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Call for Papers

International Conference and Ph.D. Colloquium
on Islamic Economics and Finance 2015

PROCEEDINGS

Strengthening Islamic Economics
and Financial Institution
for the Welfare of Ummah



Lombok Raya Hotel, Mataram, Indonesia, 25-27 of August 2015

BOOK-2: ISLAMIC FINANCE

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ON ISLAMIC ECONOMICS AND FINANCE 2015 (ICIEF'15)
*Strengthening Islamic Economics and Financial Institution
for the Welfare of Ummah*



Organized by:

Department of Sharia Economics - Faculty of Economics and Business
Universitas Airlangga, Surabaya, Indonesia
and
Faculty of Economics
Universitas Mataram, Nusa Tenggara Barat, Indonesia

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on Islamic Economics and Finance 2015*

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Foreword from the Conference Chair



Praise be to Allah, the Lord of the whole universe. Today is the day I should be grateful deeply, because I have the opportunity to meet all of you in this good meeting in this city. As most of you, I am also a guest in this city, as my house is far from here, namely in Surabaya, about 1000 km away.

We are jointly gathered by Allah in this beautiful city, whose inhabitants are proud to call it the city of a thousand mosques. Given that, the convening of this meeting in this town truly is a gift of Allah, as He is the One who is going to make this conference successful and provides the best results for mankind in general and Muslims in particular.

Any economic system and theory, whether it is capitalism, socialism, fascism, or Islamic economics, of course claimed by their followers respectively as the system or economic theory which aims to create prosperity for mankind. Such a claim is understandable because it is not possible for people to make a living system that is not aimed at making the quality of life better and more prosperous. To achieve these objectives, every economic system has its own way. One prioritizes individual freedom, the other emphasizing common ownership of production factors, while others rely on the power of government as a single economic system controllers, and so on.

Islam, which W.C. Smith referred to as “much more than a religion, it is a complete civilization”, clearly have its own concept about the economy. No doubt, Islam has an economic system that, in contrast to all other economic systems, comes from Allah and carried out by religious moral while pursuing economic prosperity. More clearly, Islam insists that all economic activities, production, consumption, and distribution, are carried out not because one is able to do or because it is profitable, but because it was allowed by the religion. In other words, the choice should be made on the alternatives that are equally permissible or lawful, not on all the alternatives that exist.

Given that this conference, named **Call for Papers, International Conference, and PhD Colloquium on Islamic Economics and Finance 2015 (ICIEF'15)**, was held from 25 to 27 August 2015 at this beautiful city.

This International Conference will address the *Strengthening Islamic Economics and Financial Institution for the Welfare of Ummah*. We do believe that this conference will be a valuable forum for *silaturrahim* among Moslems, scholars, and practitioners, to sharing knowledge and experiences as well as to discuss, the practices, concepts, and thoughts about Islamic economics and finance.

I also thank to Allah *Subhaanahu wata'aala, Alhamdulillah*, that the delegates of this conference come from more than 34 institutions from all over Indonesia and 13 institutions from international representative. There are 161 participants registered to the committee that consist of 135 national participants and 26 international participants. They will join and involve in the Plenary Sessions, Ph.D. Colloquium, and Parallel Sessions where 126 papers will be presented. *In syaa Allaah*. This conference also invites the stakeholders: universities, *pondok pesantren*, government, mass organizations, business practitioners, and Islamic scholars.

In this conference we hope the Help of Allah to explore and assess how, what can, and will be done by the Islamic economic system whose basis of religion is so certain, in advancing human well-being in general and Muslims in particular.

Therefore, it is very timely if, on this occasion I, representing both the organizing committee and the steering committee, thanked the delegates, the speakers, participants, sponsors and the co-hosts: Universiti Sains Malaysia (USM)- Malaysia, LA-Trobe University-Australia, University of Glasgow-Scotland, STEI Tazkia Bogor-Indonesia, Universitas Internasional Semen Indonesia (UISI) Gresik-Indonesia, and Faculty of Economics UIN Maulana Malik Ibrahim Malang-Indonesia. With your help and participation, Allah gives relief and convenience to us in organizing this conference. The same gratitude I convey to the Faculty of Economics, University of Mataram, which has acted as the organizer of this conference.

Finally, I congratulate to follow this conference to complete. May Allah bring maximum results and hopefully this conference would gives the sweet memories to each of us when we return back to our homes later.

وَالسَّلَامُ عَلَيْكُمْ وَرَحْمَةُ اللَّهِ وَبَرَكَاتُهُ

Drs. Ec. H. Suherman Rosyidi, Ec. Dev., M.Com.
Conference Chair

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International Conference on Islamic Economics and Finance 2015 (ICIEF '15) and PhD Colloquium

Lombok, 25th-27th August 2015

“Strengthening Islamic Economics and Financial Institution for the Welfare of Ummah”

Day 1 : 25 th August 2015, Lombok raya Hotel, Mataram	
08.00 am – 08.30 am	Registration and Coffee Break
08.30 am – 09.30 am	<p><u>Opening Ceremony</u></p> <p>Islamic Art Performance Recitation of Holy Quran</p> <p><u>Welcoming Speech:</u></p> <p>Chair, ICIEF 2015 (Head of Islamic Economics Department UNAIR)</p> <p><u>Official Opening:</u></p> <p>Dean, Faculty of Economics and Business UNAIR Rector UNRAM Governor Nusa Tenggara Barat</p> <p><u>1st Keynote Speech:</u></p> <p>Prof. Dr.M. Nasir, Ak. Minister of Research, Technology, and Higher Education Republic Indonesia,</p> <p><u>2nd Keynote Speech:</u></p> <p>Dr. Harry Azhar Azis (Chief of Audit Board of The Republic of Indonesia)</p>
09.30 am – 12.15 pm	<p><u>Plenary Session 1</u></p> <p><i>“Enhancing Islamic Economics Policies for welfare of Nation”</i></p> <p>Dr. Hj. Diding Sudirdja Anwar, S.E., M.M. Jaminan Kredit Indonesia Syariah (JAMKRINDO)</p> <p>Prof. Muhammad Syukri Salleh Director of Centre for Islamic Development Management Studies (ISDEV), Universiti Sains Malaysia (USM)</p> <p>Prof. Dr. Sri Iswati, Ak. Head of Doctoral Study Program in Islamic Economics, Universitas Airlangga (Islamic Governance)</p> <p>Dr. Sjafie Antonio STEI TAZKIA (Islamic Micro Finance)</p> <p>Prof. Dr. M. Ishaq Bhatthi Director of Islamic Banking and Finance Program, La Trobe University, Australia. (New Emerging Research Method Used in Islamic Finance)</p> <p><u>Moderator Plenary Session 1:</u> Drs. Ec. H. Suherman Rosyidi, Ec.Dev., M.Com.</p>

12.15 pm – 01.30 pm	Dhuhr Prayer and Lunch Break
01.30 pm – 03.50 pm	<p><u>Plenary Session 2</u> <i>“Reform in Islamic Financial Institution for the Financial Growth and Stability”</i></p> <p>Assoc. Prof. Muhammad Hudaib University of Glasgow, UK (Islamic Accounting in Islamic Financial Institutions)</p> <p>Prof. Dr. Hassanuddeen International Islamic University of Malaysia (IIUM)</p> <p>Roszaini Haniffa School of Management languages, WATT University (Islamic Business Ethic)</p> <p>Dr. Dadang Muljawan Senior Economic Researcher at Central Bank of Indonesia (Islamic Macro Prudential)</p> <p><u>Moderator Plenary Session 2:</u> Unram</p>
03.50 pm-04.00 pm	Break Ashar
04.00 pm-06.00 pm	<p><u>PhD Colloquium</u> See Colloquium Schedule</p>
06.18 pm – 07.00 pm	Break Maghrib
07.00 pm –	Gala Dinner
Day 2 : 26th August 2015 : Pascasarjana Building, Universitas Mataram	
09.00 am – 04.00 pm	Parallel Sessions and PhD Colloquium
04.00 pm – 04.30 pm	Closing
Day 3: 27th August 2015 : City Tour	

Colloquium Sessions

Agenda	Time	Colloquium	Panelist Coll
Session Day 1			
Lombok Raya Hotel, Rinjani 2			
04.00 pm-05.30 pm	Moderator	Dr. Murniati	Assoc. Prof. Muhammad Hudaib Dr. Dadang Muljawan Prof. Dr. Hassanuddeen
	16.00-16.30	D186-T05P68QS	
	16.30-17.00	D086-T05P31QS	
	17.00-17.30	D226-T08P71QS	
05.30 pm-05.45			
Session Day 2			
Hall Pascasarjana Building, Universitas Mataram Parallel Sessions			
07.30am-08.00am	Registration		
	Moderator	Dr. Sri Herianingrum	
08.00am - 08.30am		D247-T03P136QS	Prof. Muhammad Syukri Salleh
08.30am-09.00am		D176-T03P59QS	Prof. Suroso
	Moderator	Dr. Ririn	
09.00am-09.30am		D226-T05P76QS	Dr. Raditya Sukmana
09.30am-10.00am		D146-T03P50QS	Dr. Dadang Muljawan
10.00am-10.30am		Coffee Break	
	Moderator	Dr. Imron Mawardi	
10.30am-11.00am		D146-T03P51QS	Prof. Dr. Sri Iswati, Ak
11.00am-11.30am		D135-T05P18QS	Prof. Roszaini Haniffa
	Moderator	Dr. Busaini	
11.30am-12.00am		D146-T05P49QS	Prof. Hasanudeen
12.00am-12.30am		D208-T09P153QS	Dr. Nafik/Dr. Murniati
12.30 pm -13.30pm		Dzuhur and Lunch	
13.30 pm -14.00 pm		Closing PhD Colloquium	

Parallel Sessions

Day 2: 26th August 2015 | Venue: Pascasarjana Building, Universitas Mataram

Agenda	TIME	Class 1 (English)	Class 2 (English)	Class 3 (English&Bahasa)	Class 4 (English&Bahasa)	Class 5 (Bahasa)	Class 6 (Bahasa)	Hall	
Registration	07.30 - 08.00							COLLOQUIUM	
Paralel A	Topic	IE	IF & IFI	ISC	EI	KI & LKS	SI		
08.00 - 10.05	08.00 - 08.25	D266-T01P96	D088-T09P143	D237-T09P107	D146-T03P55S	D237-T05P111	D086-T07P38		
	08.25 - 08.50	D277-T04P130	D297-T05P135S	D237-T09P106	D135-T05P19	D246-T05P78S	D176-T03P66		
	08.50 - 09.15	D146-T09P45	D148-T05P151	D065-T09P12	D176-T01P67	D246-T03P84S	D277-T06P122		
	09.15 - 09.40	D265-T04P28S	D265-T05P139	D176-T09P64	D086-T09P40	D107-T03P105Q	D277-T09P127		
	09.40 - 10.05	D277-T08P128S	D266-T05P93Q	D237-T09P110	D277-T04P124	D277-T04P131S	D086-T09P39		
	Moderator	Dr. Ari	Dr. Leo	Dr. Tika	Suherman Rosyidi	Noven	Sunan Fanani		
10.05 - 10.30		Coffee Break							
Paralel B	Topic	IE	IFI	ISC	EI	LKS	SI		
10.30 - 12.35	10.30 - 10.55	D246-T03P85S	D065-T05P10	D086-T05P33S	D176-T03P61S	D206-T03P69S	D265-T03P24		
	10.55 - 11.20	D065-T01P17	D065-T05P09	D045-T03P02	D277-T08P126	D266-T05P91	D086-T07P37		
	11.20 - 11.45	D146-T05P48	D246-T09P86S	D237-T09P108	D146-T04P57S	D277-T05P125	D138-T09P149		
	11.45 - 12.10	D266-T05P95	D277-T06P129	D226-T09P73	D107-T09P104	D277-T05P121	D086-T05P34		
	12.10 - 12.35	D065-T01P16	D176-T05P60S	D237-T03P115	D138-T03P146	D048-T06P139	D297-T09P133S		
	Moderator	Bambang Tutuko	Fatin Fadilah	Siti Inayah	Qudsi Fauzi	Sulistya	Syifa		
12.35 - 13.35		Dzuhur & Lunch							
Paralel C	Topic	IF	IFI	EI	KI	LKS	IF		IF
13.35-15.40	13.35 - 14.00	D065-T09P13	D246-T03P97S	D077-T08P102	D086-T05P36	D237-T05P116	D114-T01P01Q		D218-T09P155
	14.00 - 14.25	D226-T05P69S	D246-T06P141	D077-T08P103	D277-T05P120	D237-T05P114	D146-T05P56S		D208-T05P154
	14.25 - 14.50	D226-T05P72	D037-T08P99S	D086-T05P35	D237-T05P117	D138-T09P145	D086-T05P41	D188-T09P152	
	14.50 - 15.15	D246-T06P80	D065-T05P08	D146-T08P44	D297-T05P134S	D028-T05P137	D277-T05P118		
	15.15 - 15.40	D108-T01P142	D176-T05P62	D065-T01P15	D266-T05P92	D065-T09P11	D138-T05P144		
	Moderator	Rochania Ayu Y	Miftahus Surur	Nasher Akbar	Prof. Titik	Dr. Surati	Dr. Akhmad Saufi	Imanuella Romaputri Andilolo, M.Sc.	

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ISLAMIC FINANCE

A Fairness Model Based on Interval Type-2 Fuzzy Set for Sharia Financing Scoring

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ABSTRACT

Conventional credit scoring model could lead to serious and unfair problems because in certain case it would incriminate one party in financing. Sharia financing scoring model complies with Sharia rules and ensure fairness among parties. Currently, there are no certain rules in Sharia financing scoring model which lead to subjective judgements. In the subjective judgements, words could mean different things to different people. Thus, this paper proposed and deployed models for scoring of default risk level by using Interval Type-2 Fuzzy Set model to support the subjective judgements in maintaining Sharia rules. Installment amount and sum of delay period were used as variables for that scoring. Interval Type-2 Fuzzy Set model was proposed to support the subjective judgements in maintaining Sharia rules. Beginning delay period also used as weighted to the risk scoring results. Beside that, this paper also proposed the method for computing real lost value. It was used as basis in fines computation according to default risk level, bad debt expense, and installment weighted average.

Keywords: *default risk level, fines computation, interval type-2 fuzzy set, real lost value, sharia financing scoring.*

I. INTRODUCTION

Credit scoring is a classic problem which is still interesting to study. Fisher's publication in 1936 is known as the first publication that introduce credit scoring system (Lu *et al.* 2013). Recent years, there are many studies on credit scoring such as Cadeno *et al.* (2011), Ghodselahi (2011), Huang *et al.* (2006), Keramati and Yousefi (2011), Leung *et al.* (2007), Lu *et al.* (2013), Tsai and Wu (2008), Wu (2011), and Yu *et al.* (2008). It is interesting to study because of the complexity in processes and data behaviour that changes dynamically. The more interesting is most of the scholars only discuss credit scoring as feasibility analysis. Moreover, we can see from existing definitions that tend to equalize credit scoring as a credit feasibility analysis such as in Jentzch (2007), Yu *et al.* (2008), and Abdou and Pointon (2011).

The conventional credit scoring could lead to serious and unfair problems because in certain case it would incriminate one party in financing. It can be seen from several indications: in scoring of default status based solely on the sum of delay instalments would not be fair because it can not depict the actual credit risk; while in fines computation, there is no rule of the maximum fines allowed. Under certain conditions, this method can inflict a financial loss for the customer.

While Sharia credit scoring model complies Sharia rules and ensure fairness among parties. There are several criteria that must be met in order to ensure that the proposed method produces fairness and agree with Sharia rules: In scoring of default status, the model and the parameters that used to generate the output should depict the actual credit (financing) risk; and in fines computation, the model and the parameters that used to generate the fines value, should not intended to inflict a financial loss for the customer, fair in accordance with their impacts (equal to the real lost value).

If we observe rules or norms in Quran, hadiths, and other laws, many of them give the certain rules (crisp) such as zakah mal calculation which is calculated by 2.5% of total assets, and the others just give normative rules that will cause many interpretations and uncertainty such as rules about fines (ta'zir in Islam). There are no certain rules from verses and hadiths that mention the crisp amount of fines.

It is in line with the consensus of ulama (Muslim scholars) that fines calculation should be relied on the real lost value. This rule is still normative and of course will cause many interpretations, uncertainty and subjective judgements. We know that in subjective judgements, words could mean different things to different people (Wu and Mendel 2009; Liu and Mendel 2008). Consequently, we need a method that can resolve this problem.

Fuzzy logic is known as universal approximators. Thus, there are many applications use fuzzy logic to solve the problem in many areas such as control system and design (Cao *et al.* 2011; Sahraie *et al.* 2011), and recommendation system (Wu and Mendel 2009). In type-1 fuzzy sets, the membership function (MF) is a crisp value. According to Mendel *et al.* (2006), that will be a weakness if the problem has many uncertainties. Unlike type-1 fuzzy sets, type-2 fuzzy sets (T2FS) use fuzzy value in MF computation so that will accommodate the problems that have many uncertainties (Wu and Mendel 2009). It makes T2FS more promising to get better performance than type-1 fuzzy (Mendel *et al.* 2006). One of T2FS that have a lot of implementation in many areas is interval type-2 fuzzy sets (IT2FS). It is because IT2FS has less complexity than the other T2FS. By those advantages, we believe IT2FS can support the subjective judgements for maintaining Sharia rules in financing scoring.

Thus, our research is aimed to develop a fair scheme and algorithm for Sharia financing scoring in default status and fines computation by using IT2FS model. Sharia financing schema which is discussed in this research is murabaha schema (see the definition in Antonio (2001) and Zuhaili (2011)) because till now that schema still dominate the portopolio of financing of Islamic bank in Indonesia and even in the world (BI 2012).

The rest of this paper is organized as follows: Section II presents the overview about Interval Type-2 Fuzzy Set. Section III presents our proposed method in scoring of default status, IT2FS model in scoring for default status, and fines computation. Section IV presents the trial results and discussion. Section V draws the conclusion.

II. INTERVAL TYPE-2 FUZZY SET

T2FS model which is used in this research is IT2FS. IT2FS is one of type-2 fuzzy model that map the output to be interval value (Mendel *et al.* 2006). We use TSK method (Takagi, Sugeno, and Kang) for inference process. The selection of the model because it has a lower level of complexity than the other T2FS without reducing the result performance (Mendel *et al.* 2006; Wu and Mendel 2009; Liu and Mendel 2008).

If the rule base on IT2FS consists of N rules, the general rules can be written as follows:

$$R^n : IF x_1 \text{ is } \tilde{A}_1^n \text{ and } \dots \text{ and } x_l \text{ is } \tilde{A}_l^n, THEN y \text{ is } Y^n \quad n = 1, 2, \dots, N \quad (1)$$

On equation 1, $\tilde{A}_i^n (i = 1, 2, \dots, I)$ is IT2FS, whereas $Y^n = [\underline{y}^n, \bar{y}^n]$ is interval value which is used as output.

