	1.38%	1.36%	1.32%	1.33%	1.38%	1.36%	1.41%	1.42%
Series3	2.25%	2.22%	2.17%	2.21%	2.18%	2.19%	2.22%	2.26%	2.33%	2.44%	2.46%	2.54%	2.58%

Source: Bank Indonesia [2006] *Islamic Banking Statistic*, August 2006

Some predictions have been made [See Republika Newspaper, 21 December 2006], where Karim Business Consulting (KBC) forecasted that Islamic Bank market share can reach 6.67% by 2008, although the Central Bank of Republic Indonesia predicted a little bit lower, that is 5.18% by the same year.

Despite of good growth and remarkable market shared so far, the contribution achieved is still below the expectation. This is because Indonesia is known as the largest Muslim population country in the world. Indonesia now has not less than 220 million population, where at least 80 percent of them are Muslims. Consequently, the market share of Islamic banks industry should be much more than what have been achieved recently, or even predicted by 2008 or 2014.

The contribution of Islamic banks towards national economic growth is basically depending to large extent on how the bank can operate effectively, either in offering an attractive products or services, and playing its role in mediating between the society who has surplus fund, and those who in need of fund for investments or other purposes.

In doing so, most of Sharia Banks in the country used to offer the following products: (1) Funding products which include: (a) Wadiah current account, (b) mudharabah saving account and (c) mudharabah investment account. (2) Financing products, include (a) murabaha; bai' as-salam and bai' al-istina, (b) ijarah, (c) mudharabah and musharakah, and finally (3) supporting products which cover al-wakalah, al-kafalah, al-hiwahal and al-qardhul hasan.

The Islamic economics basically emphasize the implementation of preference to real sector than financial sector (Adnan, 2003; Bacha and Merican, 2006). Or, in the words used by Khurshid Ahmad (2000), "moving from debt-based to an equity-based or stake taking economy" [p 63]. Based on this, the Islamic Banks industry should have been focusing the operation to certain products such as mudharaba and musharaka, since these two product really close to equity-based or stake taking economy. However, the historical development of Islamic bank, in the world scope generally and in the country particularly does not show the same trend. What has been alluded by Karim [2001], and Warde [1999, 199] clearly show the way around. Mujiyanto [2004, 15] reported that in Indonesia itself the mudharaba contributes only 14.33%, while musharaka has even less: 2.86%.

The following table is the most current development of financing modes in Indonesia. Although it shows the promising change from the time of research conducted (2003-2004), the total composition of product portfolio still does not show what is expected by Khurshid Ahmad (2000) and Adnan (2003) as alluded earlier.

Table 2:
Composition of Financing of Islamic Banks (Million IDRs)

Items of Financing		Sep-05	Dec-05	Mar-06	Jun-06	Jul-06	Aug-06
Musharakah Financing	Amount	1,830,176	1,898,389	2,005,520	2,099,122	2,206,122	2,298,641
	Share	12.41%	12.46%	12.54%	11.55%	11.91%	12.07%
Mudharabah Financing	Amount	3,004,030	3,123,759	3,208,905	3,560,848	3,636,451	3,697,849
	Share	20.36%	20.51%	20.05%	19.61%	19.63%	19.42%
Murabahah Receivable	Amount	9,310,948	9,487,318	9,981,242	11,778,333	11,843,364	12,118,566
	Share	63.11%	62.29%	62.39%	64.85%	63.92%	63.66%
Salam Receivable	Amount	150	-	-	-	-	-
	Share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Istisna Receivable	Amount	297,086	281,676	289,179	293,359	301,079	303,335
	Share	2.01%	1.85%	1.81%	1.63%	1.63%	1.59%
Others	Amount	310,909	440,800	512,102	430,464	540,250	619,201
	Share	2.11%	2.89%	3.20%	2.37%	2.92%	3.25%
T o t a l		14,753,299	15,231,942	15,996,948	18,162,126	18,527,228	19,037,592

Source: Bank Indonesia (August 2006) *Islamic Banking Statistic.*

The fact shown above clearly indicates the significant difference between the theory and expectation and the reality. It is undeniable that a number of factors might play their role in this situation. Two different perspective can be possibly applied. One is the internal [Islamic banks] factors and the other is the external [Islamic bank] factors.

From the internal point of view, some factors might be noted. The full understanding of the product offered like mudharaba is one of important factors. The readiness to deal with the risk is perhaps another one. Most of bank managers used to behave as a risk-averse than a risk-taker. This imply that mudharabah has been perceived as one of risky products. The risk is considerably related to an agency issue. The agency issue is deniably associated with the external factors, where the honesty, transparency and trustworthiness of public in general are not really reliable.

The mudharabah contract is an agreement between two or more parties, where the profit and loss are shared among them: the capital owner or principal, and the agent or bank consumer. It is important to understand that both parties are ready to be transparent and disclosed on the business they have agreed to operate. Such contract is also strongly associated with a moral hazard and asymmetric information. The asymmetric information is very likely unavoidable in the contract of mudharabah.

Research Questions

There are basically two level of research questions are tried to be answered. First is to investigate the attributes of both project and mudharib which are mostly considered by the Islamic bank. At this level, the study is aiming to answer the following questions.
1. What are the project attributes considered by Sahibul Maal (Islamic Banks) in financing the mudharabah projects.
2. What are the mudharib attributes considered by Sahibul Maal (Islamic Banks) in financing the mudharabah projects.