We can see the MFs for IT2FS in Fig. 1. MF IT2FS for \tilde{A} can be written as $MF \mu_{\tilde{A}}(x', u)$

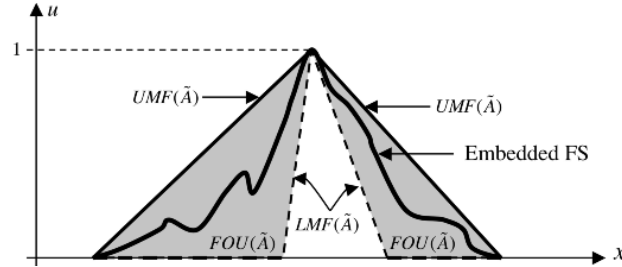


Fig. 1 MFs for IT2FS (cited from Mendel *et al.* 2006)

, for $x' \in X$ and $u \in J_{x'} \subseteq [0, 1]$, thus:

$$\tilde{A} = \{(x', u), \mu_{\tilde{A}}(x', u) = 1 \mid \forall x' \in X, \forall u \in J_{x'} \subseteq [0, 1]\} \quad (2)$$

where x' is called as primary variable and has domain X , $u \in [0, 1]$ is called as secondary variable and has domain $J_{x'} \subseteq [0, 1]$ at each $x' \in X$; while $J_{x'}$ is called as primary membership of x' . Uncertainty level of \tilde{A} can be characterized by union value of all primary membership ($J_{x'}$) which is called as *footprint of uncertainty* (FOU) of \tilde{A} , so that:

$$FOU(\tilde{A}) = \bigcup_{\forall x' \in X} J_{x'} = \{(x', u) : u \in J_{x'} \subseteq [0, 1]\} \quad (3)$$

Upper membership function (UMF) and lower membership function (LMF) of \tilde{A} are two MFs in type-1 fuzzy that bound the FOU. $UMF(\tilde{A})$ is an upper bound of $FOU(\tilde{A})$ and denoted as $\mu_{\tilde{A}}^+(x'), \forall x' \in X$. While $LMF(\tilde{A})$ is a lower bound of $FOU(\tilde{A})$ and denoted as $\mu_{\tilde{A}}^-(x'), \forall x' \in X$. So that:

$$FOU(\tilde{A}) = \bigcup_{\forall x' \in X} [\mu_{\tilde{A}}^-(x'), \mu_{\tilde{A}}^+(x')] \quad (4)$$

Generally, processes in IT2FS can be seen at Fig. 2. In Fig. 2, crisp input is fuzzified by MF rules in IT2FS. If we assume that input vector \tilde{A} is $x' = [x'_1, x'_2, \dots, x'_l]$, so that MF of x'_i at each \tilde{A}_i^n can be written as follows:

$$[\mu_{\underline{A}_i^n}(x'_i), \mu_{\bar{A}_i^n}(x'_i)]; i=1, 2, 3, \dots, I; n=1, 2, 3, \dots, N \quad (5)$$

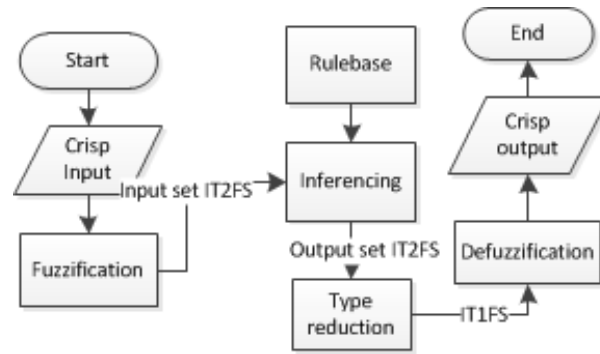


Fig. 2 IT2FS workflow

The results from fuzzification will become an input sets for IT2FS. Then, they will be inferred by calculating the firing interval based on the rule set. Firing interval calculation can be obtained by using equation (6).

$$F^n(x') = [\mu_{\underline{A}_1^n}(x'_1) \times \dots \times \mu_{\underline{A}_I^n}(x'_I), \mu_{\bar{A}_1^n}(x'_1) \times \dots \times \mu_{\bar{A}_I^n}(x'_I)] \equiv [f^n, \bar{f}^n] \quad (6)$$

Their output are still in IT2FS form, so that, the next process is type reduction from IT2FS to type-1 fuzzy. There are many methods to do this, but our research use Karnik and Mendel algorithm which is known as KM algorithm (see equation (7) and (8)). Detail of KM algorithm can be seen at Karnik and Mendel (2001), Mendel *et al.* (2006), and Wu and Mendel (2009).

$$y_l = \frac{\sum_{i=1}^L \bar{f}^n \underline{y}^n + \sum_{i=L+1}^N \underline{f}^n \underline{y}^n}{\sum_{i=1}^L \bar{f}^n + \sum_{i=L+1}^N \underline{f}^n} \quad (7)$$

$$y_r = \frac{\sum_{i=1}^R \underline{f}^n \bar{y}^n + \sum_{i=R+1}^N \bar{f}^n \bar{y}^n}{\sum_{i=1}^R \underline{f}^n + \sum_{i=R+1}^N \bar{f}^n} \quad (8)$$

Results from the type reduction will be an interval value $[y_l, y_r]$. Finally, the last stage is defuzzification process that convert the interval value to crisp value. This defuzzification is obtained by finding average value from the interval $[y_l, y_r]$ (see equation (9)).

$$y = \frac{y_l + y_r}{2} \quad (9)$$

III. PROPOSED METHOD

In according to meet the fairness condition, we will explain the steps and the methods which are used in this research.

3.1 Scoring for Default Status

According to our explanation in introduction part, scoring for default status is aimed to classify the customers (debtor) based on their risk (credit). The existing process is only according to sum of late day. Therefore in case of fairness guarantee, we propose two parameters for scoring default status that are based on sum of late day and instalment value which are expected more illustrate the credit risk for each customer rather than just based on sum of late day.

In this research, default status (*default*) is calculated by using IT2FS algorithm based on sum of late day (*late*) and instalment value (*amount*) for each customer-*i* (see equation (10)).

$$default_i : f(late_i, amount_i) \quad (10)$$

We design the default status value as interval value $[0,100]$. Lower credit risk is characterized by the closer value to zero (0) and vice versa.

In fact, Sharia bank use annuity method for calculating margin (MUI 2012; BI 2013). This treatment will effect the recognition of margin and principal. On annuity method, installment amount for each period will be constant, while margin value will be calculated in accordance with remainder of the principal amount (MUI 2012). This treatment will cause the margin value on period-*t* is higher than period *t+1*, while principal value on period-*t* is smaller than period *t+1*. This condition will cause the default risk level of financing in Sharia bank is higher on the beginning periods of contract than the end periods of contract. Thus, this research also use the period as weight of the scoring result (*default*). This weight can be obtained by equation (11):

$$Pt = \frac{N-t}{N} \quad (11)$$

On the equation above, Pt is the weighted period, t is current period (calculation period), while N is total period of contract. So that, risk level ($risk_i$) will be obtained by this formula:

$$risk_i = default_i * Pt_i \quad (12)$$

3.2. IT2FS Model in Scoring for Default Status

Fuzzification is done to convert crisp input to be fuzzy input. We assume that the model used in this process is trapezoid model. MF at each variable is converted by three ordinal scales, and according to IT2FS rules, MF for each variable has LMF and UMF; where LMF is characterized by underline, while UMF is characterized by over line (see Table 1).

Table 1.
MF IT2FS in scoring default

Variable	Nilai Linguistik
\overline{late}	short, medium, long
\underline{late}	short, medium, long
\overline{amount}	small, medium, big
\underline{amount}	small, medium, big
$\overline{default}$	low, medium, high
$\underline{default}$	low, medium, high

In the MF calculation, late day MF in day unit (see equation (13), (14), (15), (16), (17), and (18)), instalment MF in rupiah unit (see equation (19), (20), (21), (22), (23), and (24)), while default status MF in percentage unit (%) (see Table 2).

Table 2.
MF Default Status

<i>Default</i>	<u>score</u>	$\overline{\text{score}}$
Low	0	40
Middle	30	70
High	60	100

$$\mu_{\overline{\text{lateShort}}}(x') = \begin{cases} 0 & x' < 14 \text{ or } x' > 90 \\ \frac{90 - x'}{90 - 14} & 14 < x' \leq 90 \\ 1 & x' = 14 \end{cases} \quad (13)$$

$$\mu_{\text{lateShort}}(x') = \begin{cases} 0 & x' < 14 \text{ or } x' > 45 \\ \frac{45 - x'}{45 - 14} & 14 < x' \leq 45 \\ 1 & x' = 14 \end{cases} \quad (14)$$

$$\mu_{\overline{\text{lateMed}}}(x') = \begin{cases} 0; & x' < 60 \text{ or } x' > 210 \\ \frac{x' - 60}{120 - 60} & 60 \leq x' \leq 120 \\ \frac{210 - x'}{210 - 150} & 150 \leq x' \leq 210 \\ 1 & 120 \leq x' \leq 150 \end{cases} \quad (15)$$

$$\mu_{\underline{\text{lateMed}}}(x') = \begin{cases} 0; & x' < 90 \text{ or } x' > 180 \\ \frac{x' - 90}{120 - 90} & 90 \leq x' \leq 120 \\ \frac{180 - x'}{180 - 150} & 150 \leq x' \leq 180 \\ 1 & 120 \leq x' \leq 150 \end{cases} \quad (16)$$

$$\mu_{\overline{\text{lateLong}}}(x') = \begin{cases} 0 & x' < 180 \\ \frac{x' - 180}{270 - 180} & 180 \leq x' \leq 270 \\ 1 & x' \geq 270 \end{cases} \quad (17)$$

$$\mu_{\underline{\text{lateLong}}}(x') = \begin{cases} 0 & x' < 210 \\ \frac{x' - 210}{270 - 210} & 210 \leq x' \leq 270 \\ 1 & x' \geq 270 \end{cases} \quad (18)$$

$$\mu_{\underline{\text{installSmall}}}(x') = \begin{cases} 0 & x' > 2m \\ \frac{2m - x'}{2m - 100k} & 100k < x' \leq 2m \\ 1 & x' \leq 100k \end{cases} \quad (19)$$

$$\mu_{\underline{\text{installSmall}}}(x') = \begin{cases} 0 & x' > 1m \\ \frac{1m - x'}{1m - 100k} & 100k < x' \leq 1m \\ 1 & x' \leq 100k \end{cases} \quad (20)$$

$$\mu_{\underline{\text{installMed}}}(x') = \begin{cases} 0; & x' < 100k \text{ or } x' > 5m \\ \frac{x' - 100k}{2m - 100k} & 100k \leq x' \leq 2m \\ \frac{5m - x'}{5m - 3m} & 3m \leq x' \leq 5m \\ 1 & 2m \leq x' \leq 3m \end{cases} \quad (21)$$

$$\mu_{\underline{\text{installMed}}}(x') = \begin{cases} 0; & x' < 1m \text{ or } x' > 4m \\ \frac{x' - 1m}{2m - 1m} & 1m \leq x' \leq 2m \\ \frac{4m - x'}{4m - 3m} & 3m \leq x' \leq 4m \\ 1 & 2m \leq x' \leq 3m \end{cases} \quad (22)$$

$$\mu_{\underline{\text{installBig}}}(x') = \begin{cases} 0 & x' < 3m \\ \frac{x' - 3m}{5m - 3m} & 3m < x' \leq 5m \\ 1 & x' \geq 5m \end{cases} \quad (23)$$

$$\mu_{\underline{\text{installBig}}}(x') = \begin{cases} 0 & x' < 4m \\ \frac{x' - 4m}{5m - 4m} & 4m < x' \leq 5m \\ 1 & x' \geq 5m \end{cases} \quad (24)$$

Based on discussion with the experts, we obtain nine (9) rules which is used in IT2FS model. The rules can be seen in Table 3.

Table 3. Rulebase Model IT2FS

No		Late		Install		Status <i>default</i>
1	IF	Short	AND	Small	THEN	Low
2	IF	Short	AND	Middle	THEN	Low
3	IF	Short	AND	Big	THEN	Middle
4	IF	Middle	AND	Small	THEN	Low
5	IF	Middle	AND	Middle	THEN	Middle
6	IF	Middle	AND	Big	THEN	High
7	IF	Long	AND	Small	THEN	Middle
8	IF	Long	AND	Middle	THEN	High
9	IF	Long	AND	Big	THEN	High

Then, the MFs and the rules will be used in firing interval calculation as we see in equation (6), type reduction as in equation (7) and (8), and defuzzification process as in equation (9). Based on our models, the final output ($default_i = y$) will produce the interval value $[0, 100]$ that will be used in fines computation.

3.3. Fines Computation

According to Zuhaili (2011), based on verses and hadiths, imposition of penalties (fines) on the late payment of the debt will be same with *riba* (usury) which is forbidden in Islam. But, based on his study, the imposition will be allowed if the debt is based on purchase contract. Murabaha financing is one of financing contract which is based on purchase contract (Antonio 2001; Zuhaili 2011).

This is in line with the consensus of Ulama (muslim scholars) which allows the imposition of fines to customers in order to make customers more disciplined. At the other provisions, generally the imposition of fines is only allowed for customers who are able and deliberately delay the payment. But, unlike other financing contract, in murabaha contract we can assume that the customers are able to pay, so that if the customer delay the payment, it is considered as negligent and allowed to be fined.

Under the fatwa, the fines value should be based on the real lost value that may arise when the customer is arrears. However, on the other hand, the imposed fines value is solely to make customers more disciplined and may not be used for the benefit of the institutions.

Based on interview with some experts, there are two opinions regarding the determination of the real lost value. The first opinion, the banks have to actually calculate the real lost value based on real conditions when the customers are arrears. While the second opinion, banks are allowed to calculate the estimated real lost value that may arise on the basis of relevant data and information. Furthermore, the data and information that would be relevant for the calculation of real lost is the value of bad debt expense or allowance for bad debt expense that have been periodically conducted by bank. From two opinions above, the second opinion is more applicable than the first one, so that we use this paradigm in the computation.

If we assume bad debt expense as bd rupiahs, then the fines value is obtained by multiplication between bd , result of IT2FS $default_i$, and the weighted average of installment for each customer to total instalment (w_i) (see equation (25)).

$$fines_i = bd * risk_i * w_i \quad (25)$$

If there are N customers, then w_i can be obtained by using weighted average formula as follows:

$$w_i = \frac{install_i}{\sum_{i=1}^N install_i} \quad (26)$$

IV. RESULTS

The series of evaluation was conducted by using proposed method to compute risk of default value and fines amount. The dataset was a hypothetically data from two customers who have different values of instalments i.e. customers who has installment value of 1 millions and 3.8 millions. The data was computed for each end of month period of delay for 0 day to 12 months. This evaluation assumed that both of customer had been arrears since June 30th, 2013 until May 31st, 2014. In case of fines computation, this evaluation assumed that bad debt expense value was 20% to total installment. Thus, bad debt expense value was 960 thousands rupiahs (20%*(1 millions + 3.8 millions) rupiahs). Evaluation results can be seen in Fig. 3 and Fig. 4.

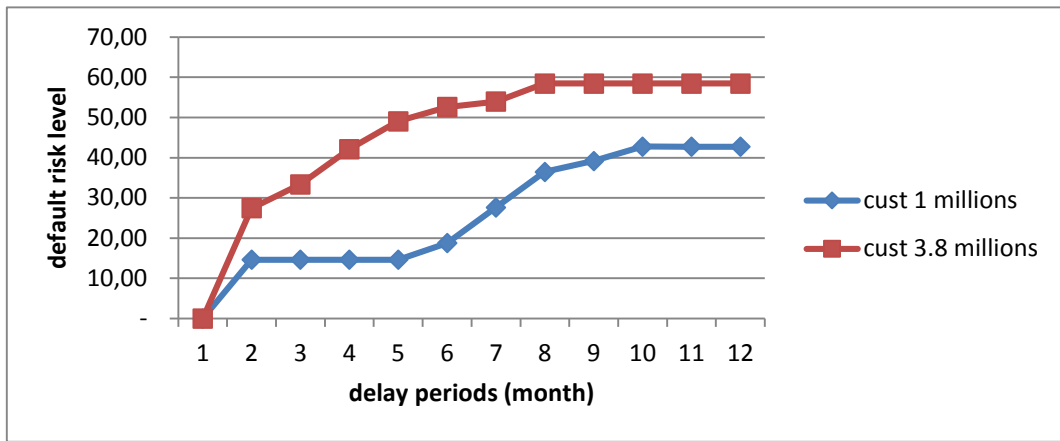


Fig. 3. Evaluation results of default risk level computation

Fig. 3 show that default risk level will be in line with sum of delay period, high delay period will cause high default risk level. But, because this research model was developed by adopting rules of Bank of Indonesia number 14/15/PBI/2012 that was limited by 270 days (9 months), thus the maximum default risk level would be obtained if the customer had been arrears in 270 days. For next periods (delay periods of ≥ 270 days (9 months)), the default risk level would be constant.

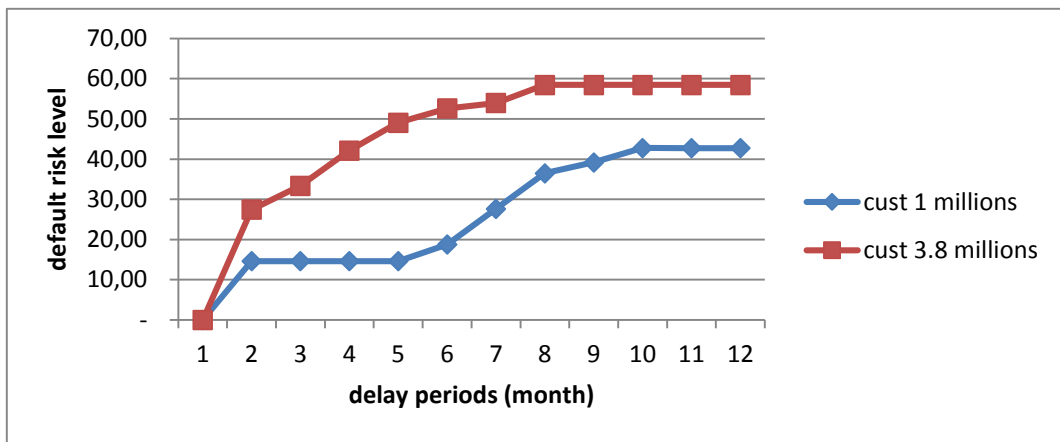


Fig. 4. Evaluation results of fines computation

The result of default risk level was used to compute fines amount by using equation (25). Evaluation results can be seen in Fig. 4. According to our explanation in introduction part, in the conventional method, the fines amount will continue to increase with the sum of delay periods without any maximum limit. While the proposed method (see Fig. 4), the fines amount will achieve the maximum value in a delay period of 9 months, so that the next period will be constant. Based on these results, we claim that our methods is fair and compliance with sharia.

V. CONCLUSION

This paper proposed models for scoring of default risk level. Installment amount and sum of delay period were used as variables for that scoring. Interval Type-2 Fuzzy Set model was proposed to support the subjective judgements in maintaining Sharia rules. Beginning delay period also used as weighted to the risk scoring results. Beside that, this paper also proposed the method for computing real lost value. It was used as basis in fines computation according to default risk level, bad debt expense, and installment weighted average. It was shown that our proposed method is fair and compliance with sharia.

REFERENCES

- Abdou H A, Pointon J. 2011. Credit scoring, statistical techniques and evaluation criteria: A Review of the Literature. *Intelligent Systems in Accounting, Finance, and Management* 18, hal 59-88 (2011) DOI: 10.1002/isaf.325
- Antonio MS. 2001. *Bank Syariah dari teori ke praktek*. Jakarta (ID): Gema Insani Pr.
- [BI] Bank Indonesia. 2012. Peraturan Bank Indonesia nomor 14/15/PBI/2012 tentang kualitas aset Bank Umum. Jakarta (ID)
- [BI] Bank Indonesia. 2013. Surat Edaran Bank Indonesia nomor 15/26/DPbS perihal Pelaksanaan Pedoman Akuntansi Perbankan Syariah Indonesia. Jakarta (ID)
- Cadeno, AM, Marin DBA, Trillo JA. 2011. Artificial metaplasticity neural network applied to credit scoring. *International Journal of Neural Systems*, Vol 21, No 4 (2011) hal 1-7. DOI: 10.1142/S0129065711002857
- Ghodselahe, A. 2011. A hybrid support vector machine ensemble model for credit scoring. *International Journal of Computer Application* vol. 17 No 5 March 2011
- Hamadani AZ, Shalbafzadeh A, Rezvan T, Moghadam A. 2013. An integrated genetic-based model of naive bayes networks for credit scoring. *International Journal of Artificial Intelligence & Application (IJAIA)* Vol. 4, No. 1, January 2013, doi:10.5121/ijaia.2013.4107
- Huang CL, Chen MC, Wang CJ. 2007. Credit scoring with a data mining approach based on support vector machine. *Expert systems with applications* (2006) doi: 10.1016/j.eswa.2006.07.007
- Lu H, Liyan H, Hongwei Z. 2013. Credit scoring model hybridizing artificial intelligence with logistic regression. *Journal of Networks*, Vol. 8, No. 1, January 2013, doi: 10.4304/jnw.8.1.253-261
- Jentzsch, N. 2007. *Financial privacy: an international comparison of credit reporting systems (contributions to economics)*. Springer
- Keramati A, Yousefi N. 2011. A proposed classification of data mining techniques in credit scoring. *Proceedings of the 2011 International Conference on Industrial Engineering and Operations Management* Kuala Lumpur, Malaysia, January 22-24, 2011

- Leung K, France C, dan Christopher C. 2007. Consumer credit scoring using an artificial immune system algorithm. *IEEE Congress on Evolutionary Computation 2007*
- Liu F, Mendel JM. 2008. Encoding words into interval type-2 fuzzy sets using an interval approach. *IEEE Transaction on Fuzzy Systems*, Vol. 16, No. 6, December 2008, doi: 10.1109/TFUZZ.2008.2005002
- Mendel JM, John RI, Liu F. 2006. Interval type-2 fuzzy logic systems made simple. *IEEE Transaction on Fuzzy Systems*, Vol. 14, No. 6, December 2006, doi: 10.1109/TFUZZ.2006.879986
- [MUI] Majelis Ulama Indonesia. 2000. Fatwa Dewan Syariah Nasional-Majelis Ulama Indonesia nomor 17/DSN-MUI/2000 tentang sanksi atas nasabah mampu yang menunda pembayaran. Jakarta (ID)
- [MUI] Majelis Ulama Indonesia. 2012. Fatwa Dewan Syariah Nasional-Majelis Ulama Indonesia nomor 84/DSN-MUI/XII/2012 tentang metode pengakuan keuntungan *Al-Tamwil Bi Al-Murabahah* (Pembiayaan Murabahah) di Lembaga Keuangan Syariah. Jakarta (ID)
- Tsai, Cf, Wu JW. 2008. Using neural network ensembles for bankruptcy prediction and credit scoring. *Expert systems with applications*. vol. 34. hal. 2639-2649
- Wu D, Mendel JM. 2009. A comparative study of ranking methods, similarity measures and uncertainty measures for interval type-2 fuzzy sets. *Information Sciences* 179 (2009) 1169-1192, Elsevier Inc., doi: 10.1016/j.ins.2008.12.010
- Wu, WW. 2011. Improving classification accuracy and causal knowledge for better credit decisions. *International Journal of Neural Systems*, Vol 21, No 4 (2011) hal 297-309. DOI: 10.1142/S0129065711002845
- Yu L, Wang S, Lai KK, Zhou L. 2008. *Bio-inspired credit risk analysis: computational intelligence with support vector machines*. Springer
- Zuhaili W. 2011. *Fiqh Islam waadillatuhu Jilid 5*. Abdul Hayyie al-Kattani dkk, penerjemah. Darul Fikr, Jakarta (ID): Gema Insani Pr. Terjemahan dari: *Fiqhul Islam wa Adillatuhu* Juz IV. Ed. Ke-10.