In the second level, the study is aiming at examining the model designed to ensure that those attributes can effectively reduced the agency problem. The questions raised are as follows:
1. How far the screening mechanism of project attributes can reduce the agency problem in mudharabah financing
2. How far the screening mechanism of mudharabah attributes can reduce the agency problem in mudharabah financing

Research Objectives

Following the research questions stated above, the research has twofold objectives. In the first level, it is expected that the research can find:
1. the project attributes considered by Sahibul Maal (Islamic Banks) in financing the mudharabah projects, and
2. the mudharib attributes considered by Sahibul Maal (Islamic Banks) in financing the mudharabah projects.

In the second level, the research is expected to formulate:
1. The project attributes that can reduce the agency problem in mudharabah financing
2. The mudharabah attributes that can reduce the agency problem in mudharabah financing

Research Contributions

As it has been alluded earlier, there is a need to orientate the Islamic banking industry to be closer to real sector than financial sector (Adnan, 2003), or from debt-based to equity-based (Khurshid Ahmad, 2000). The best products closely linked to such direction are the

mudharaba, and musharaka. However, the historical data shown by the industry particularly in Indonesia, and generally in the international level are they way around. It is commonly raised by different parties the issue of obstacles faced to operate the mudharaba product, such as moral hazard, asymmetric information and so forth. There is no research has been conducted to investigate specifically the related attributes.

The research is an effort to offer the solution to this problems. It is expected that the attributes investigated can be a contribution to a general knowledge about the mudharabah practices during the modern era. Furthermore, the Islamic Bank industry particularly might benefit of utilizing the attributes in order to promote one of the basic tenet promoted by Islamic Economics.

Previous Research Survey

Some researches associated with the issue of mudharaba have been done by previous researches. Ibrahim Warde [1999] for example has focused his study on the impediments and problems of implementation of profit and loss sharing contracts. By applying the explorative method, he found that mudharabah contract is significantly associated with adverse selection and moral hazard. Although his findings are important and contributive, he has not formulated yet the measurement of adverse selection.

Abdul Fatih, A. A. Khalil, Colin Rickwood and Victor Muride (2000) have conducted the research related to the characteristics of agency in mudharabah contract between Islamic banks and their customers. They basically found that there are (1) the risk problems caused by moral hazard and adverse selection (2) linear relationship between project and it's profit, and (3) discretionary power.

They have also identified several aspects which are considered by bank (sohibul maal) in selecting (1) the mudharibs or projects (2) the criteria to accept or reject (3) the factors which determine the profitability of the projects, (4) the variables that can be used to re-structure the mudharabah contract, (5) the agency problems and (6) monitoring and contractual governance. However, the study has not tried to identify the influence or the contribution of the factors found to the agency problems faced in mudharabah.

Karim [2000] has also studied the suitability mudharabah and musharaka financing. He found that mudharabah and musharaka financing is fit to small and medium business enterprises, provided that incentive compatible constraint mechanism is applied. Which include (1) the setting up of capital proportion or the collateral contributed by mudharib, (2) a minimum operational business risk, (3) the project should be ready with the financial statements and (4) the project has relatively low uncontrollable expense.

According to Sumiyanto [2004] who conducted the research on mudharabah at Baitul Maal wa at-Tamweel (BMT), the projects attributes, mudharibs compliance and financing pre-requisites have a significant role in the increasing of mudharabah contract between the BMTs and their customers. Although the study was more focused, it was done for BMTs, instead of Islamic banks, which are much bigger in terms of size and complexity.

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In addition to above researches, Darmawangsa [2003] tried to research on the gharar aspects in mudharabah. By implementing the case study approach, he found that the gharar will emerge in the mudharabah contract when two conditions exist: (1) the project financed has an incomplete information, and (2) the sohibul maal (Islamic banks) has no sufficient information about the project, so that they have no capacity to control.

Although several researches in related area (mudharaba) have been conducted, this research has different perspective in terms of research questions, methods, scope and data analysis. This study is aiming at determination of project attributes considered by Islamic banks in order to offer their financing services, as well as the mudharib attributes in selecting the potential mudharib to be financed.

Literature Study

Among the reasons why this study was conducted, is that because of low proportion of mudharabah financing offered by the Sharia Banks in comparison to other products such as murabaha or other 'trading' products. It is why then many critics have been raised to the operations of Sharia Banks generally [See for example Kuran, 1986; Weiss, 1999; Ahmad, 2000, Adnan, 2003 just to mention but few]. Ironically, the mudharabah product has been the most popular example of products associated with the Islamic economics generally and Islamic Banks particularly in many discourses.

Among the concerns on the mudharabah operation is the possibility of agency problems which were used to be linked with modern investments. Jensen and Meckling [1976] are perhaps among the pioneers who raised the issue of agency problems. The agency concept is related to incentive based contract, where the rewards are provided by the principal for the party who is working in order to improve the productivity [Pass, Lowes and Davies, 1985, 285]. The reward can be in the form of bonus, profit-related-pay or profit sharing.

The mudhaharabah is defined as a contract between sohibul maal (capital provider) and the business operator (mudharib) in which the profit earned will be shared in the proportion agreed. In the case of loss, two parties will also share, where the capital provider is responsible to financial loss and the mudharib is charged with non-financial loss [see for example Antonio, 2000; IAI 2002].

Although the modern investment concept is not exactly similar to the mudharabah concept, both have many similarities. Because of that, associating or analogizing the mudharabah with the agency problem is plausible.

Jensen and Meckling [1976] offered two methods by which the capital owner can reduce the risk of inappropriate conducts of agent. One is by monitoring the agent and the other is by bonding the manager or agent to do certain things. Consequently, the process will limit the opportunity for agent to mismanage or abuse the project, but at the same time it will increase the expense which may reduce the profit of project. In addition with the

residual loss that might be happening, all those expenses are categorized as the agency cost.

According to Rechelstein [1992] the agency problem will rise when the principal hires the agent, and the agent does not share what he or she has earned. While Stiglitz [1992] views that the agency problem exists if in the relationship between the principal and the agent, there is an imperfect information. The last term is also used to known as asymmetric information [Jogiyanto, 2000, 369]. Where he states that the asymmetric information is occurring in the condition where some of investors have the information, while some others have not.

The asymmetric information can be either in action or information. It is related to action, if there is an hidden action, and is related to information if there is an hidden information. In other words, the asymmetric information is more related to the agent, where the issue of moral hazard and adverse selection can also be linked. Raviv's research [1990, 32-49] examined the asymmetric information and agency model. He found that there is association between asymmetric information and agency model under default probability. He further states that the existence of asymmetric information might influence the return of investment.

The 'principal–agent' relationship in the mudharabah context has been discussed theoretically by Habib Ahmed [2000]. He analyzed the limited information obtained by principal on mudharib, where he proposed the adverse selection index λ $(0 < \lambda < 1)$, Adverse selection is $= 1/\lambda$. While moral hazard has been symbolized as $E(C_f) < E(C_t)$, in which the actual profit is less than the expected profit. He also suggested that the difference should be identified by auditing practices.

Moral hazards might be occurring in some forms like excessive or abusing project cost, retaining some of the profit earned and many other window dressing activities.

On top of those discussions related to either adverse selection and moral hazards issues, there is a need to screen both the projects and the mudharibs. The screening, in turn, may help the sahibul maal or Islamic banks to reduce all related problems in practices. Some variables were identified and proposed. In terms of project, they are: profitability, return, risk, monitoring cost, accounting aspect, related social and environmental supports, contract period, cash flow and collateral [Khalil, Rickwood and Murinde, 2000, 641]. In terms of mudharib, they are: reputation, experience and qualification of mudharib, religiosity, the ability to acces information [Khalil, Rickwood and Murinde, 2000, 641]. In addition to this, Sumiyanto [2004] added the track record, business skill, ability to adjust him or herself in facing the business risk and ownership of the business.

All those variables need to be rechecked and examined, especially in the context of Indonesia, and particularly in the environment of BPRS. This is the main issue raised by this study.

Research Method

This research applies what so called as the *combined qualitative and quantitative design* [Cresswell, 1994]. According to him, the combined research can be considered in one of following research designs: (1) the two-phase design, (2) the dominant-less dominant design, or (3) the mixed-methodology design (1994: 177). Based on Cresswell's classification, this research might be classified as the two-phase design.

In this regards, the qualitative one is first conducted in order to investigate the possible attributes associated with projects attributes as well as mudharib attributes. Then, in the second step, those attributes are examined statistically.

In the qualitative steps, the explorative approach is applied. This include the following procedures (1) *Key-informant Technique;* (2) Focus *Group Interview;* (3) *Secondary-data Analysis,* dan (4) *Case Study Method* (Mudrajad, 2003: 73-74). The attributes identified either in regards to projects or mudharibs are then examined quantitatively.

The research samples are the Rural Islamic Bank (Bank Perkreditan Rakyat Syariah - BPRS) managers. 16 BPRS[2] – representing the banks which are spread widely in two important islands of Indonesia: Sumatra and Java which include West , Central and East Java – were chosen in the basis of purposes cluster sampling method.

The samples of banks selected are required to have following conditions: First is, the bank has been applying the mudharabah contract, and second is, the mudharabah has been operated since at least three years before the research is conducted.

There were 89 BPRS in the country during the research was conducted. 84 of them are sent the questioners, but only 64 of them replied and eligible to be analyzed. Finally, 16 of out 64 BPRS managers are selected to be interviewed.

The primary data are collected by interview and observation approach. The qualitative data then examined by triangulation technique (Moleong, 2000:175). It is important to ensure that the data are valid and reliable. In turn, it will guarantee the knowledge generated are true, re-searchable, verifiable and can be generalized (Strauss dan Corbin, 2003:14-15).

In the other side, the validity and reliability examination on the quantitative part is conducted with product moment correlation and alpha technique.

Research variables are decided after exploratory steps conducted. As alluded earlier, the following items are tried to be found during the research. First is the possible attributes associated with the projects, which include the characteristic projects deemed by the bank to be financed. Second, the possible attributes related to mudharibs, which comprise of the characteristics mudharibs are considered by the bank before the contracts approved and finally agencies problems in the mudharabah contract. The agency problems deals

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[2] The list of 16 BPRS can be found in the appendices.

with the disobedience of mudharibs on the agreed contract, particularly in terms of profits earned that must be shared with the bank. The agency problem is measured by comparing the percentage of expected and actual return (Towsend, 1979; Gale and Hellwig, 1985; Ahmed, 2000).

Data Analysis Technique

Following the research objectives, two tier of analysis technique are prepared. They are (1) qualitative analysis and (2) quantitative analysis. The first technique is aimed at investigating the attributes considered by Islamic banks' management in deciding both projects as well as mudharib prior the mudharabah contract is approved.

The quantitative analysis is designed to examine the investigated attributes resulted from qualitative approach. Two more techniques are applied at this level. First is the factor analysis which screen the attributes of projects and mudharib statistically. This is then followed by the regression analysis which ensure to what extent the attributes screened effectively are involving in the agency problems. It is expected then the research might be able to formulate the research model.

Data Analysis and Research Findings

Data analysis and research finding can be described in the the following steps: (a) description on how the mudharabah are practiced in the BPRS; (b) exploratory analyses of project and mudharibs' attributes; (c) analyses of factors attributed on projects as well as mudharib in financing in the mudharabah contracts, and (d) research model confirmation.