A Study on Financing of Operating Costs and Investment in Fishing Equipments and Boats of Boat-Owner Fishermen (Juragan) in Penunggul and Mlaten Village of Nguling District, Pasuruan Regency

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ABSTRACT

This paper try to explain the sources of funding for operating costs and investment of fishing tools and boats for boat-owner fishermen (Juragan) in the village of Penunggul and Mlaten, District of Nguling of Pasuruan Regency, as well as how financing decision is made between alternatives. Using the mixed method, we do some activities or stages of research such as: (a) preliminary study, (b) questionnaire survey, and (c) focus group discussion. We conduct preliminary study to understand the demographic background and socio-cultural of fishermen in the study area, also to understand the various concepts in fishermen's living; both related to operational activities, stakeholders, as well as investing and financing activities. In this stage we use secondary data, indepth interviews with society actors, and non-participant observation.

The study on financing decision of operating costs and investment in fishing tools and boats of Juragan in Penunggul and Mlaten Village of Nguling District of Pasuruan Regency confirms the theory of Pecking Order. In this study, it is indicated that arisan and personal saving at home are common models of funds accumulation which are not only capable to satisfy the social motives but also the economic motives of doers. Arisan can reduce dependence on revenues, which are naturally uncertain in the field of traditional fisheries, in order to accumulate fund for investment decision. Yet many people are accessing the funds of the local sharia financial services due to lack of marketing activities. Funding model adopted by Juragan in one location cannot be separated from cultural backgrounds and deep traditions. Values and beliefs also play role in forming local policies on funding. Similar studies in other parts of Indonesia, are expected to reveal the diversity and richness of financial management models, particularly related to the financing policy.

Keywords: *pecking order theory, fishermen, East Java (district of Nguling, Pasuruan regency)*

I. INTRODUCTION

Indonesia is an archipelago which occupies a large area and reserves many natural resources. The oceanic area of Indonesia, which is also known as a maritime country reaches 5.8 million km² or nearly 70% of the total area of Indonesia. The coastline length of Indonesia, which is 81,000 km, is the second longest in the world after Canada. Although positioned in the second place after Canada, Indonesia is a nation with the longest productive coastline in the world, because of the geographical conditions of Indonesia which are dominated by icy island (Green Island). It is estimated that more than 2,500 species of fish and 500 species of coral live in the sea of Indonesia. Not surprisingly that one of the visions of President Jokowi is to make Indonesia as the world's largest maritime country.

The living of fishermen and their family, which is very poor and suffers severe economic problems, occurs in almost all territories in Indonesia, including in East Java. There are many coastal areas in East Java, one of which is in Pasuruan Regency. Pasuruan coastal areas along the ±48 km is the moving source of economy for society who resides in the 5 districts, which are: District of Bangil, Kraton, Rejoso, Lekok and Nguling. The potential of marine fishery reserves in Pasuruan Regency is 46,321.76 tons per year (The University of Brawijaya Research Team, 2013). The potential of sustainable reserves declined dramatically compared to 1979 which was 89,365.26 tons per year. By this point, the potential of those reserves has decreased by average of 3% per year (Marine and Fisheries Department Strategic Plan for 2013 - 2018 of Pasuruan Regency).

Poverty of fishermen cannot be separated from their small amount of earnings from fishing and the uncertainty of fishing results. Sometimes, fishermen were able to obtain great results, but in the other times, it is very likely not to get any outcomes. The funds needed by fishermen to carry out fishing activities aren't few, even for fishing equipments or operating costs. Increasing of price, especially diesel fuel costs, makes the burden of fishermen even worse. About 60% or more of the total operating cost on fishing is for fuel. Due to the high cost of fishing and the low amount of income, there is almost no remaining funds can be stored or saved by fishermen. Governments have been trying to help the fishermen's living condition, but the provided aids are often not sustainable and does not take into consideration the particular needs of fishermen. For example, boats' size given to the fishermen groups are too small or too large compared to the fishermen's needs, thus it cannot be used and has to be sold and distributed to members of the group in other forms (money or fishing equipments or money to buy fishing equipments).

There are not many researches which study fishermen funding, especially the traditional fishermen. However, aspects of funding for fishermen both for operations and for investment in boats and fishing tools is quite interesting to study. Based on the previous explanation, this study aims to explore information about the variety of funding sources utilized by fishermen, in particular, in the study area and how the funding decisions is made for alternatives available. The study is conducted in the village of Penunggul and Mlaten, District of Nguling, Pasuruan Regency.

The study is expected to be useful for the decision makers related to financing policy for fishermen; particularly in the area of study. In addition, this study is expected to provide additional knowledge for other researchers related to the utilization of diverse funding sources for small businesses, especially fishermen.

II. RESEARCH PURPOSES

This study is purposed to explain the sources of funding for operating costs and investment of fishing tools and boats for boat-owner fishermen (afterwards refer to "Juragan") in the village of Penunggul and Mlaten, District of Nguling of Pasuruan Regency, as well as how financing decision is made between alternatives.

III. THEORETICAL BASIS

3.1. Modal Structure Theory: Pecking Order Theory

There are not specific theory is a theory that has not specifically explained the capital structure decisions for small businesses. Therefore, the theory of common capital structure can be utilized as the best approach to explain the decisions of small businesses capital structure. Any type of business has to deal with two types of risk, which are business risk and financial risk. Business risk is associated with the uncertainty of operational profit in the future. Business risk is influenced by many factors, such as: demand conditions, supply conditions, input prices, and most importantly the operating leverage. Operating leverage refers to how much the fixed operating costs are covered by the company. The greater the fixed costs, the greater the operating leverage, the greater the sensitivity of operational profit compared to changes in sales, the greater the risk of operations.

The second type of risk is the financial risk. This risk is often defined as an additional risk beyond the business risk which should be covered by business owners (shareholders) as a result of the debt utilization. The use of debt (leverage) will increase the risk covered by business owners because the creditors (debt holders) are not willing to cover the risk arising from the company's operations. No matter how the condition of the company is, creditors will still ask for interest payment and installment loans. The financial risk raises important questions about the urgency of debt utilization in the capital structure. Several theories of capital structure tried to answer these questions, including the Theory of Modigliani and Miller (MM) I, The MM Theory II, The Theory of Trade Off and Bankruptcy Probability, and the Theory of Pecking Order.

In contrast to the former theories, which discusses optimal capital structure, The Theory of Pecking Order suggested that the company has a hierarchy for funding decisions. The main priority is to use internal financing (retained earnings). If a company has to use external funding resources, then the decision order should be: 1) debt, 2) convertible securities, 3) stock of preference, and 4) ordinary shares. The first reason behinds this order is the problem of control. The utilization of internal financing sources ensures the control of the company remains in the owner's hand. For small businesses, this is very important given the limited assets (resources) they have. The second funding source is the utilization of debt. By issuing debt securities, business owners do not have to share ownership and control of the company with the new owners. The bond between creditor and company is not as tight as if it occurred among similar owners. Another reason is: by using debt instruments, it is expected to able to reduce agency costs as the result of increased business owners.

3.1. Former Researches

Former study related to the small businesses financing was conducted by Kihimbo B, et al (2012) in Kenya. This study aimed to determine the main source of funding for Small and Medium Enterprises (SME) in Kenya, and particularly how SME in Kenya in accessing formal funding sources. The design used in the research is descriptive with survey through questionnaires. The data analysis by quantitative and qualitative methods showed less than 50% of SME in Kakamega town were using formal financing as the capital source for their operations, and more than 90% of SME which used formal financing were successful. The high cost of financing is a main obstacle to business owners to look for funding for their businesses, thus the majority of SME in Kakamega town received initial capital from personal savings.

The study of Kihimbo B goes along with the research of Iin Indarti et al (2013) which suggested The Method of Coastal Society Empowerment through Institutional Strengthening in Semarang Coastal Area. The results showed that capitalization including investments in traditional fishermen was very small in amount and supported by wholesalers. Fishery business, especially traditional fishermen who were seasonal with uncertainty and high risk, became the reason of capital owners to refuse capital provision. Additionally, the educational status of fishermen, who were generally low, made it difficult to meet the requirements of financial institutions, for example, collateral, insurance and equity. This classic problem made fishermen group difficult to develop their business, the problem of insufficient capital. It is caused by the low of credibility of fishermen to access capital in formal financial institution.

Fishermen, as the research of Badruddin (2005), actually had several potential social capital which became asset that were needed continuously developed to increase awareness and collective actions to face structural pressure to get rid from poverty. Results of study, found that one of the social capitals, which were quite interesting, was the Arisan. According to Badruddin, Arisan was one of the potential social capitals that benefited the social capital elements more effectively and efficiently, and showed very positive results for fishermen society, both in social sense, by strengthening the sense of solidarity, and in the term of economy as an adaptation strategy to trick uncertain incomes.

IV. QUESTIONS OF RESEARCH

- How Juragan in the Village of Penunggul and Mlaten, District of Nguling of Pasuruan Regency finances operating costs of fishing activity?
- How Juragan in the Village of Penunggul and Mlaten, District of Nguling of Pasuruan Regency finances investment in boats and fishing tools?

V. RESEARCH METHOD

The study is delivered using the mixed method with the stages of research as follows:

5.1. Preliminary Study

Preliminary study is conducted to understand the demographic background and socio-cultural of fishermen in the study area. Preliminary study is also conducted to understand the various

concepts in fishermen's living; both related to operational activities, stakeholders, as well as investing and financing activities. Preliminary studies are delivered by stages as follows:

1. Study of secondary data. Secondary data, particularly demographic data is acquired through the publication of District of Nguling in Numbers the year of 2014 published by the Central Bureau of Statistics District of Pasuruan, also the Monographic Data of Penunggul Village and Mlaten Village in the year of 2013.
2. Indepth interviews with society actors. In each village, there are four society actors whom interviewed, namely: the village administrators (village chief and village secretary), public figure/religious leader, leader of prominent fishermen group in the village, and also one fisherman figure. Leader of fishermen group and fishermen figure whom interviewed were those who have been recommended by both the village administrators and community leaders. Interviews with the village administrators and community figures/religious leaders are conducted to get an overview of the social life of village people in general, as well as the life of fishermen in the study area.
3. Non-participant observation. Non-participant observation is conducted to clarify the results of indepth interviews, especially related to the life of fishermen. Observations are conducted towards fishing ground activities, which include: preparing of fishing, maintenance and repair of boats and fishing tools, boat docking until fish sale, as well as fishermen social activities.

5.2. Questionnaire Survey

Preliminary study results give initial illustration of research results which needs to be followed up further. Some aspects related to the diversity; such as diversity of: the type of boats, fishing tools, fishermen operating system, funding sources and funding mechanisms; need to be explored comprehensively by questionnaires. Questionnaires were prepared generally using closed-ended questions, though still given some opened-ended questions, especially in matters related to fishermen's opinion about the advantages and disadvantages of certain funding sources.

Sample for the survey questionnaires have been selected using stratified sample, which the Juragan were grouped based on the diversity of fishing tools, and furthermore there were selected sample of 25% of Juragan in each group. Juragan population data in both villages are obtained from Field Instructor Officer (Petugas Penyuluh Lapangan) of the Department of Marine and Fisheries of Pasuruan Regency in District of Nguling.

5.3. Focus Group Discussion

Focus group discussion is conducted to get more indepth answers to the opened-ended questions in the questionnaires survey. Besides, it is also benefited to accommodate additional unexplored diversity in the questionnaires survey. Focus group discussion in each village is attended by two groups of Juragan; namely Juragan who answered questionnaires and Juragan who did not answer questionnaires, by the proportion of 50% similarly. Each group is represented at least by one Juragan from each Juragan groups based on the diversity of fishing tools. The numbers of participants in the focus group discussion in each village were eight people.

VI. RESULTS AND DISCUSSION

6.1. Discussion of Secondary Data

6.1.1. Village of Penunggul

Penunggul village is the northest coastal region of Pasuruan district and directly adjacent to the Madura Strait thus the average temperature is quite high at between 28°C to 33°C. The total population of the Penunggul village is 1,348 and consists of 454 families. The total woman population is higher by sex ratio of 91.5. The majority of Penunggul villagers work as fishermen, laborers and farmers or farm laborers. Penunggul village is categorized as a coastal village, thus it is not surprising that many people work as fishermen (28%).

6.1.2. Village of Mlaten

Mlaten village is located in the Sub-District of Nguling, District of Pasuruan. Mlaten village is in the northern coastal region of Pasuruan. The total population of Mlaten village is 3,003 inhabitants and consists of 853 families. The total woman population is higher by sex ratio of 97.6. Mlaten The population quality is quite good. This could be observed from the proportion of people who graduated from high school education by 18% and secondary school graduates by 6%. The majority of population (50%) works in fishery sector. The number of fish traders (bakul) in Mlaten village is the second largest in the Sub-District of Nguling. There are 40 fish traders at various business scales ranging small to large businesses.

6.2. Results of Village Social Mapping

6.2.1. Village of Penunggul

The majority of Penunggul villagers believed as Moslems with cultural nuances of Nahdliyin. The strong character of Javanese culture can be seen from not doing religious ceremonies (e.g. haul) to respect ancestors. But some villagers who have certain intentions, such as weddings and circumcisions, generally do “selamatan” or “tasyakuran” in the tomb of Ki Buyut Unggul across the Lawean River. Nahdliyin tradition is still maintained by villagers, such as: weekly recitation filled with reading Tahlil and Surah Yasin, Maulid Diba’ in the moment of birth or birthday celebration, Manaqib Syekh Abdul Qadir Al Jailani, Imtihan when pesantren graduation or other Islamic educational institutions. Traditional event which is held once a year is petik laut.

Dominant culture and value in Penunggul society is Javanese culture. At first glance, it appears as the using of Javanese language in level ngoko as daily language. Javanese language proficiency in level krama inggil of Penunggul villagers is also quite good. It should be admitted that in the region adjacent to other villages in the sub-district Nguling, there is strong assimilation process between Penunggul local cultures with Pendalungan-Madura local cultures. This appears in Pendalungan accent which became stronger and the ability to use the Javanese language level krama which is weakened by time, especially in the younger generation. Character of Javanese culture in Penunggul society appears on characteristics as follows:

- Tends to be introvert, not expressive, not transparent, however doesn’t like to talk nonsense;
- Do not/less temperamental;
- Paternalistic.
- Prioritizes harmony as the foundation of social relationship, therefore villagers maintain harmony and peaceful communal life very much.
- Most people have traditional primary livelihood, in this case is being fishermen, where traditions and myths take dominant part in the daily implementation.
- Give great respect to the formal leaders of the village and the people who perform.

6.2.2. Village of Mlaten

Mlaten villagers are 100% Moslem by culture of Nahdlatul Ulama (NU). Like other people in NU circumstances, some people still honor the ancestors, especially those who served as village founders or the first Muslim missionaries. Regular events which held by citizens were: Yasin-

Tahlil recitation, Manaqiban, Maulid Diba', and imtihan. As part of Nahdliyin culture, Mlaten villagers still maintain the ancestral traditions. It can be seen from the annual “larung bitek” ceremonies. Bitek is a small boat filled with offerings, for example: cow or buffalo head, clothes, gold jewelry, and household appliances. Bitek, which has been spelled by local traditional leaders then being released into the sea (floated) until being found and exploited by fishermen outside Mlaten village.

Dominant culture and value in Mlaten villagers are Pandalungan culture but tend to Madura Bangkalan or Sampang culture (in this study, it refers to Pandalungan-Madura culture). At first glance, it looks in the use of Madura language as daily language. Javanese language proficiency of Mlaten villagers is very limited to the level of krama madya, limited to few villagers. As the people in Pandalungan culture generally, Mlaten villagers in coastal area have these characteristics:

- Open minded;
- Characteristically expressive, tend to be rough, temperamental, transparent, and does not like to talk nonsense;
- Has relatively strong family relationship and therefore, tend to like the problem-solving together massively,
- Mostly has traditional primary livelihood, in this case is being fishermen, where tradition and myths take dominant place in the implementation of daily life.
- High respect to religious leaders (Kyai).
- Tend to be pragmatic.

6.3. Fisherman

In National Law No. 31 of 2004, it is stated that fishermen are those whose livelihood is fishing. The law also stated that fishes are all kinds of organisms that all or part of their life cycle is in the water. Fishermen in the study is categorized into: Juragan, pendega-labors and pendega-passengers (nunut). Juragan are fishermen who own fishing boats. Juragan investing in boats and fishing tools. Juragan are also responsible for the operating costs of fishing activities. As the boat owner, Juragan take risk of damage to boats and fishing tools. While the business risks associated with fishing operations are covered either by Juragan or Pendega; by a higher portion of risk for Juragan. It means that if in some operating day Juragan and Pendega do not get any fishes, then there is no income received by both, but Juragan remain burdened by operating costs of fishing. Not all of Juragan have pendega. Juragan who catch crabs (rajungan), generally work alone.

Pendega-labors are fishermen who work for Juragan. The amount of pendega-labors whom employed by Juragan in one boat, were very affected by the type of fishing tools used. The type of fishing tools used is determined by the type of fishes to be caught. In this case, from earlier, Juragan has decided whether to catch: the Medai fish, Sot fish, crabs or other fish species which are inside the operating target of water regions. Pendega-labors obtained money shared from fish sale outcome by Juragan. Here is a share table of fish sale.

Fishing Tools	Number of Crew (Including Juragan)	Juragan Participation	revenue sharing on gross sales	
			Juragan	Each Pendega
Payang Seine	15	Go to sea	10/24	1/24
		Do not go to sea	8/22	1/22
Seblang Nets, Medai Nets	3	Go to sea	3/5	1/5
		Do not go to sea	2/4	1/4
Crab Net, Sot Net	1	Go to sea	1	0
		Do not go to sea	0	0

Besides Juragan and pendega-labors, there are also fishermen who have their own fishing tools, but do not have any boats. Such fishermen will ride on Juragan's boat, but catching fishes using their own fishing tools. In this study, this kind of fishermen are called pendega-passenger (term used in the study area, either for pendega-labors or pendega-passengers is pendega. In the research area, in fact, the term pendega and passengers is basically interchangeable. Separation to pendega-labors and pendega-passengers is conducted to ease the discussion). Generally, they ride on Juragan equipped with crab net fishing tools. As a reward to Juragan, fishermen-passengers pay the diesel fuel cost. The amount of costs covered by pendega-passengers is different in each village. In the Penunggul village, pendega-passengers "donate" the average diesel fuel cost by 10% from fish sale results. Pendega-passengers in Mlaten village handle maximally 50% of the diesel fuel cost which is covered by Juragan. The percentage charged by the Juragan in Mlaten is determined based on the subjective judgment of fish sale results caught by pendega-passengers. Fishing yields are not mutually shared.

Number of Fishermen

Type of Fishermen	Penunggul	Mlaten
Juragan	71	65
Pendega-Labors	17	403
Pendega-Passengers	20	5

The great number of pendega-labors in Mlaten village is caused by a great amount of Juragan who use payang seine as fishing tools. Payang seine operation requires pendega-labors

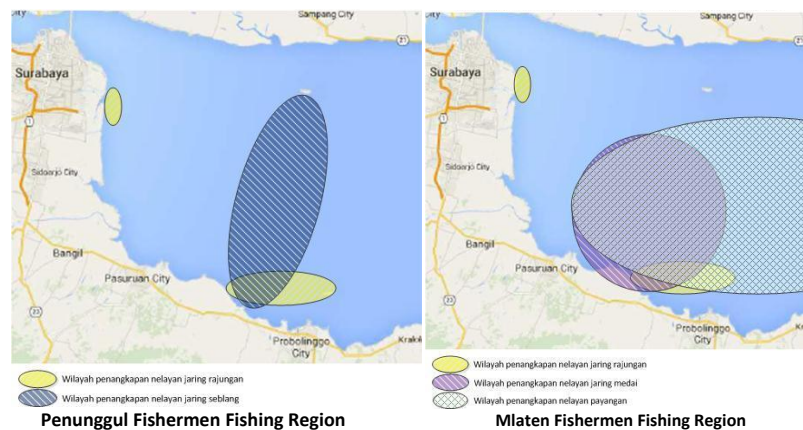
about 14 people. Mostly (around 78%) of pendega-labors, who operate payang, come from other villages, particularly from the District of Tongas of Probolinggo Regency. The main source for pendega-labors is mostly from Juragan's close relatives; for example: son, nephew, and brother. If close relatives are unavailable or unwilling, Juragan will seek pendega-labors in the village. If local labors are not available, the Juragan will seek in other villages. Juragan may request help from other Juragan or pendega-labors to find employees from other regions. There is no special selection process and the relationship between Juragan and pendega-labors is only based on mutual trust.

To strengthen the relationship with pendega-labors, Juragan give opportunity to pendega-labors to borrow money from Juragan. The loan does not have to be repaid over as long as pendega-labors are still working to Juragan. This activity is called as "ngiket". In conditions of pendega-labors have good trust, the loan can be paid off in two ways, namely: 1) pendega-labors pay off using their own money (and then resign), 2) pendega-labors ask to their new Juragan to pay off their debt on the old Juragan and hence, they are bound to work to the new Juragan. The amount of accumulated loans to every pendega-labor, which is still able to be tolerated by Juragan, is different on two villages in this study. In Mlaten village, generally Juragan limit the accumulated debt of pendega-labors up to IDR 1,000,000.00. Juragan in Penunggul village are more flexible in setting the accumulated debt limit. Accumulated debt limit in Penunggul village is generally accustomed to the shame feeling of pendega-labors to add debt amount to Juragan (in local terms, it is expressed as "sak sungkane tiyange"). There is no specific amount limit on the term of the "sak sungkane", but according to some Juragan, it ranges from IDR 2,000,000.00 to IDR 2,750,000.00. Differences in limiting the accumulated debt from Juragan to pendega-labors, in both study area, are strongly influenced by the characteristics of the power source of pendega-labors. In Penunggul village, one hundred percent of pendega-labors are relatives or village neighborhood. In Mlaten village, majority of pendega-labors workforce, are from other villages, even from other districts. Hence, the limitation of accumulated loans for each pendega is being tightened.