A. The following data might figure out the practices of mudharabah, particularly among the BPRS. The table below describes the portion of mudhrabah of the research samples.

Table 3:
The Proportion of Mudharabah Financing at BPR Syari'ah in 2004

The Proportion of *Mudharabah Financing of the total financing products offered.*	Frequency	Percentage
a. Less than 5%	24	37,50
b. 5% - 10%	00	00,00
c. 10% - 15%	00	00,00
d. 15% - 20 %	40	62,50
e. More than 20%	00	00,00
T o t a l	64	100,00

Source: Analyzed Primary Data.

The above data is in-line with the data issued by Central Bank of Indonesia, where *mudharabah* contract constitute about 15.35% in 2004 (and 19.42% in August 2006) of

the total financing products applied [See: Table 2 above]. This is one of the reasons why this study in conducted.

The *mudharabah* contract can be further classified into two types. They are the *Mudharabah mutlaqoh* or Un-restricted Investment Accounts, and *Mudharabah Muqayyadah* or Restricted Investment Accounts. How the preference of BPRS in applying them, can be seen in the following table.

Tabel 4:
The Proportion of *Mudharabah Mutlaqoh* and *Mudharabah Muqayyadah*
at BPR Syari'ah in 2004

Types of Mudharabah	Frequency	Percentage
a. Mudharabah mutlaqah (Un-restricted Mudharabah)	36	56,25
b. Mudharabah muqayyadah (Restricted Mudharabah)	28	43,75
c. Both	00	00,00
Jumlah	64	100,00

Source: Analyzed Primary Data

As shown in the above table, majority of BPRS prefer the *mudharabah mutlaqoh* or unrestricted investment accounts (56.25%) than *mudharabah muqayyadah*. Two main reasons may describe this phenomenon. First is because most of customers who invested their money also prefer this type of mudharabah, then it is easier for the banks to utilize the investment under the same principle. The second reason is that, the *mudharabah mutlaqoh* is more flexible as well as more manageable (and expectedly more profitable) than *mudharabah muqayyadah*, since the last is committed to some constraint stipulated by sahibul maal [Karim and also Waris[3], 2004].

In regard to the length of contract, the research found that most contracts were signed for 1 – 2 years (81.25%), and only 18.75% of the contracts has between 2.1 – 3 years period. This also confirms that no contract is signed for longer than 3 years, as shown in the following table.

Tabel 5:
Length of Mudharabah Financing Contract
in BPR Syari'ah in 2004

Length of Mudharabah Financing Contract	Frequency	Percentage
a. 1 – 2 years	52	81,25
b. 2,1 – 3 years	12	18,75
c. 3,1 – 4 years	00	00,00
d. 4,1 – 5 years	00	00,00
e. 5,1 – 6 years	00	00,00
T o t a l	64	100,00

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[3] This view was expressed during the interview. Karim (was the former manager of one Islamic Banks, and Waris was one managers of the interviewed BPRS). The interviews were done separately in August, 2004.

Source: Primary Data Analyzed

The above trend indicates two things. One is the BPRS were avoiding the longer contracts due to limited fund available for financing, since the BPRS are classified as small and medium size banks. The other is that the banks used to follow the urf or socio-cultural habit or business practices in general. The next table which describes the types of business funded by the banks perhaps support this practices.

Table 6 below shows the types of industry which are financed by banks under mudharabah contracts.

Tabel 6:
Types of Business / Industry Financed under *Mudharabah*
by BPR Syari'ah in 2004

Types of Business / Industry	Frequency	Percentage
a. Agriculture	07	10,94
b. Husbandary	15	23,44
c. Trading	33	51,56
d. Manufacturing	09	14,06
e. Craft	00	00,00
f. Other	00	00,00
T o t a l	64	100,00

Source: Analyzed Primary Data

As indicated in the table, trading sector are dominating the mudharabah contract by 51.56%. According to most of bank managers who were interviewed, they believe that trading is the most manageable sector, which also ready with some conditions required such as the availability of financial statements and other related documents. In turn, this fasilitates the banks in doing their control function. Moreover, trading sector is more flexible than for instance agriculture and husbandary which used to be committed with other external factors like weather, season and so forth.

B. Explatory analysis on attributes of projects and mudharibs.
Based on the questioners circulated among the respondents which were followed by in-depth interview, the following projects attributes are noted.

1. Minimum business risk.
2. Accounting information system.
3. The certainty of return.
4. Low monitoring cost.
5. Project's rate of return
6. Project's soundness
7. Guarantee / Collateral
8. Project cash flow
9. Contract period
10. Project horizon

11. Prospect
12. Business's going concern
13. Contract conditions

Based on the same method of exploring of projects' attributes, the following factors are also noted with relation mudharib's attributes which are considered important by the management of BPRS.

1. Having skill in the related business / area
2. Market familiarity
3. Ability to correct the business risk
4. Possesing the collateral
5. Family business background
6. Business commitment
7. Ability to articulate the business language
8. Having business habit
9. Having own business
10. Historical business lingkage with Sahibul Maal
11. Ability to grap business opportunity
12. Social class
13. Ability to anticipate business risk
14. Track record

C.   Analyses of factors attributed on projects as well as *mudharib* in financing in the *mudharabah* contracts.

As described earlier, there several attributes noted for both projects and *mudharibs* from the BPRS management point of view. At his sections those attributes are statistically examined. The following table shows the ranks of the attributes and their standard deviations.

Table 7:
Ranking of all Projects' Attributes

Attributes	Abbreviation	Mean	Std. Deviation	Analysis N
Certainty of Return	PSTHASIL	4.30	.68	64
Collateral on Project	JAMINAN	4.09	.68	64
Prospects of projects financed	PROSPEK	4.02	.72	64
Projects' rate of Return	TKRETURN	3.97	.76	64
Project's Period of Financing	JGKWAKT	3.94	.79	64
Projects' rate of Risk	TKRISIKO	3.88	.85	64
Projects' Cash Flow	ARUSKAS	3.77	.77	64
Projects' Conditions	KLAUSUL	3.77	.81	64
Projects' Age Financed	USIAPRO	3.69	.75	64
Projects' Going Concern	BERKMB	3.56	.89	64
Business Health Rate	TKKSHTAN	3.55	1.05	64
Accounting Information System	SIA	3.39	.81	64
Projects' Cost of Monitoring	BIAPANTU	3.33	1.13	64

The table shows the heterogeneity of Sahibul Maal (i.e. Islamic Banks). The standard deviations indicate to what extent the of Sahibul Maals rank the projects attributes. The certainty of return has been considered to be the most important attribute by them. The examination on the Kaiser-Meyer-Oklin (MKO) and Barlett on those attributes confirm the result, as shown by following table.

Table 8:
Summary of Kaiser-Meyer-Olkin (KMO) and Bartlett Examination

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.502
Bartlett's Test of Sphericity	Approx. Chi-Square	297.632
	df	78
	Sig.	.000

It is found that the coefficient *Kaiser-Meyer-Olkin Measure of Sampling Adequacy* (MSA) is 0,502. This indicates that the samples used are sufficient, since the mark required by MAS Hair *et. al* (1998) is 0.50. The interrelation of attributes can be seen from the co-eficient of *Bartlett's Test of Sphericity,* which is 297,632 and significancy level at $p < 0,01$.

The analysis to determine the projects attributes is iniatited by communalities analyisis which can be seen from the following table.

Table 9:
Communalities of Projects' Atributes

Attributes	Abbreviation	Initial	Extraction
Projects' Cost of Monitoring	BIAPANTU	1.000	.670
Project's Period of Financing	JGKWAKT	1.000	.839
Business Health Rate	TKKSHTAN	1.000	.841
Accounting Information System	SIA	1.000	.854
Certainty of Return	PSTHASIL	1.000	.865
Projects' rate of Return	TKRETURN	1.000	.887
Projects' Conditions	KLAUSUL	1.000	.797
Projects' rate of Risk	TKRISIKO	1.000	.805
Prospects of projects financed	PROSPEK	1.000	.787
Projects' Cash Flow	ARUSKAS	1.000	.745
Collateral on Project	JAMINAN	1.000	.724
Projects' Going Concern	BERKMB	1.000	.748
Projects' Age Financed	USIAPRO	1.000	.806

Extraction Method: Principal Component Analysis.

This analysis is grouping the attributes which have a significant relationship. They were analysed by the orthogonal varimax method. It was intended to have rotated orthogoanally attributes. The summary of results are as follows:

Tabel 10:
Projects Attributes Based on Factor Analysis.

Projects' Atributtes	SET Variabel					
	1	2	3	4	5	6
Projects' Cost of Monitoring (BIAPANTA)	0,559					
Business Health Rate (TKKSHATA)	0,902					
Projects' Going Concern (BERKMB)	0,854					
Certainty of Return (PSTHASIL)		0,921				
Collateral on Project (JAMINAN)		0,647				
Projects' rate of Return (TKRETURN)			0,542			
Projects' rate of Risk (TKRISIKO)			0,762			
Prospects of projects financed (PROSPEK)			0,825			
Accounting Information System (SIA)				0,899		
Projects' Cash Flow (ARUSKAS)				0,557		
Projects' Conditions (KLAUSUL)					0,850	
Project's Period of Financing (JKWAKTU)						0,614
Projects' Age Financed (USIAPRO)						0,885
Eigen Value	**2.858**	**2.501**	**1.461**	**1.424**	**1.121**	**1.003**
Percentage of Variance	**21,982**	**19,238**	**11,238**	**10,951**	**8,627**	**7,715**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization
Remarks: 1) Business Health Rate;2) Collateral on Project;3)Prospects of projects financed; 4) Financial reports; 5) Projects' Conditions, and 6) Projects' Age Financed

The above table shows how the common factor analysis explains latent root criterion by indicating the total variance explained. There are 6 factors out of 13 which contributed 79.750% to the total projects attributes, each with the following figures: component 1 = 21.982%, component 2 = 19.238%, component 3 = 11.238%, component 4 = 10.951%, component 5 = 8.627% and component 6 = 7.715%.

The result of Principal Component Analysis with Extraction Method and Varimax Rotated Component explains the content of each component. The first component is named as Project Soundness which include project monitroing cost with coeeficient 0.559, business health rate with co-efficient 0.902 and business's going concern with co-efficient 0.854.

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The second component is named Repayment Guarantee which include payment certainty and project collateral, with coefficients of 0.921 and 0.647 respectively. The third component consists of project's rate of return (0.542), project risk (0.762) and prospect of the project (0.825). This component is called as Project's Prospective.

The fourth component is classified as Financial Aspect which include accounting information system (0.899) and Project's cash flow (0.557). The fifth component is identified as Contract Conditions, which include the conditions required by the contract (0.850) and finally the Projects' Age Financed which has 0.885 co-efficient. All attributes mentioned above have loading factor > 0.05.

Because of that, it can be concluded that what have been considered by Islamic banks in financing the projects are: the project soundness, the repayment guarantee, the prospect of project, financial aspects (financial statements), project conditions and project age.