6.4. Fishing Activities

1. The operation area of fishing of a Juragan is mostly determined by Juragan's experience when they were pendega or resumed their parents' habit. Different fishing operation area provides different fishing results. Fishing results commodity, generally requires different fishing tools. Next, boat selection should be accustomed to fishing tools used.

2. Juragan's fishing activities may be done either daily or by "andun". In the daily fishing activity, the activity is conducted in water area which is not far from fishermen's home. Less than one day, fishermen will return to their home. Otherwise, andun activity requires longer period, more than one day, even weeks.
3. Penunggul fishermen can be categorized into those who go fishing using seblang nets and crab nets. Fishermen with Seblang nets go fishing daily. Crab nets fishermen from Penunggul village can choose to go fishing daily or by andun. From 63 fishermen with crab nets, half of them go fishing daily and the other half use daily mechanism as well as andun. Fishermen can spend 20 days in a month for andun.
4. Mlaten fishermen can be categorized into those who use paying seine, medai nets, and crab nets. Fishermen with medai nets generally use daily mechanism as described in previous discussion. Fishermen with payang seine (Payangan fishermen) and crab nets may choose whether to use a daily fishing mechanism or andun.



The Number of Fishing Tools

Fishing Tools	Penunggul	Mlaten
Seblang Nets	8	0
Crab Nets	63	10
Medai Nets	0	28
Payang Seine	0	31
Total	71	69*
Number of Andun Juragan	30	20

6.5. Investment and Operating Cost

6.5.1. Investment in Boats and Fishing Tools

1. Fishing boats can be made of wood and fiberglass. Although there are many types of wood that can be used as boats, Juragan in Penunggul and Mlaten village, as Juragan in

other Pasuruan territories, are only willing to buy boats made of teak wood. The selection of teak wood is based on consideration of durability and the residual value estimation which is still high when the boats are no longer being used. New teak wood boats can be used for 15 to 25 years. While the used teak wooden boats are still able to be used for 8 to 10 years. Fiberglass boats are commonly used to catch crabs. The dimension of wooden boats varies depending on operational area plan and the type of fishing tools used.

2. Dimension and capacity of boats Mlaten area are generally larger than Penunggul. Jurung (wooden boats for payang fishing tools) have an average length dimension of 15 m and 3 m wide. Smaller jurung have dimensions of 14 m long and a width of 2.2 m. Jurung generally has weight over 5 gross tons (GT). Teak wood boats for non payang fishing tools generally have dimensions of length 12 m and width of 2.1 m. This type of boat has weight of less than 5 GT but more than 1GT. Crab fishermen can use teak wood boats and fiberglass boats. Fiberglass boats have dimensions of length 8 m and width of 1.6 m. This type of boat can be used up to 20 years.
3. The differences in choosing type and dimension of boats in both villages cannot be separated from the history of fishermen village in Nguling sub district. The earliest development of fishing business in the sub-district began in Kedawang village and then spread to Mlaten. Until recent, in both villages, there are found many Juragan, traders (or “bakul” in local terms), and fish processing business, compared to other villages in sub district of Nguling. In both villages, there are also fish auction place and Village Unit Cooperatives dedicated for fishermen. Fishermen from other villages, in the past, generally became pendega for Juragan in Kedawang and Mlaten. As pendega, fishermen, especially in the village of Penunggul, had to wait too long to have boats with large dimension. They also had difficulties to buy new boats. This resulted to all of teak wood boats in Penunggul village were used boats with relatively cheaper price.

Village	Boats	Dimension (m)	Weight (GT)	Price (Thousand Rupiah)		Upgrade Costs (Thousand Rupiah)	Motor Price (Thousand Rupiah)	Remaining Life		Proportion
				New	Secondhand			New	Secondhand	
Penunggul	Teakwood Jurung	15 x 3	>5	-	-	-	-	-	-	0%
	Teakwood Boats	7x1,5 -12x2,1	1-5	-	3.000-8.000	500-2.000	2.500	-	10	70%
	Fiber Boats	5x1	<1	12.000	-	-	1.500	20-25	-	30%
Mlaten	Teakwood Jurung	15 x 3	>5	25.000-30.000	17.500	2.500	15.000	15-25	10-15	28%
	Teakwood Boats	7x1,5 -12x2,1	1-5	-	8.000	2.000	2.500	-	10	61%
	Fiber Boats	8x1,6	<1	15.000	-	-	1.500	20	-	11%

4. The types of fishing tools used by fishermen are very influenced by the type of fish to catch:

- Payang seine are fishing tools that can be used for catching various types of surface fishes, such as anchovy fish to tuna fish. Payang’s ability to catch various types of fish is

due to their construction, which involve several types of nets with different mesh size. Payang's mesh size varies between 0.75 inches at the end of bag up to 3 inches at foot end. Payang can be used up to two years with adequate treatment. Treatment for payang is done by Juragan and pendega-labors themselves. Payang must be purchased in finished condition. Mlaten fishermen commonly buy payang from sellers in the Kedawang village for IDR 6,000,000.00 per unit. One jurung only equipped with one payang. Payang are used by fishermen in the village of Mlaten.

- Seblang nets and crab nets use similar materials, namely nets with mesh size of 3 inches to 3.5 inches. Both types of nets are generally produced by Juragan and their family (wife and children). The production cost of one unit (set) crab nets is IDR 140,000.00, while Seblang nets is IDR 150,000.00. Fishermen tend to produce their nets for fishing by themselves due to the high cost difference compared to buying finished nets, at around IDR 90,000.00. The amount of crab nets, which each Juragan has, is very different, but on average each Juragan has 7 sets. The total amount of Seblang nets in each Juragan is in average of 10 sets. The durability of crab nets is very low, within one month the nets had to be replaced. Hence, investment in crab nets can be basically categorized as short-term investment. Seblang nets, with regular maintenance, can be used up to two years. Maintenance is performed whenever threads in nets are broken by weaving. Seblang nets are used by Penunggul fishermen, while the crab nets are used by both Mlaten and Penunggul fishermen.
- Medai nets have mesh size of 1.75 inches and are used to catch mackerel (medai in Madura language). Medai nets are generally also produced by Juragan family themselves. Production cost per unit of medai net is IDR 180,000.00. One fisherman in Penunggul village generally has 45 sets of medai nets. As Seblang nets, medai nets can be used for one year with regular maintenance. Maintenance is done by the Juragan's wife. Medai nets are used by Mlaten fishermen.
- Sot nets are used to catch sot fish. These nets are provided by Juragan whose main fishing commodity is crabs. When crabs are not many to find, Penunggul fishermen catch sot fishes. Sot nets have mesh size of 2 inches. Like other nets, these nets are produced by Juragan's family with production cost is IDR 165,000.00. One fisherman generally has four sot nets. These nets can be used up to two years with adequate treatment. Treatment is done whenever the threads in nets are broken, by fishermen's wife. Sot nets are used by Penunggul fishermen.

6.5.2. Operating Cost

1. Operating costs, which are covered by Juragan, can be categorized into fishing cost and maintenance costs of boats and fishing tools. The fishing operating costs consist of fuel costs, meals and cigarettes. Fishermen in Penunggul and Mlaten do not need bait to catch fish.
2. Diesel fuel requirement per day is determined by the operational area of pendega's boats. Boats with crabs fishing tools, which are operating around coastal waters, only require in average 5 liters of diesel fuel per day. The daily requirement of diesel fuel would be similar, either if Juragan go fishing by daily or andun mechanism. Fishing by payang generally requires 20 liters of diesel fuel per day if it is conducted by daily fishing mechanism. When andun is conducted, the average fuel consumption of jurung reaches 30 liters per day. Diesel fuel consumption of boats with seblang and medai nets reaches in average 10 liters per day. Diesel fuel is purchased from grocery stores (pracangan) by price of IDR 7,500.00 per liter. The price set by sellers is higher by IDR 500.00 compared to the price in public refueling stations, and rounded up to the nearest multiple of five hundred. Fishermen buy diesel fuel from local grocery stores as the refueling station for fishermen in Mlaten village has not been operating for a long period. Generally one Juragan is regular customer to one grocery store.
3. The needs of cigarrets and foods are largely determined by the amount of pendega-labors which are employed by Juragan. Cigarettes for boats with pendega-labors up to 2 people (boats with seblang and medai nets) are 2 packs, meanwhile for boats with pendega-labors up to 15 people (payangan) are 10 packs. Cigarettes are purchased from grocery stores which already became Juragan's regular by average price of IDR 12,500.00 per pack.
4. Meal cost covered by Juragan in Penunggul village consists of: the price of rice and dish, bottled drinking waters, coffee beverages. The cost per person per day ranges from IDR 15,000.00 to IDR 20,000.00. The high meal cost in Penunggul village covered by Juragan is caused by the long period of fishing in average (12 hours for boats with seblang nets and about 8 hours for boats with crab nets). In Mlaten village, meal cost covered by payangan Juragan is different with other Juragan. Meal prepared for pendega-labors is only bread, thus meal cost per person can be reduced to IDR 5,000 to IDR 7,500.00 per day. For boats with medai and crabs nets, meal cost per person covered by Juragan is IDR 10,000.00 per day. It is caused by the period of Mlaten fishermen which is shorter.

Village	Net Type	Number of Crew	Diesel Fuel		Cigarettes		Food		Daily Costs (Rupiah)
			Liter	Rupiah	Pack	Rupiah	Per Person	Rupiah	
Penunggul	Seblang Nets	3	10	75.000	2	25.000	20.000	60.000	160.000
	Crab Nets	1	5	37.500	1	12.500	15.000	15.000	65.000
Mlaten	Payang Seine	15	20	150.000	10	125.000	7.500	112.500	387.500
	Medai Nets	3	10	75.000	2	25.000	10.000	30.000	130.000
	Crab Nets	1	5	37.500	1	12.500	10.000	10.000	60.000

- Boats maintenance cost calculation is based on the amount of budgets in 2014. Regular maintenance cost of wooden boats consists of monthly and annual budgets. Monthly cost is spent for regular maintenance such as: scrubbing, caulking and painting. The amount of monthly maintenance cost ranges between IDR 100,000.00 to IDR 200,000.00 depends on the size of the boat. The annual cost is spent in time towards Eid celebration day. The annual budget is major maintenance cost to restore the condition of wooden boats. Major improvements can be total repainting and replacement of rotten woods. Total repainting requires money between IDR 175,000.00 to IDR 350,000.00, depends on the size of the boats. Replacement of rotten woods costs vary depends on the damage, but can be ranged between IDR 1.500.000,00 to IDR 2.500.000,00.

6.6. Juragan's Stakeholder

Besides Pendega-labors and Pendega-passengers, parties concerned with Juragan in both villages also include:

- Fish and crab traders (better known as bakul). Bakul are traders who buy fishing yields of fishermen. Basically, Juragan can sell their fishing results to any bakul operating in their village territory. Therefore, to ensure good supply of fishes, bakul offer loans to Juragan which are generally used to buy boats or fishing tools. The loan does not have to be repaid by the Juragan as long as Juragan still supply their fishing results to the creditors-bakul. Loans shall be paid when Juragan want to be other bakul's subscribed suppliers. Juragan's debt repayment is carried out by new bakul to old creditors-bakul, and hence Juragan are tied to the new creditors-bakul. This mechanism is similar to factoring, receivable transfer, but implemented in a very simple mechanism (e.g. no credit evidences were transferred because the credit documentation is only simply written in creditors-bakul transaction books. Lending and borrowing transaction between bakul and Juragan is only based on: tradition, good intention and mutual trust). Creditors-bakul will stop lending to Juragan when the accumulated debt has reached the tolerated limit. Accumulated load limit of bakul to Juragan of Penunggul village is around IDR 1,000,000.00, meanwhile in Mlaten village is IDR 2.000.000,00. In the case of Juragan's

debt which is transferred to the new creditors-bakul, Juragan can add more debt amount up to accumulation of IDR 1,000,000.00.

The consequences for Juragan who are in debt to bakul are obligation to supply fishes or crabs. The selling price to bakul is generally lower by about 5% to 10% compared to the market price. The amount of discount/ reduction in selling price is influenced by additional activities of bakul, as in daily fishing versus andun. For example: crabs (rajungan) captured by Juragan in Nguling waters area will be valued IDR 1,000.00 lower than market price (the current market price for bakul level is IDR 30,000.00 per kilogram). However, if Juragan catch crabs by andun in Tambak Sumur waters area, the results will be valued IDR 3,000.00 per kilogram lower than market price, by the same bakul. It is because of bakul, in orders to mobilize andun workforce, should provide temporary shelter for Juragan who do andun. Bakul also have to take care of food delivery from Juragan's wife to Juragan in andun area every day. In addition, the transportation of Juragan from village to andun area is fully covered by bakul. Currently, there are six bakul in Penunggul area, meanwhile in Mlaten, there are 40 people.

2. Grocery stores. Grocery stores fulfill the demands of diesel fuel and cigarettes for fishing operations. Similar to bakul, to ensure Juragan do not buy from other grocery stores (binding = ngiket), shop owners are willing to lend funds to Juragan. The loans do not have to be repaid as long as Juragan always buy from stores-creditors. This mechanism is done on the basis of mutual trust. Loans shall be repaid only if Juragan want to be customers (diesel and cigarettes) of other grocery stores. Repayment of the loans can be made by cash or credit transfer to the new grocery stores. Besides providing cash loans, grocery stores also provide credit facility to purchase diesel fuel and cigarettes. Payables period is not more than two days. Juragan, who do not pay the debt of diesel fuel or cigarettes for more than two days, are not allowed to buy on credit until the debt is paid off. Currently, there are three grocery stores in Penunggul and 6 grocery stores in Mlaten, which sell diesel fuel and cigarettes for the purposes of fishing operations.
3. Net and netting material stores. All Penunggul and Mlaten fishermen buy material for nets in two shops in Kedawang village (H Rahmat, and H Fatah) and 1 store in Penunggul (H. Abidin). The purchasing of netting materials should be made in cash. The store owners do not provide cash loans to Juragan
4. Boats manufacturers and sellers. Teak wooden boats which are used by Penunggul fishermen are purchased in used condition. The boats are obtained from fishermen who were around Nguling sub district, District of Pasuruan and Tongas Wetan sub district, district of Probolinggo. Fiber boats are purchased from manufacturers in Banjarsari, sub

district of Sumberasih, Probolinggo district. Boat purchasing must be made in cash. Boat sellers do not provide cash loans to Juragan.

Mlaten Teak wooden fishing boats are purchased either new or used condition. Secondhand boats are purchased from fishermen around sub district of Nguling and Tongaswetan. The new boats were purchased from manufacturers in Kedawang village (sub district of Nguling) or Semeduasri village (sub district of Lekok). Like Penunggal fishermen, Mlaten fishermen also buy fiberglass boats from manufacturers in Banjarsari

5. Arisan Organizer (“boreg arisan” in local terms). Arisan, in the coastal area of Pasuruan Regency, is a social non-formal raising funds group whose members are required to perform a series of payment certain amount of money periodically (usually daily, but can also be found weekly) for a certain period (usually one, two, or two and a half year depends on the agreement and the number of members). Accumulation of arisan funds are distributed to the group members, in turn, periodically (usually every month). Those who receive funds are already determined at the beginning of the period, i.e. before arisan activities are started, either by means of the draw of sequence number withdrawals or by consultation and negotiation between participants/members. Those who are responsible and manage the arisan are called boreg. Boreg are obligated to collect funds from arisan participants (Juragan), to save, and give the accumulated arisan funds to members every month based on sequenced numbers of funds receiving order. For their services, boreg will receive money with amount that will be received by arisan members, but it is obtained through the accumulated funds of arisan members. Boreg are those who first receive the accumulated funds. As an illustration can be exemplified: Mr. Buamar participates to the daily arisan organized by (“diboregi”) Mrs. Tuti. Arisan time period is one year and the collecting amount of daily arisan is IDR 10,000.00. The number of members of arisan is 12 people. Assumed one year is 360 days, the accumulated funds of arisan to be received Mr. Buamar is IDR 3,600,000.00. After drawing, Mr. Buamar gets the sequence number of 6. After that, Mr. Buamar and other group members pay IDR 10,000.00 per day to boreg. Money collection which is not paid, is automatically becoming debt and must be paid when the members have enough money. Accumulated funds at the end of the first month (in local terms is known as the "sequence 0") becomes boreg's. Accumulated funds in second month are received by arisan members with sequence number 1. Mr. Buamar (with sequence number 6) will receive the accumulated funds at the end of the seventh month. And so on until members with the last sequence number will receive the last accumulated funds at the end of the thirteenth month. If one

of the arisan members in default (leave the village and therefore do not perform daily funds collection), then boreg are obliged to cover the members' contributions.

In essence, arisan is a form of forced term savings that can only be withdrawn periodically at a specified time. If observed, the cost of arisan members (in the form of the earliest accumulated funds to boreg) is quite large (up to 8% in the example above).

The members are not concerned about the amount of cost charged by boreg, due to:

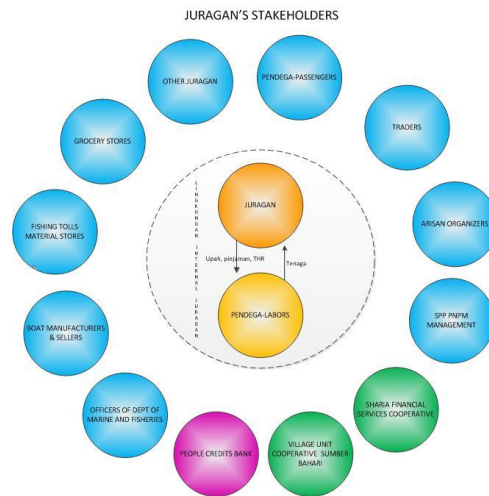
- a. Arisan is a model of the most common funds accumulation in coastal area of Pasuruan Regency and even becomes a tradition. As a tradition, arisan is not only a fund raising activity, but also an implementation of unity (togetherness) of society to face financial problems. Arisan is a mechanism which still able to remind society that they need each other, and that problems can be overcome if they help each other.
- b. Low educational level and lack of financial empowerment program resulted in fishermen do not know any other cheaper alternative funds accumulation. Financial empowerments nowadays are mostly aid distribution or loans to fishermen and small and medium-sized businesses (SME) in general. Yet many activities are associated with the awareness of SME doers about funds accumulation alternatives as well as critical thinking in managing existing funds.
- c. Arisan members have knowledge about period when large amounts of money they will receive. It makes them easier to take investment decisions. Juragan have been able to plan when to purchase or replace boats or fishing tools, including what to do when, based on calculations, fishing tools must be replaced before receiving arisan accumulated funds. Through negotiations, it is possible for Juragan to change their sequence numbers with other arisan members, so the period to receive funds can be adjusted with a predicted time of investment realization.
- d. Arisan members have knowledge about how much the additional funds for investment should be found from other sources are.
- e. Arisan members can minimize the percentage of reward for boreg by extending the period of arisan; for example, into two or two and a half years. In this case, of course it takes more members to join.

Besides collecting arisan funds, boreg also accept celebration day savings. Celebration day savings deposits are savings by members to arisan boreg which its amount and frequency is not determined yet but done after the celebration day (middle of the month of Shawwal) and ends before the celebration day (middle of the

month of Ramadan) in the next year. The one year accumulated funds will be returned to the depositors before the celebration day. Return to savers can be money or goods for celebration (such as sugar, coffee, rice, cooking oil, chicken, beef, and so on). Savers also have the opportunity to borrow funds from boreg without interest. This loan must be paid off before the next celebration day. Juragan can use this credit facility of boreg to buy the necessary fishing tools.

6. Department of Marine and Fisheries (DKP) District of Pasuruan through Field Counselor Officer (PPL) Sub District of Nguling. Department of Marine and Fisheries is in charge of delivering management of marine resources optimally and sustainable through supervising and guiding the fishermen.
7. Pengelola Simpan Pinjam Perempuan Mandiri (PNPM) or Women Savings and Loans Independent Management. Although it is aimed for women, SPP PNPM Mandiri is also used to fund investment of fishing tools. In the past, SPP PNPM Mandiri does not require any provision of collateral. However, since 2015, members are required to provide collateral in the form of BPKB or vehicle ownership letter. It seems as burdensome, especially for Juragan who have put their BPKB to other creditors (e.g. BPR and KJKS)
8. Bank Perkreditan Rakyat (BPR Singosari Nguling) or People Credits Bank. The bank provides motor vehicles mortgage loans of BPKB on some residents and is responded positively. Loans period is generally one year with 20% interest per year. The preference for a one year credit period comes from the villagers' experience in receiving loans by SPP PNPM Mandiri, which is received earlier.
9. Sumber Samudera KUD or Village Unit Cooperative. This KUD is utilized by Juragan from Mlaten and Kedawang village, who have debt to bakul. Every time Juragan, especially Juragan of Payangan, dock, then fishes are weighed by KUD. Based on the weighing results, KUD will issue letter of off-weight consisting of the species of captured fishes, price and weight. The letter and the fishes then being delivered by Juragan to the creditors-bakul and Juragan are paid according to the stated values. Juragan who have no debt to bakul, are not required to follow the procedures and therefore free to sell the fishes to any bakul at market price. By the increasing number of bakul, Juragan's eager to weigh their catches to KUD is also declining.
10. Masalahah Sharia Financial Services Cooperative or BMT Masalahah. Some Juragan in Mlaten use the syariah mortgage loans of BMT Masalahah. The cooperation was found by the family of Pondok Pesantren Sidogiri Pasuruan. Type of loans which is used by villagers is syariah loan of motor vehicles. Rules related to the repayment and the credit period in the syariah loans of BMT Masalahah, are not much different from the rules of

the SPP PNPM Mandiri. There are not many of Mlaten villagers who take the advantage of this KJKS.