With regards to Mudharibs' attributes, as it has been stated earlier, there are 13 attributes, as shown in the following table.

Table 11:
Ranking of All Attributes of Mudharib

Attributes of Mudharib	Abbreviation	Mean	Std. Deviation	Analysis N
Having a good track record	TRECKAC	4.09	.68	64
Owning business collateral	JAMINAN	4.05	.70	64
Historical relationship	HUBHIST	4.03	.85	64
Good business habit	KEBIASA	4.02	.72	64
Good relatiosnhip with Sahibul Maal	HUBKELU	3.97	.76	64
Market accepted	FAMILIAR	3.94	.79	64
Project [self] possesion	MLKSEND	3.88	.85	64
Ability to grab an opportunity	TKPELUA	3.86	.85	64
Ability to articulate the business language	ARTIKUL	3.86	.81	64
Good social class	KELSOSI	3.72	.58	64
Having related business skill	KEAHLIAN	3.70	.71	64
Ability to Control the risk	KORERISK	3.70	.85	64
Coming from business family	KELPEB	3.39	.81	64
Having a good business commitment	KOMITMEN	3.33	1.13	64

The above table dislcoses the level of importance of attributes considered by the bank in relation to mudharib. The business track record has been ranked in the first and then followed by collateral, and so forth.

The sample suitability test was also done for this case, where the Kaiser-Meyer-Olin and Barlett examination was applied. The result is as follows:

Table 12:
Summary of Kaiser-Meyer-Olkin (KMO) and Bartlett Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.573
Bartlett's Test of Sphericity	Approx. Chi-Square	496.605
	df	51
	Sig.	000

The *Kaiser-Meyer-Olkin Measure of Sampling Adequacy* (MSA) is 0,573. This indicates that the samples used are sufficient, since according to Hair *et. al* (1998) the requirement is 0,50. The intervariable correlation can be referred to   coefficient of *Bartlett's Test of Sphericity,* that is 496,605 at p<0,01.

The further analysis is to determine the attributes by communalities analysis. The result is as follows:

Tabel 13:
Communalities Attributes of Mudharib

Attributes	Abbreviation	Initial	Extraction
Having a good business commitment	KOMITMEN	1.000	.797
Market accepted	FAMILIER	1.000	.805
Coming from business family	KELPEB	1.000	.816
Having a good track record	TRECKAC	1.000	.712
Historical relationship	HUBHIST	1.000	.710
Project [self] possesion	MLKSEND	1.000	.631
Ability to Control the risk	KORERISK	1.000	.750
Owning business collateral	JAMINAN	1.000	.848
Good business habit	KEBIASA	1.000	.700
Having related business skill	KEAHLIAN	1.000	.400
Good social class	KELSOSI	1.000	.770
Ability to articulate the business language	ARTIKUL	1.000	.906
Ability to grab an opportunity	TKPELUA	1.000	.951
Good relatiosnhip with Sahibul Maal	HUBKELU	1.000	.911

Extraction Method: Principal Component Analysis.

The final analyisis is grouping or classifying the attributes which have significant relationship. This is done by orthogonal varimax method. The anlysis is expceted to produce a rotated orthogonal attributes. The summary of result analysis is shown in the following table:

Table 14:
Summary of Variable Names and Mudharibs'Attributes
based on Factor Analysis.

Attributes of Mudharib	SET VARIABEL				
	1	2	3	4	5
Ability to Control the risk (KOREKRISK)	0,777				
Ability to articulate the business language (ARTIKUL)	0,925				
Ability to grab an opportunity (TKPELUA)	0,968				
Owning business collateral (JAMINAN)		0,877			
Good business habit (KEBIASA)		0,644			
Good relatiosnhip with Sahibul Maal (HUBKELU)		0,947			
Market accepted (FAMILIAR)			0,859		
Having a good track record (TRECKAC)			0,975		
Having related business skill (KEAHLIAN)			0,514		
Coming from business family (KELPEB)				0,583	
Project [self] possesion (MLKSEND)				0,528	
Good social class (KELSOSI)				0,826	
Having a good business commitment (KOMITMEN)					0,782
Historical relationship (HUBHIST)					0,625
Eigen Value	**3.706**	**2.384**	**2.125**	**1.319**	**1.173**
Percentage of Variance	**26,469**	**17,031**	**15,176**	**9,421**	**8,381**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization
Remarks: 1) Business Skill; 2) Collateral; 3) Reputation; 4) Baackground; and 5) Business Commitment.

The common factor analysis which explain the latent root criterion is indicated by the total variance explained. The analysis found 5 components of those 14 attributes, which describe 76.478%. Each component contributes 26,469%; 17,031%; 15,176%; 9,421%; and 8,381% respectively.

The attributes belong to first component is Ability to Control the risk, Ability to articulate the business language, and Ability to grab an opportunity. They are are identified as Business Skill or ability.

The attributes belong to second component is called Collateral, this relates to following attributes: Owning business collateral, Good business habit and Good relatiosnhip with Sahibul Maal. The third component includes the following attributes: Market accepted, Having a good track record, and Having related business skill. They are named as Reputation.

The fourth component consist of Coming from business family, Project [self] possesion, Good social class. They are identified as Background. The last component is known as business commitment, it constitutes the following attributes: Having a good business commitment, Historical relationship. All those attributes have a loeading factor more than 0.05.