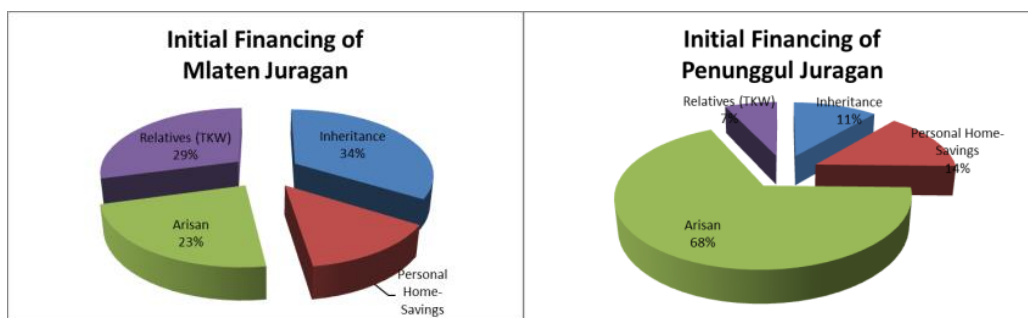


6.7. Initial Capital

In the past, most of Penunggul fishermen work as pendega-labors and pendega-passengers. The amount of Juragan in the past is not too many and therefore there are currently not many Juragan start a business by continuing from their parents. The desire to get a better life encourages pendega; both labors and passengers, by doing arisan or saving cash at home (not in a financial institution). Arisan is more preferred because the results are faster to be received than saving at home. Enrolling to arisan also gives smaller risk. Penunggul fishermen generally do arisan more than one period. The accumulated funds of arisan, which are received in the first period, are generally used to buy fishing tools. By having fishing tools, pendega-labors fishermen then increase their status to be pendega-passengers. The catches are then re-accumulated through arisan system to collect enough money to buy boats. The accumulation of funds by saving at home is also generally following the pattern of pendega-labors - pendega-passengers - Juragan.

The long history of Mlaten fishermen village makes plenty of Juragan who continue their parents' business (34%). As happened in Penunggul village, pendega in Mlaten village improve their status to be Juragan through: doing arisan or saving at home In contrast to what happened in the village of Penunggul, new Juragan in Mlaten village generally are pendega-labors whose wives or children work as woman labors in overseas (Tenaga Kerja Wanita = TKW) (29%). Other pendega labors enroll to arisan or save money at home to be able to be Juragan. First funds received from arisan are used to buy fishing tools. Then, fishing tools are stored and pendega still continue their activity as pendega-labors while continuing doing arisan or saving money.

The funds from the following arisan are then used to buy boats. Thus, pendega in Mlaten village use the pattern: pendega-labors - pendega-labors - Juragan.



6.8. Re-investment Financing of Boats and Fishing Tools

In both villages, the next boats investment tends to be financed by fishing results which are accumulated through: saving at home (personal savings), enrolling arisan and saving on arisan boreg. There are differences in the method of funds accumulation after receiving arisan funds for purchasing boats. Juragan in Penunggul village tend to keep the arisan funds which are yet unused in personal savings, while Juragan in Mlaten prefer to transfer the deposits to other forms considered liquid assets, namely: jewelry, motorcycles, before those assets are sold to buy new boats. There are also Juragan in Mlaten who accumulate funds in the form of bank savings; although the latter alternative is rarely chosen. Juragan in Mlaten are not unaware of the potential bad of assets in the form of gold and motors if it is stored in a long time. They know that there is a potential drop in gold price and motorcycle which is very considering when those assets are sold. However, the price declining is worth with the fulfilling of lifestyle and social status corresponding to the local values. In Mlaten village, and other villages with Pandalungan cultural backgrounds generally, the ownership of gold jewelry and transportation vehicles show someone's social status. Juragan in Penunggul are also aware of the potential of gold and motorcycles as a source of investment funds. They just do not want the assets, which are owned by much efforts, must be lost to become boats. They use the jewelry assets and motorcycles to meet their needs of smaller investments, like fishing tools. This will be explained in further discussion.

Juragan in Mlaten also show open mind to the using of external funding sources as an addition to funds shortage in to fulfill investment necessities. Hence they are willing to receive funding from bakul and SPP PNPM Mandiri. They decide to loan from bakul because of their old habit and thus it becomes the most known external funding alternatives to fishermen. Funding from bakul is also delivered by simple way (not complicated). The determination consequences

of purchasing price by bakul which is lower than market price can be tricked by requesting credit transfer to new creditors-bakul.

Financing patterns of fishing tools in Mlaten fishermen is still consistent, that is accumulating catches into cash reserves at home, arisan and saving on arisan boreg. External funding is mainly obtained from SPP PNPM Mandiri loans and debt to bakul. Today, some people are starting to realize other funding sources and Mlaten Juragan are daring enough to use financial services of KJKS. The selected mechanism is syariah mortgage loans. This method is very beneficial to creditors, as asset owners do not have to lose their assets. Juragan's courage to seek alternative sources of funding is predicted to be followed by other Mlaten Juragan. Mlaten Juragan, like other Juragan in Kedawang village, Kapasan, and Watuprapat, have tendency to borrow and less likely to save. The difference lies in the reliance on debt repayment by Mlaten Juragan.

Funding sources for fishing tools investments of Penunggul Juragan are more varied than funding for boats investments. The investment period, which is not too long, cause potential loss of assets, becomes smaller. The anxiety to borrow is also reduced. It can be seen from the decision to use mortgage loan funds from People's Credits Banks. The amount of money borrowed is not too large (maximum IDR 2,000,000.00) with period and interest which are not too burdensome (as similar to the load conditions of SPP PNPM Mandiri). Hence, the mortgage loans choice is quite interested. To loan from bakul is an old habit, but because of its low quota, then it tends to be used for financing fishing tools. Penunggul fishermen's tendency to use internal force seems in the use of personal savings by all respondents whom are being sampled.

Financing Decision	Sources of Funds	Penunggul	Mlaten
		Percentage	Percentage
Boat Reinvestment Financing	Personal Savings	100%	11%
	Arisan	70%	83%
	Savings in Arisan Boreg	100%	22%
	"Savings" in Form of Valuables	0%	39%
	Savings in Bank	0%	6%
	Bank/KJKS Loans	0%	0%
	Traders Loans	0%	39%
	SPP PNPM Loans	0%	50%
Financing Decision	Sources of Funds	Penunggul	Mlaten
Fishing Tools Investment Financing	Tabungan pribadi/Cadangan Uang Tunai	100%	56%
	Arisan	5%	78%
	Tabungan pada boreg arisan	10%	11%
	Tabungan perhiasan/motor	0%	28%
	Tabungan di bank	0%	0%
	Hutang bank/KJKS	20%	11%
	Hutang bakul	25%	22%
	Hutang SPP PNPM	25%	39%

6.9. Financing Operating Cost

This following table shows the tend of Mlaten Juragan to loan. Although there are many Juragan rely on their own strength in fulfilling their operating costs, but there are also Juragan who fully rely on external funding sources to meet their operational needs. Besides having mind of risk-taker, the market credit policy which is set by grocery stores in Mlaten village, also makes these conditions. The grocery stores in Mlaten set a maximum limit on credit purchases of diesel by 30 liters. For Juragan with crab nets, 30 liters of diesel are enough to use for fishing in 6 days, while Juragan with medai nets need equivalent in 3 days in the sea. This is very different with the grocery stores in Penunggul, which set a maximum period for market loan in 2 days.

Penunggul fishermen rely very much on internal funding sources. Therefore, personal savings and accumulated savings withdrawals in boreg are some options. Boreg savings withdrawals are treated as loans from boreg and therefore must be repaid off. Savings on boreg are essentially only able to be withdrawn before Idul Fitri celebration day. The amount of money which is already accumulated must be kept increasing until the time of withdrawal. Therefore, the withdrawal which is long before its time should be completed by an obligation to return the money to boreg.

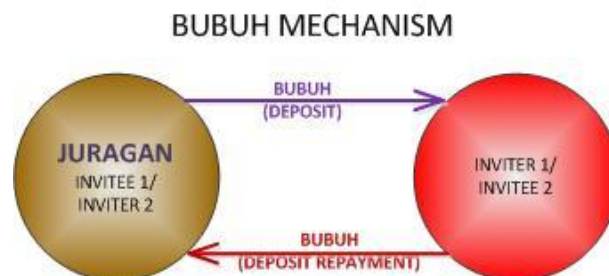
The high proportion of fishermen who utilize credits, even in Penunggul, is strongly influenced by the character of fishing results. The amount of fishes is affected by time (season) and place. Certain types of fishes will be very easy to catch when they are "in the season" but it becomes very difficult to catch beside those seasons. The location of fishes also changes from time to time. Fishes, which are easily founded one day in the location (coordinates), are unavailable in the following day. The fishermen's fishing results are very fluctuating. Payangan Juragan who are lucky, can obtain yields up to IDR 2.500.000,00 in one day, but on the other day, the yields are only enough to cover half of the diesel fuel. Crabs Juragan, in July, are able to capture up to 7 kilograms of crabs, in the days in March, they only get one crab. Such a condition which causes market credits of grocery stores for fishing operational are very needed by fishermen.

Financing Decision	Sources of Funds	Penunggul	Mlaten
		Percentage	Percentage
Financing of Operating Costs	Tabungan pribadi/Cadangan Uang Tunai	100%	89%
	Tabungan pada boreg arisan	10%	0%
	Hutang bakul	0%	28%
	Hutang Toko Kelontong	70%	67%

6.10. Special Financing Sources for Fishing Tools and Boats

Bubuh (in Javanese language is called buwuh) is a funding source that is commonly used by Pandalungan cultural society to make big investments. Bubuh, in general, can be defined as money or goods given by the invitees (invited) as a gift to the inviter who conducts celebration such as weddings, circumcisions, and so on. Pandalungan culture, bubuh is treated as a deposit. Doing bubuh, on Pandalungan culture, can be seen as the activity to deposit money or goods to the inviter that is temporarily can be utilized to finance the inviter and meet the needs. Because it is treated as a deposit, then bubuh must be returned to the depositors. Repayment period should not be arbitrary, but must wait the ex invitees doing a celebration; in this case the initial inviter (ex inviter) will be the invitees. The amount to be returned is exactly as deposited before. To ensure that all parties obey the rules (tradition) either inviter (bubuh receiver) and invitees (bubuh depositors) should be equally noted the amount of bubuh money. Returning bubuh less than amount deposited will consequence:

1. Charging by the depositors (ex invitees). Depositors may contact those who are entrusted and clearly tell that their deposit is less in returning.
2. The obligation to "pay off" deposit on the next celebration.
3. Social punishment in the form of un-attending celebration by those who often do not return the bubuh or pay less.



To remind the amount of deposit which has been given, the inviter often write the amount of his/her bubuh of his/her previous celebration in the invitation letter.

Bubuh is a form of social care activities among society. This activity cannot be separated from the history of the ancestors of Pandalungan people who are immigrants from Madura. As migrants, it needed high social responsibility in order to survive in a new environment. Life should be based on the willingness to help migrant "brothers" who have difficulties, and vice versa. These activities of helping each other then are able to maintain and even develop condition of migrants groups in the new ground.

For Mlaten people, Bubuh can (and often) be used to raise funds for investment purposes of fishing tools and boats. This is generally done by Juragan who credit bubuh or at least not

having bubuh debts. When Juragan have trouble in financing their investments, they will conduct celebration event to raise deposit money. In this case, the event should not be a big celebration such as a wedding or a circumcision, but it can be also simply birthday celebration (child or grandchild or even Juragan themselves), praying for ancestors ceremony (kirim doa) (although sometimes it doesn't match to traditionally specified time) or other celebration events which in essential inviting as many as people whom have been deposited to. Bubuh money, which is a return of the deposit, then is able to finance investment needs.

Unlike the Mlaten Juragan, Juragan in Penunggul village generally do not use bubuh money to finance their investment of fishing tools and boats. For Penunggul Juragan, bubuh money is too large to be simply used as investments in boats and fishing tools. They generally will use the bubuh money for the investment which requires greater funding; such as home renovations or even building houses. The average value of bubuh money per person in Penunggul village is IDR 200,000.00 (excluding bubuh which are formed as goods) with a variation of IDR 50,000.00 to IDR 500,000.00, Mlaten people in average give bubuh money started from IDR 50,000.00 with variations of IDR 20,000.00 to IDR 100,000.00.

Besides bubuh, Juragan in Mlaten also have other specific funding sources. These funding sources will be accessed (utilized) when the accumulated funds from available funding sources are smaller than financing needs. These resources will also be accessible when various funding sources altogether are inaccessible for Juragan. These funding sources are the last funding sources for Juragan (in local terms is referred to as "nek wis kepepet" or dead end). The funding source is to borrow money from relatives. Despite having no consequences of interest, these funding sources will be accessed at the very end, because it has the potential to crack the relationship of relatives. There often happens clash, or at least quarrel between relatives due to one of parties do not pay the debt. For Penunggul Juragan, to loan from relatives, for investment fishing tools and boats, is generally avoided. They prefer to utilize the accumulated personal savings.

6.11. Attitudes Toward Commercial Banks

The absence of Juragan who utilize the services of commercial banks is caused by Juragan who don't know about savings and credit services of commercial banks and also are afraid to utilize savings and credit services. Fear of saving in banks is basically starting from the ignorance of deposit services. Ignorance about savings procedures and the amount of money saved makes

them feel unconfident to enter commercial banks offices. The absence of confidence is also caused by the relatively small amount of money that they can save for savings in banks. Because tradition tells them to keep cash at home, then the banks savings, in the opinion of Juragan, are the residual fishing income after being deducted by amount which should be kept at home and reserved for purchasing diesel fuel. Juragan, in general, do not realize that saving cash at home, partially, can actually be saved in the banks. They also do not realize that saving/storing cash at home has high risk which can be reduced by saving in banks. Low levels of education, traditional mindset, and lack of socialization to the community are causing Juragan to be unaware of those potential and such risks.

Fear to borrow from banks is caused by fear of the consequences of delay or repayment fail of the bank loans. Juragan learn from the experience of Kedawang Juragan who are often being searched (in terms Mlaten Juragan "diuber-uber" or pursued) by debt collectors, even by force taking of assets. Juragan's fear of borrowing from commercial banks is also associated with the uncertainty income from fish sales to pay off the debt. This fear arises from their ignorance of debt and repayment procedures. Juragan also do not know the products of credit services provided by the banks. For example, they even do not have any information about the People's Business Credit (Kredit Usaha Rakyat = KUR).

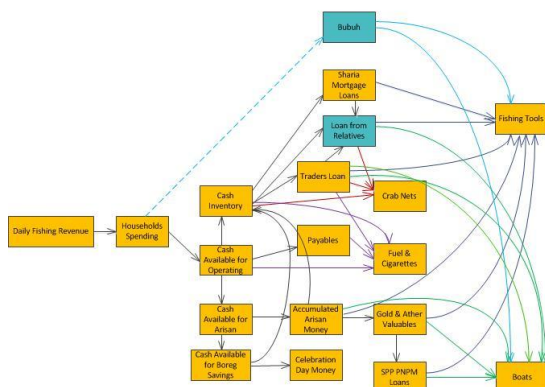
6.12. Financing Model

Juragan of Mlaten have been accustomed to utilize various funding sources because the Mlaten village emerged and developed as fishermen village long before Penunggul. Experiences and lessons learned by the past Juragan are then inherited to their offspring and pendega-labors that finally become Juragan. This is also supported by the higher availability of funding sources (such as number of bakul and grocery stores) that allows Juragan to accomplish their operating cost and investments. Level of competition between bakul and grocery stores which is higher in Mlaten, lead to the easiness of credit requirements defined either by bakul and grocery stores owners. Courage to take risks plays role in forming the funding pattern of Mlaten Juragan. Based on the strong cultural backgrounds of Pandalungan, Mlaten Juragan's attitude in taking risk appears in relying on loans to fulfill the operational needs. Courage to take risks is also affected by the availability of supports from Juragan's relatives as the latest alternative funding sources. Therefore, how difficult it is the financial pressure faced by Juragan, as long as they are still in

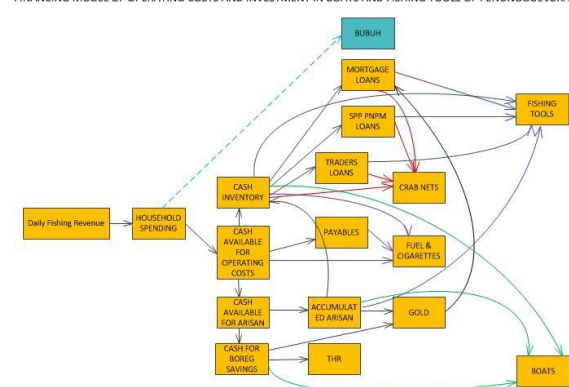
harmony with their relatives, problem will be soon solved or at least reduced. Above them all, Mlaten Juragan have higher preference in the internal financing; either in the form cash reserves utilization, arisan funds and boreg savings, or jewelry sales, which are truly transformation of arisan funds.

However, Mlaten Juragan’s attitude towards internal funding is still less than Penunggul Juragan. Educated by lessons and difficult life in the past, where they have to accumulate the results after working as pendega-labors little by little to improve their status to be Juragan, Penunggul Juragan rely heavily on the use of internal funds. This appears in the absence of financing activities, both for operational and investments, which do not involve any internal sources of funds, especially cash reserves. Funding from bakul is only used for purchasing the fishing tools. Penunggul fishermen avoid dependency to bakul. The low dependency level to bakul will secure the income yields from fish sales to be properly valued with the market price. Finally, this will speed up the cash accumulation of Juragan. External funding sources are used only when internal funds are not available enough. The doing methods are made to not decreasing assets which have been collected, hence, mortgage loans are chosen to the utilization of gold jewelry (and motorcycles), not for selling.

FINANCING MODEL OF OPERATING COSTS AND INVESTMENT IN BOATS AND FISHING TOOLS OF MLATEN JURAGAN



FINANCING MODEL OF OPERATING COSTS AND INVESTMENT IN BOATS AND FISHING TOOLS OF PENUNGGUL JURAGAN



VII. CONCLUSION AND SUGGESTIONS

The study on financing decision of operating costs and investment in fishing tools and boats of Juragan in Penunggul and Mlaten Village of Nguling District of Pasuruan Regency confirms the theory of Pecking Order. Businessmen (Juragan) prefer to use internal funding sources to finance their activities. The purpose of business control mastering encourages alternative funding sources to be chosen, which are actually more expensive and more risky due to the properties of its accumulation process. The quality of human resources of Juragan limits

the emergence of awareness for this condition. This is even worse because of the lack of Juragan's knowledge about alternative funds accumulations by banking system as funding alternatives. On the other hands, banks as financial service providers, it seems, also have minimal knowledge about the potential of Juragan.

This study has not been able to confirm the difference of Juragan's preference about debt utilization and the entry of new investors in the long-term investment financing. Study is conducted in the traditional fishermen village, where all Juragan use any forms of private enterprises. The study about the preference for debt and capital inclusion in funding is considered able to be implemented on modern fishermen business.

This study also confirms research results by Badrudin. In this study, it is indicated that arisan is a model of funds accumulation which is not only capable to satisfy the social motives but also the economic motives of doers. Arisan is not only able to reduce the uncertainty of income, due to the nature of the business, in order to accumulate fund for investment decision. Arisan is also able to be utilized by Juragan to maintain the continuity of their business.

This study is not attempting to bring any generalization. As explained in the discussion, funding model adopted by Juragan in one location cannot be separated from cultural backgrounds and deep traditions. Values and beliefs also play role in forming local policies on funding. Similar studies in other parts of Indonesia, are expected to reveal the diversity and richness of financial management models, particularly related to the financing policy.

REFERENCES

- Badruddin. 2005. "Modal Sosial Dan Reduksi Kemiskinan Nelayan Di Provinsi Sumatera Utara". *Jurnal Komunikasi Penelitian*. Volume 17 (1)
- Bickman, Leonard & Debra J. Rog. 2008. *The SAGE Handbook of Applied Social Research Methods*. 2nd Edition. Sage Publication.
- Creswell, John W. 2003. *Research Design: Qualitative, Quantitative, and Mix Methods Approaches*. 2nd Edition. Sage Publication.
- Damodaran, Aswath. 2001. *Corporate Finance: Theory and Practice*. 2nd edition. John Wiley & Sons, Inc.
- Indarti, Iin dan Dwiyadi Surya Wardana. 2013. "Metode Pemberdayaan Masyarakat Pesisir Melalui Penguatan Kelembagaan Di Wilayah Pesisir Kota Semarang". *BENEFIT Jurnal Manajemen dan Bisnis*. Volume 17, Nomor 1, Juni, hlm. 75-88
- Kihimbo B. W, Ayako B. A, Omoka, K. W, and Otuya. W. 2012. "*Financing Of Small And Medium Enterprises (SMEs) In Kenya: A Study Of Selected SMEs In Kakamega*

Municipality". International Journal of Current Research Vol. 4, Issue 04, Apr, pp.303-309

Krisnawati, Enni. 2004. "Analisis Pola Konsumsi Rumah Tangga Nelayan dalam Perspektif Ekonomi dan Sosial (Studi Kasus pada Desa Bandaran Kecamatan Tlanakan Kabupaten Pamekasan)". TEMA. Volume 5, Nomor 1, hlm. 58-71

Neuman, W. Lawrence. 2009. Social Research Methods: Qualitative and Quantitative Approaches. 7th Edition. Pearson

Comparative Analysis of the Rate of Return, Risk and the Coefficient of Variation on *Mudharabah-Musyarakah* and *Murabahah* Financing at Bank Syariah Mandiri Period 2010-2014

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ABSTRACT

Financing on Islamic banks use a variety of contract tailored to sharia principles. Every contract has different characteristics, so that the characteristics of the risks will also be different between each other. This will have an impact on the rate of return and the variability of the various types of financing. Risk management by Islamic banks can lower the level of risk in each contract financing.

The purpose of this research is to analyze whether there is a difference between the rate of return, risk as measured by the standard deviation and coefficient of variation between also *Mudharabah-Musyarakah* and *Murabahah* financing on Bank Syariah Mandiri.

The method of this research is quantitative methods. Analysis techniques using a test of normality, then next performed a different test process using two simple t-test paired to a normal distributed data and Wilcoxon Signed-Rank Test for data that is not distributed normally.

The result is no significant difference in the rate of return, the risk of financing and the coefficient of variation between *mudharabah-musyarakah* and *murabahah* financing. Basically risk management on Bank Syariah Mandiri is already well evidenced by increasing funding levels on Bank Syariah Mandiri.

Keywords: *financing, rate of return, risk, and the coefficient of variation.*

I. INTRODUCTION

Banking is one aspect of the economy. UU No. 10 of 1998 explains that the bank is a business entity that funds in the form of savings and channel it to the community in the form of credit and or other forms in order to improve the livelihood of many communities. UU No. 21 of 2008 about Islamic banking explained that the Islamic bank is a bank that runs its business activities based on sharia principles, namely the principles of Islamic law in the banking activities based on the fatwas issued by the agencies that have the authority in the determination of the fatwa in the Islamic fields.

The growth of Islamic banking in Indonesia showed a good development. This is evidenced in the Islamic banking statistics report issued by The Otoritas Jasa Keuangan (OJK), until January 2015, there are 12 public Bank Syariah and 22 Syariah Business Unit with 2792 Office.

Islamic banking is not only profit oriented but should also be operational in accordance with the principles of Islam. The real difference is in the conventional banking uses the interest-based system. Interest has been expressly forbidden in Islam because included in the *riba*. This has been explained in the QS. Al-Baqarah 273.

Islamic banks as one of the financial institutions have two main functions, to gather funds from community and redistribute the funds to communities in need of financing. In gathering together the Fund, Islamic bank provides the means for investment funds with depository system of profit-sharing and in the channeling of funds there are financing investment with a profit sharing system (Wirnyaningsih *dkk*, 2005:16).

Financing on Islamic banking in Indonesia comply with the principles of Islam. Based on data issued by The Otoritas Jasa Keuangan (Table 1), the type of financing that flourished in the Islamic banking industry in Indonesia is financing with based on the principle of profit sharing (*mudharabah* and *musyarakah*), financing based on the principle of selling (*murabaha* and *istishna*), financing based on the principle of rent (*ijarah*) and financing the *qard*.

The financing function is a function that is most important in banking. This is because the portfolio financing on commercial banks occupy the largest share, i.e. in General about 55 percent to 60 percent of the total assets (Arifin, 2005:59). The data in Figure 1 are issued by OJK showed that up to December 2014 financing on Islamic banking in Indonesia occupies the highest position although it is still in the range of 40-45 percent of the total Islamic banking

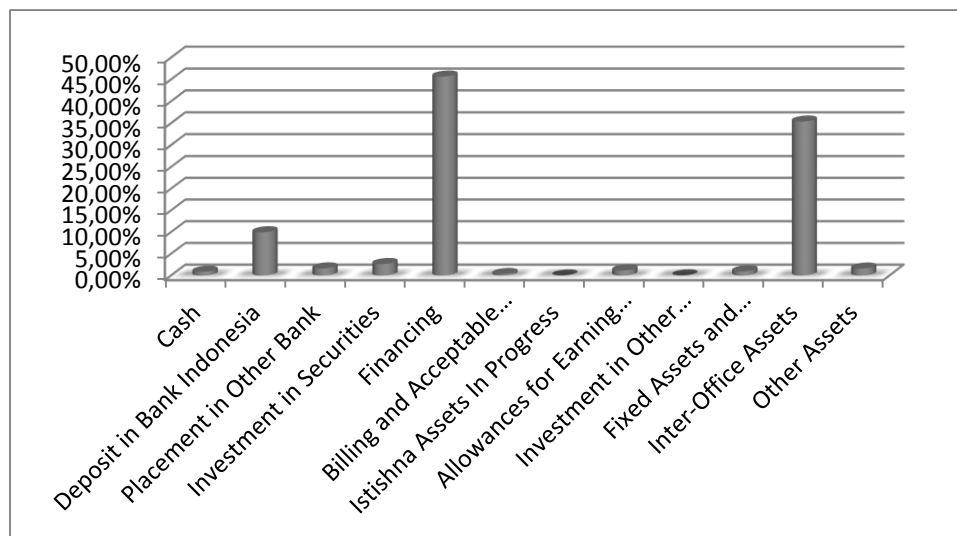
assets. Additionally, on the functions of financing also expected Islamic banks can obtain favorable results.

Table 1
The composition of the Public Sharia Bank Financing and Syariah Business Unit in Indonesia (in millions)

Year	The Principle of Profit Sharing		The Principle of Buying-Selling		The Principle of Ijarah	The Principle of Qardh
	<i>Mudharabah</i>	<i>Musyarakah</i>	<i>Murabahah</i>	<i>Istishna'</i>		
2010	8.631	14.624	37.508	347	2.341	4.731
2011	10.229	18.960	56.365	326	3.839	12.937
2012	12.023	27.667	88.004	376	7.345	12.090
2013	13.664	37.921	107.484	582	10.481	8.995
2014	14.354	49.416	117.371	633	11.620	5.965

Source: The Otoritas Jasa Keuangan, Islamic Banking Statistics, author.

Figure 1
The combined assets of Islamic commercial banks and Syariah Business Unit in Indonesia



Source: The Otoritas Jasa Keuangan, Islamic Banking Statistics, author.

The importance of the functions of financing requires that the Islamic banking to be more careful. Based on data obtained from the financial services authority in January-December 2001, the value of the ratio of the FDR Islamic banking ranges between 91-102 percent. This is very risky so need a good management and control. Islamic banks need to consider three things in performing the functions of financing, i.e., the rate of return, risk and the coefficient of variation.

The Bank is a business entity profit oriented; Islamic banks need to consider the rate of return from a variety of financing. This is to see if financing is done by the Islamic banks can provide advantages for Islamic banks or not. Islamic banks also need to consider the risk of financing. This is because the rate of return is directly proportional to the risk. One of the risks in financing according to Horne and Wachowicz (2001:145) is a risk the existence of differences between actual returns with the expected return.

One of financing risk measurement techniques on Islamic banking is to use the standard deviation. Horne and Wachowicz (2001:146) explained that the standard deviation is a device used to measure the spread or variability in the rate of return of an investment (financing). When the greater level of standard deviation of the rate of return, then the greater the variability of returns and risks of such financing is increasingly high. Horne and Wachowicz (2001:149) explains that the coefficient of variation is a measure of the relative size of the ratio of the standard deviation of a distribution against the average value of the distribution, when the smaller value of the coefficient of variation, then the financing (investment) the better.

Financing on Islamic banks use a variety of contract tailored to sharia principles. Every contract has different characteristics, so that the characteristics of the risks will also be different between each other. This will have an impact on the rate of return and the variability of the various types of financing. Risk management by Islamic banks can lower the level of risk in each contract financing.

One of the Public Sharia Bank (BUS) in Indonesia is Bank Mandiri Syariah (BSM). Bank Syariah Mandiri is the second BUS in Indonesia after the Bank Muamalat Indonesia (BMI). The history of the founding of the BSM affected claims from some Muslims that Indonesia considered that bank interest was unlawful. BSM has been operating about 16 years i.e. precisely on November 1, 1999, the difference in 7 years with BMI in the operation in the field of Islamic banking. The presence of BSM is the fruit of the efforts of the pioneers of PT Bank Susila Bakti and management PT. Bank Mandiri (persero). BSM is present as a bank which combines the ideals of business with Islamic values in the operation.

Based on the above introduction is interesting to do research with the title “Comparative Analysis of The Rate of Return, Risk and The Coefficient of Variation on *Mudharabah-Musyarakah* and *Murabahah* Financing at Bank Syariah Mandiri Period 2010- 2014”. The purpose of this research is to analyze whether there is a difference between the rate of return,

risk as measured by the standard deviation and coefficient of variation between also *Mudharabah-Musyarakah* and *Murabahah* financing on Bank Syariah Mandiri.

This research uses the financing of profit sharing *mudharabah- musyarakah* and the financing of buying-selling with *murabahah*. This is due to the financing system of profit sharing and financing system of buying-selling is the most widely used financing on Sharia banking industry in Indonesia.

II. LITERATUR REVIEW

2.1. Financing on Islamic banking

2.1.1. Mudharabah Financing

Mudharabah according to Antonio (2001:99) is a business cooperation contract between two parties in which the first party (shahibul maal) provides the entire capital (100), while the other party being the Manager (mudharib). In other words, mudharabah financing is a cooperation contract between the bank and the customer, which the bank as the provider of funds (capital) and clients as managers of the funds (capital).

In the world of banking, according to Antonio (2001:99) on the side of ordinary mudharabah financing, applied to:

- Working capital financing, such as working capital for trade and services.
- Special investment, also called the mudharabah muqayyadah, in which special funds resources with special remittances with the terms applied shahibul maal.

2.1.2. Musyarakah Financing

Antonio (2001:90) explained that the Musyarakah is the contract of cooperation between two or more parties to a certain business where each party is contributing funds. On the contract risk and profit musyarakah will be borne along in accordance with the agreement by both parties.

In Islam, the practice of Islamic banking on musyarakah is allowed. Almighty God permit the existence of unions or partnership between two or more parties as long as there is no element of dzalim.

Application contract Musyarakah in banking is to finance the project, the customer and the bank provides funds to finance the project. After the project was completed, the customer

returns these funds with profit-sharing that has been agreed upon for the bank (Antonio, 2001:93).

2.1.3. Murabahah Financing

Murabahah according to Antonio (2001:101) is the selling of goods at a price of origin with an additional profit. In this contract, the seller should tell the price of the product to be purchased and to determine a level of profit as enhancements. Murabahah financing, in other words, is a contract selling goods with an additional advantage which has been agreed by both parties, where the bank acts as the seller of the goods and the customer as purchaser of the goods.

Antonio (2001:106) explained that the application of the banking world in murabahah can be applied to product financing for the purchase of investment goods, both domestic and abroad, such as through letters of credit (L/C). In addition, the circle of Islamic banking in Indonesia many use murabahah continuously (roll over/evergreen) as for working capital.

III. RESEARCH METHODS

3.1. The Identification Of The Research Variables

The variables used in this study are:

1. The Rate of return (\bar{X})

The rate of return in this study was calculated by using the formula of the expected return on mudharabah- musyarakah and murabahah financing on Bank Syariah Mandiri with an annual period. For calculating the rate of realized return, data obtained from the financial reports profit loss quarterly Bank Syariah Mandiri. The formula of expected return is:

$$\bar{X} = \frac{\sum x}{n} \dots\dots\dots (1)$$

2. Risk. Risk is measured using the standard deviation of the rate of return on mudharabah- musyarakah and murabahah financing on Bank Syariah Mandiri with an annual period. data obtained from the financial reports profit loss quarterly bank mandiri syariah. The standard deviation formula is:

$$\sigma = \sqrt{\frac{\sum_{i=1}^n (X - \bar{X})^2}{n-1}} \dots\dots\dots (2)$$

3. The coefficient of variation. The coefficient of variation on this research is measured using the formula, where σ is the calculated risks with standard deviation and R is the rate of return expectations of mudharabah-musyarakah and murabahah financing on Bank Syariah Mandiri. The coefficient of variation is calculated using the annual period. The formula of the coefficient of variation is:

$$CV = \frac{\sigma}{R} \dots\dots\dots (3)$$

3.2. Analytical Techniques

Analytical techniques used are Paired Samples t-Test. Paired Samples t-Test was used to compare the difference between two mean of two paired samples assuming normal distributed data (Uyanto, 2009:119).

To test whether the data is distributed normally or not, then performed a test of normality by using *One Sample Kolmogorov Smirnov Test* with a significance level of 5 percent. If the *p-value* is greater than the significance level 5 percent then the data is distributed normally. If the *p-value* is less than the 5 percent of significance level, then the data is not distributed normally. The data is not normally distributed then the test tools used are different from the non parametric test using the Wilcoxon Signed-Rank Test.

After a test of normality, then next performed a different test process using two sample t-test paired to a normal distributed data and Wilcoxon Signed-Rank Test for data that is not distributed normally. Steps to test the different using t-test paired two sample is as follows:

1. Compiled formula research hypothesis

The hypothesis for the rate of return

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

μ_1 = The average rate of return mudharabah-musyarakah financing

μ_2 = The average rate of return murabahah financing

The hypothesis for the risk

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

μ_1 = The average risk of mudharabah-musyarakah financing

μ_2 = The average risk of murabahah financing

The hypothesis for the coefficient of variation

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

μ_1 = The average coefficient of variation mudharabah-musyarakah financing

μ_2 = The average coefficient of variation murabahah financing

2. Specify the level of significance (α), which used 5 percent.

If the p value is greater than $\alpha = 5$ persen, means H_0 accepted and H_1 rejected.

If the p value is smaller than $\alpha = 5$ persen, means H_0 rejected and H_1 accepted.

Steps to perform different tests using Wilcoxon Signed Rank Test are as follows:

- a. Compiled formula research hypothesis

The hypothesis for the rate of return

$$H_0: \eta_1 = \eta_2$$

$$H_1: \eta_1 \neq \eta_2$$

η_1 = The median rate of return mudharabah-musyarakah financing

η_2 = The median rate of return murabahah financing

The hypothesis for the risk

$$H_0: \eta_1 = \eta_2$$

$$H_1: \eta_1 \neq \eta_2$$

η_1 = The median rate of return mudharabah-musyarakah financing

η_2 = The median rate of return murabahah financing

The hypothesis for the coefficient of variation

$$H_0: \eta_1 = \eta_2$$

$$H_1: \eta_1 \neq \eta_2$$

η_1 = The median rate of return mudharabah-musyarakah financing

η_2 = The median rate of return murabahah financing

- b. Specify the level of significance (α), which used 5 percent

If the p value is greater than $\alpha = 5$ persen, means H_0 accepted and H_1 rejected.

If the p value is smaller than $\alpha = 5$ persen, means H_0 rejected and H_1 accepted.

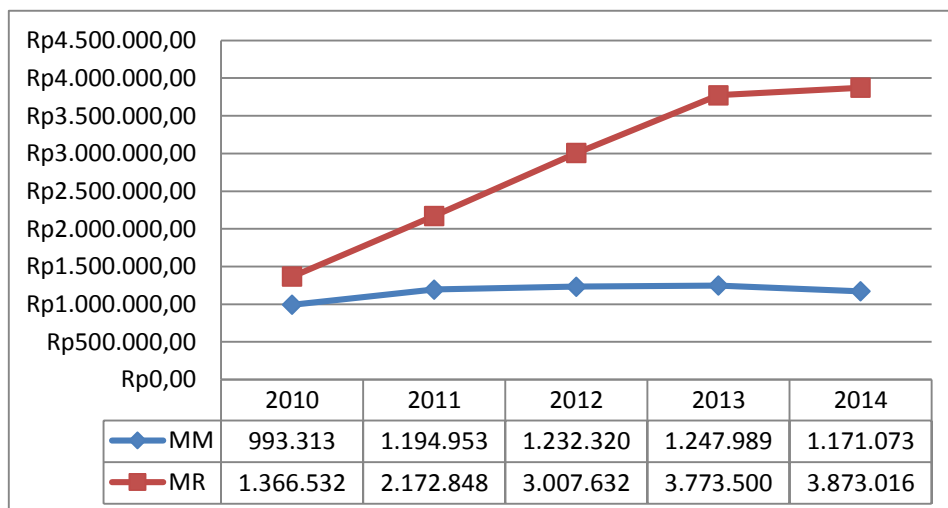
IV. RESULTS AND DISCUSSION

Bank Syariah Mandiri as financial intermediation institutions performs two major activities in its operational. Such activity is activity gathers funds from customers and channeling funds (financing) to customers. The FDR data ratio describes how much the funds collected by the Islamic bank that is used in Islamic banking and financing activities. The level of FDR

(Financing to Deposits Ratio) Bank Syariah Mandiri from 2010-2014 increased. This is followed by increasing financing provided by Bank Syariah Mandiri. Financing provided by the Bank Syariah Mandiri increased up to 200%. The difference between Islamic banks and conventional banks is the lack of fundamental elements of interest in it. Therefore, in Bank Syariah Mandiri financing activities using a wide variety of contract financing based on the principles of Sharia such as of mudharabah-musyarakah and murabahah financing.

Increased of mudharabah-musyarakah and murabahah financing on Bank Syariah Mandiri, followed by an increase in income earned from both the financing. Figure 4.1 describes the comparison of income levels in mudharabah-musyarakah and murabahah financing. Murabahah financing in Bank Syariah Mandiri period 2010-2014 increased greater than the mudharabah-musyarakah financing.

Figure 2.
Income of Mudharabah-Musyarakah and Murabaha Financing on Bank Syariah Mandiri Period of 2010-2014



Source: The results of the data processing, Authors.

The return of mudharabah-musyarakah and murabahah financing on Bank Syariah Mandiri in the period 2010-2014 tends to be stable. The lowest rate of return of financing mudharabah-musyarakah is 0,027 and the highest rate of return is 0,116. While the financing murabahah has the lowest rate return is 0.025 and the highest rate return is 0,114. The average return of mudharabah-musyarakah on Bank Syariah Mandiri has a higher rate of return of murabahah financing, while the 0,0370 of 0,0364. Standard deviation of the murabahah financing Bank Syariah Mandiri is greater compared with the mudharabah-musyarakah financing. Financing with murabahah has a value of standard deviation of 0,0114, while the

standar value deviation mudharabah-musyarakah financing only of 0,0092. The coefficient of variation (risk per unit of return) of two such financing, financing with mudharabah-musyarakah has a coefficient of variation is higher when compared to murabahah financing. On the mudharabah-musyarakah financing obtained coefficient of variation of 0,1424, while the coefficient of variation obtained murabahah financing amounting to 0,0728. This shows that on Bank Syariah Mandiri, financing with murabahah is better compared to financing with mudharabah-musyarakah if seen in terms of the coefficient of variation.

Table 2.

Average, Standard Deviation and Coefficient of Variation Rate of Return Mudharabah-Musyarakah and Murabahah Financing on Bank Syariah Mandiri 2010-2014

	Mudharabah-Musyarakah	Murabahah
Average	0,0370	0,0364
Standard Deviation	0,0114	0,0092
Coefficient of Variation	0,1424	0,0728

Source: The results of the data processing, Authors.

A descriptive analysis of the results of the data rate return the of financing principles for profit sharing (mudharabah-musyarakah) and selling (murabahah) on Bank Syariah Mandiri shows principles for buy with mudharabah-musyarakah financing has an average rate of return of 0,0370, while the principle of financing the sale by murabahah value is the average of the rate of return is 0,0364. The highest rate of return on the mudharabah-musyarakah financing is 0,070 and the lowest rate of return is 0.028. In murabahah financing has highest rate of return to 0,072 and the lowest is 0,027.

Table 3.

Descriptive Statistics a Rate of Return Mudharabah-Musyarakah and Murabahah Financing

Financing	N	Minimum	Maximum	Average
Mudharabah-Musyarakah	5	0.028	0.070	0.0370
Murabahah	5	0.027	0.072	0.0364

Source: The results of the data processing, Authors.

The level of risk using mudharabah-musyarakah has an average value of 0,0092 and the average value of risk using murabahah is 0,0164. Returns with the mudharabah-musyarakah had

the highest risk level of 0,037 and the lowest value of 0.001 while using the highest level of risk of murabaha is 0,072 and lowest level of risk value is 0.002.

Table 4
Descriptive Statistics of Riks Mudharabah-Musyarakah and Murabahah Financing

Financing	N	Minimum	Maximum	Rata-Rata
Mudharabah-Musyarakah	5	0.001	0.037	0.0092
Murabahah	5	0.002	0.072	0.0164

Source: The results of the data processing, Authors.

Mudharabah-musyarakah financing through descriptive analysis has the average value of the coefficient of variation is 0,1424 and the average value of the coefficient of variation using murabahah is 0,0164. The highest value of the coefficient of variation on mudharabah-musyarakah is 0,528 and lowest of 0,017, while with the murabahah highest values of coefficient of variation is 0,084 and lowest is 0.063.