D. Regression analysis on the screening effectiveness of Agency Problems.

The regression analysis is intended to confirm the qualitative analysis and Co-efficient quantitative. It is expected that passing this examination, the research findings will have a sufficient platform. Three more analysis are done for this purpose. They are as follow:

The previous analysis has found five factrors or variables as the the most important attributes related to projects in the view of banks' mangement in order to reduce the agency problems. They are project soundness (KSHTPROY), projects' prospect (PROSPROY), financial reports (LAPKEU), contract conditions (PERSYKLA) and the length of contract (WAKTKONTR).

When the variables are examined with the regession analysis, the following result is obtained:

$$\text{AGPROB} = \beta_o + \beta_1 \text{KSHTPROY} + \beta_2 \text{PROSPROY} + \beta_3 \text{LAPKEU} + \beta_4 \text{PERSYKLA} + \beta_5 \text{WKTKONTR}$$

	Coef Reg = 0,434	+ 0,0614	+ 0,125	+ 0,234	+ 0,574	+ 0,274
Coef. t	= (4,051)	(2,294)	(2,356)	(2,367)	(4,459)	(2,614)
p	= 0,000	0,025	0,022	0,021	0,000	0,011

F = 10,784

adjusted R^2 = 0,437

As shown above, F is 10,784 with p= 0,000. This indicates that those variables significantly affect the agency problem in mudharabah contract. Furthermore, the *adjusted R^2* is 0,437 which means that the variance of agency problem is explained by the above variables is 43.7%. The rest of 56.3% problems are explained or cuased by other variables.

The examination resulted the co-efficient of project soundness variable β_1 2.294 with p = 0.025. This indeed the lowest, yet it still has a significant effect toward minimizing agency problem among the BPRS. Other coefficeint variables (project's prospect, financial reports, contract condititions and length of contract) have the positive results. It can be concluded that all those attributes can be screened to reduce the agency problems in mudharabah contract.

The same regression method is also applied to the attributes of mudharib, resulted from previous analysis. There are also five main attributes identified: (1) Business Skill (2) Collateral; (3) Reputation (4) Background; and (5) Business Commitment. The regression analysis has further resulted the following coefficients regression:

$$\text{AGPROB} = \beta_0 + \beta_1\text{KEMBIS} + \beta_2\text{JAMINAN} + \beta_3\text{REPUTASI} + \beta_4\text{ASALUSUL} + \beta_5\text{KOMITMEN}$$

Coef Reg	= 0,526 +	0,103 +	0,144 +	0,165 +	0,148 +	0,220
Coef. t	= (5,781)	(3,721)	(3,054)	(3,728)	(2,444)	(2,017)
p	= 0,000	0,000	0,003	0,000	0,018	0,048
F	= 13,581					
p	= 0,000					
adj. R^2	= 0,500					

It is found that F = 13.581 at p = 0.0000. This indicate that statistically the variables are significantly effective to be used in preventing the agency problems in mudharabah contract at Islamic Banks or BPRS.

The *adjusted* R^2 is 0,500 means that the variaety of agency problems are explained by those indepenendent variables. While other 50% of problem are explained by other (unidentified) variables. It is then confirmed that all five variables identified can be utilised to reduce the agency problems in mudhrabaha contract.

The final part is the examination of research design. To large extent, this relate to the question of are those project and mudharib attributes (together) have influences on the agency problems minimally?

As discussed above, the research found 6 attributes of projects and 5 attributes of mudharib. A combination of them (11 attributes) are once again tested by regression analysis. The result shows that F = 13.609 at p=0.000, and *adjusted* R^2 is 0,688. What can be concluded from this is that all those variables (together) contributed to explain 68.8% of possible agency problem arise in the mudharabah contract. While 32.2% of problem are explained by other variables. However, further assestment on individual variable, resulted only 5 variables which have s significant influence, they are: (1) Business skill of *mudharib*, (2) business reputation of *mudharib*, (3) Business commitmnent of mudharib (4) financial report of project, and (5) the length of contract of the project.

Based on the above finding, the research model formulation proposed is:

$$\text{AGPROB} = \beta_0 + \beta_1\text{KEMBIS} + \beta_2\text{REPUTASI} + \beta_3\text{KOMITMENT} + \beta_4\text{LAPKEU} + \beta_5\text{WAKTKONT}$$

Coef Reg	= 0,409 +	0,150 +	0,142 +	0,349 +	0,540 +	0,343
Coef. t	= (4,099)	(2,083)	(2,753)	(3,219)	(3,207)	(3,398)
p	= 0,000	0,042	0,008	0,002	0,002	0,001

Concluding Remarks

The research has been trying to investigate how is the mudharabah products been practiced by the BPRS. From descriptive statistic point of view, the research found the following: first, 62.5% of respondents offer between 15 – 20% of mudharabah financing to the customers, and the rest (32.5%) offer less than 5%. Second, 56.25% of respondents prefer to practice of mudharabah mutlaqoh, intead of mudharabah muqayyadah. Third, 81.25% of the banks signed the mudharabah contract between 1 – 2 years, and 51.56% of bank used to have mudharabah with trading industry.

The study then identified qualitatively the attirubutes on both projects and mudharibs which are perceived by sohibul maal. The research initially found 13 attributes related to the project and 14 attributes related to the mudharib. However, after further screening statistically, it is found that 5 main attributes related to project and 6 attributes related to mudharib.

Further quantitative analysis have been conducted to examine those attributes. This finally filters all those attributes into 5 most influential factors. They are business skill, business reputation, business commitment (all are related to mudharib), financial report of project and length of contract of project.

Implication
The 5 attributes stated above can be seriously considered by the Islamic management to determine both the project and mudharib, before the contract is signed. As proven by the analysis, the selected attributes are believed as the factors might be potentially reduce the agency problems which is perceived so far as one of important factors why the mudharabah contract is not widely practiced by the Islamic banks.