Table 5
Descriptive Statistics of Coefficient of Variation
Mudharabah-Musyarakah and Murabahah Financing

Financing	N	Minimum	Maximum	Rata-Rata
Mudharabah-Musyarakah	5	0.017	0.528	0.1424
Murabahah	5	0.063	0.084	0.0728

Source: The results of the data processing, Authors.

Test of normality of data using One Sample Kolmogorov Smirnov Test with a significance level of 5%. Normality test results show that data is not distributed normally, here is the result of testing the normally of data using One Sample Kolmogorov Smirnov Test.

Table 6
Test Results of One Sample Kolmogorov Smirnov Test

	Financing	Sig.	Description
Rate of Return	Mudharabah-Musyarakah	0.001	Not Normally Distributed
	Muarabahah	0.001	Not Normally Distributed
Risk	Mudharabah-Musyarakah	0.003	Not Normally Distributed
	Murabahah	0.001	Not Normally Distributed
Coefficient of Variation	Mudharabah-Musyarakah	0.004	Not Normally Distributed
	Murabahah	0.200	Normally Distributed

Source: The results of the data processing, Authors.

Based on the results of normality test data indicate that data are not normally distributed, then the hypothesis test using the Wilcoxon Signed-Rank Test with a significance level of 5% (0,05). The value of P-value (.sig) of a variable return is 0,461 which means the return on mudharabah-musyarakah and murabahah financing are not significant differences. The risk of financing the mudharabah-musyarakah and muarabahah financing on Bank Syariah Mandiri, the value of the P-value is 0.593 it can be concluded that the risk with mudharabah-musyarakah dan murabahah financing there was no significant difference. Comparison of the coefficients of variation of mudharabah-musyarakah and murabahah financing by using the Wilcoxon Signed-Rank Test, P-value obtained value of 0,686 which means the coefficient of variation with mudharabah-musyarakah and with murabahah financing there was no significant difference.

Table 7
Hypothesis Test Results

	Z	Sig.	α	Conclusion H_0	Conclusion
Rate of Return	-0.736	0.461	0.05	H_0 Accepted	There was no significant difference
Risk	-0.535	0.593	0.05	H_0 Accepted	There was no significant difference
Coefficient of Variation	-0.405	0.686	0.05	H_0 Accepted	There was no significant difference

Source: The results of the data processing, Authors.

In the financing of mudharabah-musyarakah, profits retrieved depends on the results of an effort or project financed by Islamic banks. When the profit from the business that is financed then both parties including bank will acquire a large part, whereas when a small business, then the section obtained would also be small. In an invesment or a business is always followed by risk. The issue is how the invesment or a business contain minimal risk, therefore needed a good risk management in invesment or business. The difference was not significant between the risk of mudharabah-musyarakah dan murabahah financing could have been affected by the risk management which is owned by the Bank.

Research on risk is the risk of the magnitude of the variability of the rate of return of a financing. The greater the variability that is owned by owned by the return of a financing, the higher the risk. Coefficient of variation were calculated to see how big the risk per unit of return, owned an invesment or financing in the case is small, great variability depending on how Islamic

banks manage risk characteristics belonging to the financing. The variability of the rate of return of both financing on Bank Syariah Mandiri is not too large. This shows that the Bank Syariah Mandiri has good risk management so that the rate of return of both these financing tends to be stable though theoretically mudharabah-musrayakah financing had a grater risk than with murabahah financing.

V. CONCLUSION AND SUGGESTION

Based on the results of the discussion above, it can be concluded that there was no significant difference in the rate of return, the risk of financing and the coefficient of variation between mudharabah-musyarakah and murabahah financing. On the mudharabah-musyarakah contract, the result of financing obtained from the results of te business financed, hig or low income financing is determined by how the management of risk at the bank. Basically risk management on Bank Syariah Mandiri is well implement by increasing funding levels on Bank Syariah Mandiri, so expect the banks to do evaluation of contract used in financing.

On the further research is expected to use a more in contract research, given the limitations of the variables usde in this study so that it brings a broader knowledge. In addition it is recomended to use a longer period of time and many more samples to add the validity of the results of the research.

REFERENCES

- Al Qur'an dan Terjemahannya*. 2004. Departemen Agama RI. Surabaya: Mekar Surabaya.
- Anshori, Muslich & Sri Iswati. 2009. *Metodologi Penelitian Kuantitatif*. Surabaya: Pusat Penerbitan dan Percetakan Unair (AUP).
- Antonio, Muhammad Syafi'i. 2001. *Bank Syariah Dari Teori Ke Praktik*. Jakarta: Gema Insani.
- Arifin, Zainul. 2006. *Dasar-Dasar Manajemen Bank Syariah*. Jakarta: Pustaka Alvabet.
- Bank Indonesia. 1998. Undang-Undang No.7 Tahun 1992 tentang Perbankan sebagaimana telah diubah dengan Undang-Undang No.10 Tahun 1998. Jakarta: Direktorat Hukum Bank Indonesia.
- . 2008. Undang-Undang No. 20 Tahun 2008 tentang Perbankan Syariah. Jakarta: Direktorat Hukum Bank Indonesia.
- Bank Mandiri Syariah. 2015. *Laporan Keuangan Tahunan Bank Mandiri Syariah Tahun 2010-2014*. (www.syariahamandiri.co.id, diakses pada tanggal 30 Mei 2015 pukul 22.10 WIB).

- . 2014. *Laporan Keuangan Triwulanan Bank Mandiri Syariah Tahun 2010-2014*. (www.syariahmandiri.co.id, diakses pada tanggal 31 Mei 2015 pukul 10.38 WIB).
- Horne, James C. Van dan John M. Wachowicz, JR. 2001. *Fundamental of Financial Management: Prinsip-prinsip Manajemen Keuangan*. Edisi 12. Terjemahan oleh Dewi Fitriyani dan Deny Arnos Kwary. 2009. Jakarta: Salemba Empat.
- Otoritas Jasa Keuangan. 2014. *Statistik Perbankan Indonesia Volume 13 Nomor 1*. (Diakses pada tanggal 30 Mei 2015 pukul 09.00 WIB).
- Sugiyono. 2011. *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- Uyanto, Stanislaus S. 2009. *Pedoman Analisis Data dengan SPSS*. Edisi 3. Yogyakarta: Graha Ilmu.
- Wiryaningsih dkk. 2005. *Bank dan Asuransi Islam di Indonesia*. Jakarta: Kencana.

Determinants of Syari'ah Based Financing and Its Contribution for SMES Development

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ABSTRACT

This study examines the factors that affect the volume of Shariah-based financing for results and its contribution to the SMEs development in Indonesia. The determinant of sharia-based financing covers, third party funds, financing problems (non-performing Finance), inflation rates, interest rates on working capital loans, investment credit interest rate, and the gross domestic product. This study uses secondary data sourced from Indonesian Banking statistics published by Bank Indonesia with the observation period between 2007-2014. The analytical method used is descriptive and multiple regression. The results showed that the Gross Domestic Product, Third Party Funds and investment credit interest rates positive and significant impact on the volume of sharing based financing. The development of Shariah banking financing in the development of SMEs in Indonesia during 2007-2014 has increased fluctuate, but generally still has significant prospects. Shari'ah banking financing contribution in the SMEs development is needed because there are still many SMEs which have not obtained financing facility.

Keywords: *Shari'ah financing, Shari'ah commercial banks, Micro small and medium enterprises (SMEs)*

I. INTRODUCTION

Article 1 (7) of UU No. 21 / 2008 about Perbankan Syari'ah explained that Islamic banks are the banks running their business based on sharia principles. By type, consisting of Shari'ah commercial banks (BUS) and Islamic Financing Bank (BPRS). In carrying out its business activities, Islamic banks provide financing based on the principle of sharing (*mudârabah*), equity (*mushârahah*), sale of goods with a gain (*murâbahah*), pure rental without option (*ijârah*), or with the choice of transfer of ownership of goods leased from the bank by another party (*ijârah wa iqtinâ*), *salam* contract, *istithnâ* ' contract, the lease is terminated by ownership (*ijârah al-muntahiya bi al-tamlîk*), and other principles that are not contrary to Islamic principles. (Akhbar, 2006).

Continuous Government policies provide support to Islamic banking, causing shariah banking in Indonesia increase a significant growth despite the value of Islamic banking assets still 4.66 percent of total national banking assets. According to the Indonesian shariah banking statistics published by Bank Indonesia, in 2007 the number of Sharia commercial bank (BUS) in Indonesia only 3 with 112 branches. In November 2014 BUS number increased to 12 with 2,147 units. Similarly, Shariah Business Unit (UUS) grew from 23 to 104 offices in 2007 and increased to 354 offices in November 2014.

Profit-loss share financing 2007 only reached 35.73 percent of total financing even from November 2014 only reached 32.03 percent much below the non profit-share financing when the profit-loss share financing as the essence, and characteristics distinguishing between banking syar'iah and conventional banking. Principles for profit-loss share is a common characteristic and the basis for the Islamic bank as a whole (Shafii, 2001). Ideally, profit-loss share funding should be more dominant and preferred banking Shari'ah than non profit-loss financing. Non profit-loss share financing character is only as a support of the profit-loss share financing.

Profit-loss share financing can plays a major role in moving real sector, increase goods and services productivity, and impact on the national economy performance improvement, and can be seen from the GDP (the value of goods and services produced within a country by factors of production owned by the State and the foreign State). Shari'ah banking role in developing the real sector or the business can be seen from at least two indicators. First, intermediation function of shariah bank, through Financing to Deposit Ratio (FDR); and second, Sharia bank financing allocation according to economic sector or financing purposes (Tamanni, 2005).

Funding which be collected by Sharia bank from the public in the third-party funds (DPK) form and then distributed to a variety of financing, including profit-loss share financing, and TPF increase will affect the profit-loss share financing volume. The increase the non-performing financing caused shariah banks must establish Allowance for Earning Assets (PPAP) larger, so diminish the profit-loss share financing fund. The increase in inflation causes uncertainty in the real sector, which led to an interest decrease in businessman to develop their business, thereby decreasing the profit-loss share financing volume.

Interest rates for working capital credit and investment credit interest rates affect the profit-loss share financing. The Shari'ah banking will balance with a decrease in the level of profit-loss sharing at the time of lending rates for working capital and investment credit interest rate is rises, thereby will be decrease respon businessman to apply for business financing. Customer rationality, in this case the businessman is also a consideration in determining the pattern of business funding. This will affect the profit-loss share financing volume. Economic growth can be seen through an indicator of gross domestic product (GDP). The higher economic growth will increase the profit-loss sharing financing demand.

Dar and Persley's research (2001) identified seven factors that cause an imbalance of the profit-loss share financing management and control, and its affect decrease of profit-loss sharing schemes in shariah banking practices. This study is in line with several other publications such as: Alchaian and Demstz (1972); Khaf and Khan (1992); Ahmad (1993); Errico and Farahbarksh (1998). Lack of the profit-loss share financing that have been going on since a long time can make negative perception of society that shariah banking is almost no different from conventional banking, so it will be able to damage the image and reputation of shari'a banking itself. Therefore, the first objective of this study is whether the third-party funds, non-performing financing, inflation, interest rates on working capital loans, investment credit interest rate, and the gross domestic product affect the profit-loss share financing volume of shariah banking in Indonesia.

Seeing the scope of its business activities can be stated that shariah banking products is more varied compared to conventional bank products. This allows the shariah banking products provide broader opportunities in order to meet the needs of depositors and borrowers according to their real needs. Specifically in funding to society, the financing scheme can be adapted to customers' requirements. Meanwhile economic sector in Indonesia is factually largely supported by micro, small, and medium enterprises (SMEs). At the time of economic crisis, the sector is

able to survive. SME sector has advantages and great potential to be developed through an appropriate policy and support of appropriate institutions as well (Sri Adiningsih, 2008).

Based on the basic principles of such products, the Sharia bank actually has a core product for the results developed in musharakah and mudarabah financing products (Muhammad, 2005). The presence of Sharia bank should give a tremendous impact on the growth of the real sector, especially SMEs. This is because the musharakah and mudarabah pattern as direct investments pattern in the real sector and the financial sector return (profit sharing). Thus, the existence of Sharia bank should be able to contribute to improve the real sector growth. The function will be realized if the Sharia bank use profit and loss sharing agreement (mudarabah and musharakah) as its core product (Irfan, 2008).

The development of SMEs is still constrained problem of lack of capital and thus require financing to support it. Many credit facilities offered, whether it be from conventional banks, microfinance, and are not exempt from Sharia banks to SMEs. But of all the bids of the credit scheme, only about 60% that can meet the needs of SMEs because they have not been able to take advantage of the offer well. One reason for the difficulty SMEs to obtain credit / financing is the necessity of collateral held (Aswadi, 2007).

Financing provided by the Sharia bank with different characteristics with credit / loans (of conventional banks are expected SMEs will be able to meet the capital requirements referred to. The problems arise relation to this case is about what kind of financing that are suitable for SMEs and how best of Sharia banks to respond the SMEs need. Thus, the second objective of this research is how many contributions of Share financing on the Micro-SMEs development.

II. METHODOLOGY

This type of research is secondary data analysis during the period 2007 to 2014. The goal of this research is the entire Sharia bank in Indonesia, both in the Sharia Commercial Banks (BUS) and Sharia Business unit (UUS). The data used consist of data Musharakah and mudharabah financing in Indonesia sharia bank at every quarter period from 2007 through 2014. Independent variable consists of the deposits in Indonesia Sharia bank, non-performing financing in Sharia bank, inflation data, interest rates on working capital loans, investment credit interest rate. Dependent variable is real gross domestic product in Indonesia every quarter period of 2007 to 2014. Data were analyzed using multiple regression analysis.

Sharia financing contributions for SMEs analyzed by the magnitude of sharia financing channeled to sectors of the economy and SMEs by Sharia banking every quarter period from 2007 through 2014

III. FUNDING AND DISCUSSION

3.1. The Development of Sharia Bank in Indonesia

Sharia banking development, can be seen from the change in deposits and financing from 2007 until 2014, as the following table:

Table 1
The development of Third Party Fund (DPK) in Sharia Banking and National Banking 2007 - 2014 (in billion rupiah)

Year	Syaria Banking		National Banking
	Nominal	Share	Nominal
2007	25,658	1,78%	1.437,600
2008	36,852	2,39%	1.538,840
2009	52,271	2,67%	1.950,712
2010	76,036	3,25%	2.338,824
2011	125,415	4,50%	2.785,024
2012	147,512	4,57%	3.225,198
2013	183,534	5,01%	3.663,968
2014	209,644	5,09%	4.114,420

Source: Syaria banking statistic 2007-2014 and Indonesia banking statistic 2015,
Secondary data processed

Third Party Fund (DPK) that have been collected sharia banking in December 2007 amounted to 25.658 trillion rupiah, or reaching 1.78 percent of total national banking deposits reached 1437.600 billion dollars. During the study period, Sharia banking experienced an average increase in deposits of 36 percent per year. An average increase of Sharia banking deposits far exceeded the average increase in national banking deposits which only reached 16 percent per year. An increase in deposits during this period in line with the increase in the number of banks and sharia banking office network, so that people's access to sharia services easier.

Table 2.
The development of financing in Syaria banking and
Credit of National Banking 2007 – 2014 (in billion rupiah)

Year	Syaria Banking		National Banking
	Nominal	Share	Nominal
2007	26,548	2,76%	962,389
2008	38,195	1,90%	2.015,221
2009	46,886	2,05%	2.282,179
2010	68,181	2,47%	2.765,912
2011	102,655	3,01%	3.412,463
2012	147,505	3,54%	4.172,672
2013	184,122	3,82%	4.823,303
2014	198,376	3,63%	5.468,910

Source: Syaria banking statistic 2007-2014 and Indonesia banking statistic 2015,
Secondary data processed

Based on Table 2, the volume of sharia bank financing at the end of 2007 amounted to 26.548 trillion or equivalent to 2.76 percent of the total financing or credit and national banks in Indonesia, in November 2014 rose to 3.63 percent of the national banking or amounted to 198.376 trillion rupiah.

3.2. Compositions of the Profit-loss Share Financing in Indonesia Sharia Banking

Realization of the profit-loss share financing for sharia banking as shown in the following table

Table 3.
Compositions of the profit-loss share financing in sharia banking
2007 – 2014 (in trillions rupiahs)

Year	<i>Musyarakah</i>		<i>Mudharabah</i>		Financing Total	
	Nominal	Share	Nominal	Share	Nominal	Share
2007	4,406	15,77%	5,578	19,96%	9,984	53,73%
2008	6,205	16,25%	7,411	19,40%	13,616	35,65%
2009	6,597	14,07%	10,412	22,21%	17,009	36,28%
2010	14,642	21,48%	8,631	12,66%	23,273	34,13%
2011	18,960	18,47%	10,229	9,96%	29,189	28,43%
2012	27,667	18,76%	12,023	8,15%	39,690	26,91%
2013	39,874	21,66%	13,625	7,40%	53,499	29,06%
2014	48,611	24,73%	14,356	7,30%	62,967	32,03%

Source: Sharia banking Statistic 2007-2014, Secondary data processed

Based on composition, volume musyarakah sharia banking in December 2007 amounted to 4.406 trillion dollars, and then increased every year, and in November 2014 amounted to 48.611 trillion rupiah. In November 2014 the profit-loss share financing only reached 32.03 percent. In the last four years of the profit-loss share financing has increased.

Factors affecting the increase in the profit-loss share financing is the growing cooperation between the sharia banking and non-bank financial institutions, such as cooperatives and pawnshops, as well as their short-term projects of infrastructure and public facilities.

3.3. Multiple Regression Analysis

Based on F test showed that GDP, interest rates on working capital loans, investment credit interest rates, inflation, DPK, and NPF as a whole have a significant impact on volume of the profit-loss share financing. It can be seen from F test in 682.008 with significant value $0.0000 < 0.05$. The partial analysis showed that GDP positive and significant impact on volume of the profit-loss share financing with a significance value ($0.0000 < 0.05$). Similarly, DPK and investment credit interest rate with a positive and significant effect on profit-loss share financing ($\beta=0.196$ and 2395.074). Other variables, namely the working capital loan interest rate, inflation, and NPF not significant on profit-loss share financing.

3.4. Sharia Financing contribution to economic sector and SMEs by Sharia Banking in Indonesia

Based on the table above it appears that the bank's attention in particular the Sharia banking financing on develop SMEs more and highe. Thus the seriousness of sharia bank financing to help support enhancing the SMEs performance and have shown significant results. Alignments Sharia bank in the SMEs sector is also shown by the various financing strategies by each bank individually Shari'ah, such as the opening of service centers microfinance, SMEs outlets, or SMEs centers. Based on data from sectoral financing, SMEs financing is now concentrated on the financing of Sharia banking in the retail sector (31.1%), business services (29.3%), and trade (13.2%). Financing exposure shariah banking sector SMEs identical to the total exposure of industrial financing.

Although the contribution of development is quite large, but the growth of the SME sector in Indonesia has a problem. Problems in the national SME sector are complex, ranging from Human Resources (HR), accessing to capital, business culture, level of mastery of technology and management capabilities. It is common knowledge that the level of education the majority of SMEs business operators is low enough, the business culture that has not woken up because a lot of effort made by businesses hereditary, business fund management mixed with household finances, and so forth. Some of this is being addressed by the parties on an ongoing basis. Specifically to address the issue of access of capital in the SME sector, the current Sharia banks have been doing the same work in the distribution of funding to the sector. Cooperation

in the form of joint financing that uses the linkage concept, whereby the larger Sharia bank financing channeled through Smaller Sharia financial institutions, such as the BPRS, BMT, BTM, and KJKS. This is done because the reach of a large Islamic bank which has not reached the outposts of the small business community centers or small Sharia financial institutions and more direct touch with the entrepreneurs of SMEs.

Table 5.
Distribution of Funds for Economic Sector and SMEs
by Financing Sharia Banking in Indonesia
2007 - 2014 (in billion rupiah)

Year	Syaria Bank		Contribution (%)
	SMEs	Economic Sector	
2007	19,570	27,950	70,01
2008	27,063	38,195	70,85
2009	35,799	46,886	76,35
2010	52,570	68,181	77,10
2011	71,810	102,655	69,95
2012	90,860	147,505	61,59
2013	110,086	184,120	59,79
2014	53,606	196,563	27,27

Source: Sharia banking Statistic 2007-2014, Secondary data processed

Financing schemes conducted linkage Islamic bank with PBRs, BMT, BTM, and KJKS may be channeling, executing or joint financing. Channeling scheme put PBRs or BMT as intermediary Sharia Commercial Bank (BUS) / Sharia Business Unit (UUS) to SMEs. While executing schemes do when BUS / UUS provide funding that can be utilized by the BPRS, BMT, BTM, and KJKS in their financing to its SME customers. As for the joint financing scheme is a scheme where BUS / UUS and BPRS / BMT, BTM, and KJKS cooperate in providing financing to the SMEs. Besides that, this time also established cooperation with some Sharia bank institutions involved in solving the other problems that are hampering the development of the SMEs sector, such as the business culture issues, the level of mastery of technology, and management capabilities. Sharia bank in cooperation with educational institutions or social fund managers in an effort to improve the work culture, management capabilities of SMEs, and mastery of technology. This is done in the form of programs fostering customer. Coaching clients, particularly for SME customers, a factor that is crucial in creating and maintaining a good quality SME financing.