Limitations and further Research Suggestions
Although the research has been conducted carefully, some limitations cannot be avoided, these include, first the scope. As presented earlier, the research was focused on BPRS, which represent 'small' Islamic Banks in Indonesia. BPRS is a rural bank with limited by size, capital and location. The second limitation is obviously the number of samples. Although the sample size is statistically accepted, it is undeniable that bigger size and as well as scope might produce better result. The third is perhaps related to research methodology. As there are many possible statistical tools can be applied, this research just apply some selected methods. This means that, the aplication of other possible research methods might result more confincing findings.

Because of that, we humbly offer other researchers to further examine what have been found by improving some limitation mentioned above.

Bibliography

Adnan, Muhammad Akhyar [2003] Perkembangan Gerakan Ekonomi Islam di Indonesia: Sebuah Evaluasi (Develoment of Islamic Economy Movement in Indonesia: A Review), Paper presented in the *60ᵗʰ Anniversary Islamic University of Indonesia*, September 24, 2003.

Ahmad, Khurshid [2000] "Islamic Finance and Banking: The Challenge and Prospect" *Review of Islamic Economics*, No. 9, pp. 57-82.

Antonio, M. Syafi'i, *Bank Syari'ah : Suatu Pengantar Umum*, Edisi Khusus, Jakarta : Tazkia Institute, 2000.

Bacha, Obiyathullah Ismath and Omar Malik Ali Merican [2006] "Crossroads on Sustainable Capital Market" *Working Paper No. 1*, Kulliyyah of Economics and Management Sciences, International Islamic University.

Creswell, John W., *Research Design: Qualitative & Quantitative Approaches,* London: Sage Publications, 1994.

Darmawangsa [2003] "Gharar Dalam Pembiayaan Mudharabah di BPRS Heurakat Aceh" Unpublished Thesis, MSI-UII, Yogyakarta.

Gale and Hellwig, 1985;

Harri, Milton and Arthur Raviv, "Capital Structure and Informational Role of Debt," *Journal of Finance,* vol. 45, pp. 321-49.

Jensen, C. Michael dan W.H. Mechkling, "Theory of the Firm: managerial Behavior, Agency Costs and Ownership Structure", *Journal of Fiancial Economics,* No.3, 1976

Jensen, C. Michael, "Agency Cost of Free Cash Flow, Corporate Finance, and Takeover", *American Economic Review,* Vol. 76, No.2, May, 1989.

Karim, Adiwarman A., "Incentive Compatible Constrains for Islamic: Banking Some Leassons From Bank Muamalat", *Conference Papers,* Fourth International Conference on Islamic Economics and Banking Loughborough University, UK, August 13-15, 2000, pp. 579-598.

Khalil, Abdel-Fattah A.A., Colin Rickwood, dan Victor Muride, (2000), "Agency Contractual in Profit-Sharing Financing," *Islamic Finance : Challenges and Opportunities in The Twenty-First Century,* Conference Papers, Fourth International Conference on Islamic Economic and Banking Loughborough University, UK, August 13-15, 2000.

Kuncoro, Mudrajad, 2003, *Metode Riset untuk Bisnis dan Ekonomi; Bagaimana meneliti dan menulis tesis?,* Jakarta: Penerbit Erlangga, 2003.

Kuran, Timur, "The Economic System in Contemporary Islamic Thought: Interpretation and Assesment", *International Journal of Meddle East Studies 18,* Vol. 2, No. 1, 1986, pp. 135-164.

Moleong, Lexy J., *Metodologi Penelitian Kualitatif,* Bandung: PT. Remaja Rosdakarya, 2000.

Mujiyanto [2004] "Optimisme Perbankan Syariah" *Modal* 15/II January 2004, pp. 14-5.

Reichelstein, Stefan, "Agency", dalam *The New Palgrave Dictionary of Money and Finance,* Vol.2, 1992, p. 23-26.

Republika Daily Newspaper [2006] "Aset Bank Syariah 2008 Capai 6.67 Persen". *Bank Syariah Desk*, 21 December 2006.

Ross, Stephen, "The Determination of Financial Structure: The Incentive Signalling Approach," *Bell Journal of Economics,* Vol. 8, pp. 23-40.

Saeed, Abdullah*, Islamic Banking and Interest, A Study of Prohibition of Riba and Its Contemporary Interpretation,* Leiden, New York, Koln: EJ. Brill, 1996

Stiglitz, E. Joseph, "Principal and Agent," dalam *The New Palgrave Dictionary of Money and Finance,* Vol.2, 1992, p. 185-190.

Strauss, Anselm dan Juliet Corbin, *Dasar-dasar Penelitian Kualitatif: Tatalangkah dan Teknik Teoritisasi data,* (terjemahan: Muhammad Shodiq dan Imam Muttaqien), Yogyakarta: Pustaka Pelajar, 2003.

Sumianto, Ahmad, "Minat Manajer BMT di Yogyakarta dalam Menerapkan Produk Pembiayaan *Mudharabah*", *Tesis,* Tidak dipublikasikan, Yogyakarta: MSI UII, 2004.

Warde, Ibrahim, "The Revitalization of Islamic Profit-and-loss Sharing," *Proceeding of the The Harvard University Forum on Islamic Finance*, Oktober 1, Cambridge : Harvard Islamic Finance Information Program Centre for Middle Easter Studies, 1999.

Warde, Ibrahim, *Islamic Finance in Global Economy*, Edinburgh: Edinburgh University Press, 1999.

Weiss, Dieter, "The Struggle for a Viable Islamic Economy", *The Muslim World,* Vol. 79, 1989, pp. 46-58.