Based on the results of interviews with one of the small businesses that the information obtained in the framework of the distribution of funding to SMEs, Sharia bank in cooperation

with other management units such as the BPRS or cooperatives. This is done by the bank because it still has weaknesses that must be taken into account so as not to negatively affect bank profits. It is reasonable taken into account by the Sharia bank because Sharia bank financing principle must satisfy two aspects, namely the Sharia and economic aspects. Apart from having the appropriate sharia, Sharia bank must also keep into account the profitability of the business to be financed so profitable for banks and customers. But this does not mean that the Sharia bank is not in favor of SMEs, as banks have had certain policies which is also the strategy of the bank in carrying out its functions optimally.

Sharia bank does not want to be stuck in the conventional patterns which only focused on increasing profit without looking at other aspects such as the aspect of fairness and balance. There have been many efforts which are carried by the Sharia bank in the business development of SMEs through financing. This is one of the good bank policy in order to optimize the function of the bank. Sharia bank has endeavored to develop the SMEs sector through financing. It is also reflected in policies that continue to accommodate the difficulties and weaknesses of SMEs by making policies in favor of SMEs. The number of Sharia bank financing channeled to the SMEs sector to be one indicator.

Based on the explanation above, it can be done analysis of the strategic role of Sharia bank in financing of SMEs is that in accordance with sharia banking national development focus in the second phase of improving the skill competency, professional institutions and Sharia banking actors, as well as improving the function of intermediation, efficiency, and competitiveness of the banking industry shari'ah, it is necessary to welcome the readiness of the retail market that is still open chances. Then the question is, should the Sharia bank directly involved in financing the project to accommodate the sector? While Bank Indonesia (BI) status as a monetary authority sets the procedure of collateral, which is still difficult for SMEs to enter the formal Micro Finance Institutions. By looking at a promising market trends as well as the BI policy in early 2006, Sharia banks can actually enter the market SMEs directly, in addition to also keep the lower classes to accommodate linkage program. Problems collateral difficulties could be overcome by developing social capital in the form of empowerment of business groups and non-governmental groups that apply jointly and severally liable with the double pressure that is on the bank and the group. Hence the need for an intermediary institution Sharia with the same force that goes in the SME sector to protect the interests of small businesses from banking practices were unfair and did not meet the principles of Shari'ah. Credit program or project financing for productive activities should achieve the target to increase the production volume will increase productivity in the real sector so as to produce a multiplier effect (labor demand

and downstream business) to the surrounding environment and is able to drive economic growth. Thus it is necessary for the integration of the credit program that does not rely on one institution.

3.5. Sharia Financing Constraints in SMEs Development.

Although the Sharia bank has various advantages and benefits in moving the economy, especially the SME sector, but keep in mind that the influence of Sharia bank on the growth of the national economy is only 0.23%, or less than 1%. According to the analysis of Bank Indonesia that Sharia banks would be able to influence the national economy could even affect inflation if the Sharia bank's role in the national economic growth ranging between 10% -20%. In the SME sector, which is one of the stimulators of the economy, the role of shari'a financing is currently not maximized. Currently the finance portfolio in the SME sector in Indonesia is still dominated by conventional banks

The reasons that hinder the Sharia bank in optimizing its role in the SME sector in Indonesia are: First, the availability of human resources who understand the aspects of jurisprudence (*Fikih*) once the financial aspects are still very limited (less quality HR). Second, the lack of socialization of the Sharia bank primarily to the lower layers of society as a holder of an important role the SME sector. Third, less active Sharia bank in the financing. Fourth, the sophistication of information technology is still behind when compared to conventional banks. Fifth, the government's policy on the development of Sharia bank is still considered slow because the government itself is in favor of conventional banking by reason of the existence of conventional banks during this effect on the national economy and the government's lack of knowledge about Sharia bank. Sixth, the existence of asymmetric information or information in one direction between the sharia bank with the customer so that no synchronization in carrying out its activities. Seventh, it sometimes happens fraud task by the Sharia bank since human resources are empowered derived from conventional banks or limited knowledge of Shari'ah. Eighth, the role of Sharia bank as a partner with the SME sector is considered unfinished, namely the Sharia bank only assist in financing the fund alone but not participate in helping to promote SMEs in increasing revenue. Ninth, the number of Sharia banks is still limited is a significant obstacle because most sectors of SMEs located in rural areas

Barriers such as that above led to the development of Sharia bank is inhibited although theoretically Sharia bank has a competitive advantage in the national economy. Therefore, it is necessary the collaboration between governments as policy makers, Sharia bank, as well as the community. With so sharia financing is expected to be able to compete with conventional banks

and affect the growth of the national economy through the growth of the real sector. Small and medium businesses in today's economy occupies a very strategic position because of its contribution to employment and Gross Domestic Product (GDP), as well as flexibility and toughness in the face of a prolonged economic crisis. This makes SMEs as the main hope or backbone of regional and national economic development in the future. However, many SMEs are in development still has limitations in the capital so that the necessary financing to support such developments. Many credit facilities offered, both from conventional banks, microfinance and Sharia banks. However, of all these credit schemes offer only approximately 60% that can meet the needs of SMEs because they have not been able to use it well. This is caused by the presence of some limitations of SMEs to obtain Sharia bank financing, one of which is collateral owned.

Another obstacle for SMEs in obtaining financing from Sharia banks is still a lack of legality and administration. Most SMEs do not have a regular administration and many were experiencing problems in its cash flow. They assume that the profit-loss share system offered by the Sharia bank is too complicated because every month they have to calculate what percentage of profits to be paid to the bank. Though there are many things that must be done by the owners of SMEs given that most of the SMEs only be handled by one person. This is different from conventional banks to apply the system of interest. They are not difficult to calculate the huge back for the results to be paid every month, because they pay big installments already set at the beginning of the loan agreement with a fixed amount every month

In addition, equity financing Sharia banks to all the regions in Indonesia is still lacking and community knowledge about the Sharia bank system is still minimal. In the small towns, the local community only a few really know about the system and the advantages of Sharia bank financing. Most of them just knowing that it's only Sharia bank bank save it in the post office and did not think to apply for financing. It was not separated from the limitations of Sharia bank in the area, so that most SMEs are still focused on conventional financing that use interest systems.

Sharia bank product pricing that is sometimes higher than conventional banks also have an influence on the lack of public interest in accessing Sharia bank products, because the price is relatively burdensome SMEs, let alone that have relatively small incomes. Today many conventional banks that offer loans with small interest to SMEs. It was not separated from the dominance of conventional banks because conventional banks in terms of age, better known by the people than of the Sharia bank.

Hence the need for a solution to facilitate the access of SMEs to Sharia bank financing. All parties must play a role in this regard, including government, Sharia bank, and the SMEs themselves. Sharia banks are expected to further expand access and disseminate advantages so well that Sharia bank could be a companion amplifier and development of SMEs. While the government can provide management training facilities for SMEs in order to competence concerning the management of business administration can be increased.

IV. CONCLUSION AND RECOMMENDATION

From the above analysis it can be concluded that that the gross domestic product, interest rates on working capital loans, investment credit interest rates, inflation, Third Party Funds, and Non-Performance Finance as a whole have a significant impact on the volume of financing for the results. Gross Domestic Product, Third Party Funds and investment credit interest rates positive and significant impact on the volume of profit-loss share financing for the results.

The development of Sharia banking financing in the development of SMEs in Indonesia during 2007-2014 has increased fluctuate. This reflects that participation of Sharia banking financing in improvement of SMEs is not optimal. Although the amount of Sharia bank financing disbursed by Sharia banks fluctuate but in general still has significant prospects. Sharia banking financing contribution in the development of SMEs is needed because there are still many SMEs which have not obtained financing facility. While the obstacles and challenges that have been faced by many Sharia banks in the development of SMEs is the limited market share of Sharia banking and human resources capable, the paradigm of conventional banks are still strong, still chased the BEP target, lack of socialization, and still limited network.

As for some advice and strategic steps include:

1. Sharia bank should be more focus on optimizing SMEs, which provide facilities for the SMEs in obtaining financing. This can be done by channeling or joint financing with BMT / BTM through the Linkage program
2. Syaria bank also provide mentoring and coaching intensive and sustained effort, especially in financial management, production engineering, and information technology to get into global markets
3. Sharia bank should be conduct socialization and education community more broadly and efficiently through a variety of means of direct communication (in cooperation with the Universities), or indirectly (print, electronic, online / web-site), which aims to provide an

understanding on the advantages of Sharia banking products and services that can be utilized by the community.

REFERENCES

- Adiwarman, Karim, 2003, *Bank Islam: Analisis Fiqih dan Keuangan*, The International Institute of Islamic Thought (IIIT), Jakarta.
- Ahmad, A., 1993, Contemporary Practices of Islamic Financing Techniques, *IRT Research Paper No. 20*, Jeddah: IRTI, Islamic Development Bank
- Akhbar, Burhan, 2006, "Sinergisme Konsep Corporate Governance dan Konsep Distribusi Nila Tambah Dalam Upaya Meminimalisasi Permasalahan Agensi Pada Pembiayaan Mudharabah", makalah disampaikan pada *LKTI Temu Ilmiah Nasional Universitas Jenderal Soedirman*, tahun 2006.
- Alchayan, A., and Demstz H., 1972, Production, Information Costs, and Economic Organization, *American Economic Review*, 62: 777-795.
- Aswandi S, 2008 "Kiprah UMKM di Tengah Krisis EkonomPerannya Besar, Minim Perhatian Pemerintah", dalam <http://www.sme-center.com>, diunduh pada tanggal 02 April 2014.
- Dar, H.A., and Persley, J.R., 2001, Lack of Profit Loss Sharing in Islamic Banking: Management and Control imbalances, *International Journal of Islamic Financial Services*, Vol.2, No. 2: 3-18.
- Errico, L., and Farahbarksh, M., 1998, Islamic Banking: Issues in Prudential Regulations and Supervisions, *IMF Working Paper No. 30*.
- Hermawan, K., dan Muhammad Syakir, Sula, 2006, *Syari'ah Marketing*, Penerbit Mizan, Mark Plus & Co, Bandung.
- Irfan Syauqi, Beik, 2008, *Bank Syariah dan Pengembangan Sektor Riil*, dalam www.pesantrenvirtual.com, diunduh pada 10 Juli 2014.
- Khaf, M., and Khan, T., 1992, Principles of Islamic Financing, *IRT Research Paper No. 16*, Jeddah: IRTI, Islamic Development Bank.
- Muhammad, 2005, *Manajemen Bank Syariah Edisi Revisi*, Yogyakarta: Unit Penerbit dan Percetakan (UPP) AMP YKPN, 2005.
- Sri Adiningsih, "Revitalisasi UMKM", dalam <http://www.niriah.com>, diunduh pada tanggal 10 Juli 2014.
- Syafi'i, Antonio, 2001, *Bank Syari'ah dari Teori ke Praktek*, Gema Insani Press, Jakarta.
- Tamanni, L., 2005, Implikasi Perkembangan Perbankan Syariah Terhadap Dunia Bisnis Indonesia, *Jurnal Ekonomi Syariah MUAMALAH*, Januari, 2005, Vol. 3 No. 1: 13-28.
- Perundang-undangan:** Undang-Undang Nomor 19 Tahun 2003 tentang Badan Usaha Milik Negara. Undang-Undang Nomor 20 Tahun 2008 tentang Usaha Mikro, Kecil, dan Menengah. Undang-Undang Nomor 21 Tahun 2008 tentang Perbankan Syariah. Undang-Undang Nomor 9 Tahun 1995 tentang Usaha Kecil dan Menengah. Undang-Undang Nomor 10 Tahun 1998 tentang Perubahan atas Undang-Undang Nomor 7 Tahun 1992 tentang Perbankan.

Estimating Investor Losses in Restructuring of Defaulted Sukuk: A Case Study of Defaulted Corporate Sukuk in Malaysia

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ABSTRACT

The objective of the study is to estimate investor losses in restructuring of defaulted sukuk. The government and corporate sukuk with similar maturity and coupon rate are used as market benchmark. The main finding suggests that the average investor losses ranging from 2.01% - 3.14% (for less than or equal to 1 year remaining tenure) to 18.15% - 18.94% (for more than 5 years remaining tenure). The finding indicates that investors will face relatively bigger losses if the defaulted sukuk have longer remaining tenure. The finding provides benchmark to estimate recovery value in negotiating and restructuring of defaulted sukuk. Further study might compare the finding with actual investor losses to check its accuracy.

Keywords: *Sukuk Default, Sukuk Restructuring, Investor Losses, Islamic capital market*

I. INTRODUCTION

Sukuk industry has emerged as one of the main components of the Islamic financial system and has increasingly become an integral subset of the international financial system. According to the Kuwait Finance House (KFH), over the years the sukuk market has grown by 10% to 15% annually to reach approximately USD 170.3 billion outstanding as at end of 3rd quarter of 2011 and contributes approximately 14.3% of the global Islamic finance assets. Prospect for the sukuk markets remain bright and expected to see further growth in coming years indicated by greater interest from the international community and the spread of sukuk issuance around the world.

However, behind this bright prospect there is recent development which shocks the sukuk industry that is increasing number of defaulting sukuk. According to Islamic Finance Information Services (IFIS), there are 33 sukuk default events in the market around the world for the period 2003-2011. The amounts of default reach USD 1.93 billion and represent about 0.70% of total sukuk issued in the market for the same period. Malaysia as the largest sukuk issuer also had experienced by 25 default events or contributes more than two-third of total default events. However, the default amounts reach only USD 674.72 million or represent about 0.31% of total sukuk issued by Malaysia for the same period. This amount is relatively small and may not pose significant threat to the local capital market; however, it have impact on the overall reputation of Malaysia as the hub for global Islamic finance and negative perception on Shariah principles which used as underlying structure of sukuk.

Whilst the business causes leading to sukuk default are varied, the ultimate reason for a default is the issuer unable to meet its contractual obligations and may renege from paying the principal and the profit due. Every case of default raises important issues on how much loss suffered by investors and what proportion of the original principal they were able to recover. Understanding these issues is important for at least two reasons. First, assumption about expected losses and recovery value is one important factor considered by investors in their investment decision. It is often used by investors as a proxy of default risk in the pricing models. Second, the extent to which investors suffered losses in recent sukuk restructurings is an important input in both the legal and financial aspect on how defaulted sukuk should be restructured, and whether the current framework for doing so is appropriate or not. On one side, a restructuring that involves high investor losses may raise concerns about issuer moral hazard and its impact on the future of the sukuk market. On the other side, a restructuring that is too easy to side investors will be perceived harm the issuers and may have negative impact on the economic activities.

The study is motivated by a condition where information on how much the actual loss suffered by investors in case of restructuring defaulted sukuk is very limited. This was due to the restructuring process mostly taken place through out of court and it conducted by issuers and investors, either directly or through intermediaries. Consequently there is no accurate data about losses of investors in the event of default. Therefore, the study is aimed to estimate the losses of investors in the restructuring of defaulted sukuk. Hence, the study contributes to the literature since empirical studies on sukuk default are very limited and the result may be used by the market participants as a benchmark for restructuring of defaulted sukuk in the future.

II. LITERATURE REVIEW

Events of default have been make market participants aware that sukuk as a product of Islamic capital market, by design, have similarity with products in the conventional counterpart, in term of their exposure to the default risk. Since these default events are largely unprecedented, the default study is likewise a new frontier for the Islamic finance industry. Therefore, until very recently the default study in sukuk market is very few compared with one in conventional market.

A research conducted by Khnifer (2010a) is one of the early studies that discuss the sukuk default. In his paper the author reported that there are at least 21 defaulted sukuk in last 20 months from November 2010. The issuances of these defaulted sukuk come from various industry and spread from Malaysia, Pakistan, US and Gulf Cooperation Council (GCC) countries. Learning from conventional market experiences, Khnifer (2010b) further proposed three approaches to restructure defaulted sukuk that argued compliant to Shari'ah principles, namely haircut, rescheduling and debt-for-equity swaps. The first approach is 'haircut' whereby the sukuk holders would come to agreement to make a discount on their investment in order to get early settlement. The second approach is 'rescheduling' whereby the sukuk holders may agree to reschedule the financial obligations of the issuer by extending maturity for the same, lower or usually higher profit rate. Alternatively, the sukuk holders may agree to covert some or all of the debt in exchange for equity in the company under a 'debt-for-equity swaps' approach. The author further argued that these three approaches do not guarantee the recovery of the principle. He estimates, for example, that haircut approach will recover 70-80% of the original principle without any profits. However, this number is come from his expectation without any proof from empirical study on restructuring of defaulted sukuk.

In another default study, Purwono (2012) estimates the default probability and recovery value of Ijarah sukuk. Employing *reduced-form* approach and using daily price of selected Ijarah sukuk listed in the Dubai Bond Market from period April-May 2010, the study concluded that the estimated long-term default rate steadily increases from around 5% to more than 40% and the estimated recovery value ranges between 40 to 60 cents USD over the period of study. The model is argued able to capture the dynamics of credit risk in the global economy since the period of study coincidence with the period of global financial crisis especially Greece debt crisis.

Since literature on sukuk default study is very limited, literatures from conventional bond market may be adapted in the empirical study of sukuk market. Among empirical study in conventional market, Sturzenegger and Zettelmeyer (2007 and 2008) provide so far the most rigorous study on estimating investor losses. In their paper, the authors calculate investor losses by comparing the present value of new bond with both the par value and the present value of old bond at the exit from default. Using cases of sovereign debt restructuring in nine countries over the period 1998 to 2005, the paper found average investors losses ranging from 13% to 73% and recovery values ranging from 30% to about 75%.

III. METHODOLOGY

Data: The data on the issuance date, size, coupon, rating, and the date of maturity and default was collected from Malaysia Rating Corporation Berhad (MARC) and Rating Agency Malaysia Berhad (RAM). The data on market benchmark was collected from BondStream. Another data for the study is collected from Bank Negara Malaysia and Bursa Malaysia. The sample cover default events from 2007 until 2011 and selected base on availability of required data.

Measuring Investor Losses: In order to estimate investor losses, this study adapt the approach developed by Sturzenegger and Zettelmeyer (2007 and 2008). In this study “investor losses” does not reflect the actual loss that investors experienced in restructuring of sukuk default. Rather, our expected loss describes the loss that is incurred if investors participate in a hypothetical situation in which they agree to restructure defaulted sukuk through a ‘haircut’ approach. Under this restructuring mode investors agree to make a discount on their investment in order to get early settlement. The discount is measured by compare expected value of defaulted sukuk with market value of benchmark sukuk in the market which has similar maturity and rating.

Hence, “investor losses” are defined as the percentage difference between the market value of benchmark sukuk and the expected value of the remaining contractual payments on the defaulted sukuk discounted using the yield of the benchmark sukuk.

$$EL = 1 - \frac{Pb(r_b)}{Pd(r_b)} \quad (1)$$

Where

EL = expected investor losses

Pb = market value of benchmark sukuk

Pd = expected value of defaulted sukuk

r_b = yield of the benchmark sukuk

In order to measure expected value of defaulted sukuk (Pd), this paper use formula as follow:

$$Pd = \left[\frac{\text{redemption}}{\left(1 + \frac{\text{yld}}{\text{frequency}}\right)^{\left(N-1 + \frac{\text{DSC}}{E}\right)}} \right] + \left[\sum_{k=1}^N \frac{100 \times \frac{\text{rate}}{\text{frequency}}}{\left(1 + \frac{\text{yld}}{\text{frequency}}\right)^{k-1 + \frac{\text{DSC}}{E}}} \right] - \left(100 \times \frac{\text{rate}}{\text{frequency}} \times \frac{A}{E}\right) \quad (2)$$

where:

Default date	= the date when the sukuk is declared default by credit rating agency
Maturity date	= the sukuk's maturity date
Rate	= the sukuk's annual coupon rate.
Yld	= the sukuk's annual yield i.e. yield of the benchmark sukuk (r_b)
Redemption	= the sukuk's redemption value per \$100 face value.
Frequency	= the number of coupon payments per year (for annual payments = 1; for semiannual = 2; for quarterly = 4)
Basis	= the type of day count basis to use (Actual/actual = 1, Actual/360 = 2, Actual/365 = 3, European 30/360 = 4)
DSC	= number of days from default date to next coupon date.
E	= number of days in coupon period in which the default date falls.
N	= number of coupons payable between default date and redemption date.
A	= number of days from beginning of coupon period to default date.

Computing expected investor losses (EL) involves a number of practical complications. The most difficult problem is in determining the sukuk which is used as market benchmark. To deal with this problem, firstly we employ both corporate and government sukuk. Corporate sukuk is used to estimate a fair value of restructuring based on current market condition. While government sukuk is used to estimate a worst loss estimation of restructuring since it often perceived as risk free investment and usually gives smaller yield than the corporate sukuk.

A second and more routine problem for determining benchmark is the maturities of the defaulted sukuk and the benchmark is not exactly same. The maturity is very important since it affect the yield of sukuk. Sukuk with longer maturity tend to have higher yields than those have shorter maturity. To deal with this problem, our approach was to group the remaining tenor of defaulted sukuk in to seven groups from less than 1 year to more than 5 years with 1 year interval of each group. Base on this approach, the benchmark is selected from the sukuk which have similar remaining tenure. When this is not possible, for example because the remaining tenure is too long and there are no sukuk in the market have similar tenure, we used the closest available benchmark and made an adjustment using the yield curve and sukuk price index.

The third complication arises when determining which rating will be used to select the benchmark. The last rating before sukuk was declared as default by rating agency should not be used because it was usually already affected by information related with default and it oftendrop very fast from normal or stable rating to default status. In this case, we use initial rating when the sukuk was issued. This approach provides fair valuation for investors since they use the initial rating when make decision to invest on the sukuk. Another problem is the difference in the rating symbols and categories used by rating agencies and market data provider. To deal with this problem, the rating symbols are synchronized based on the definition provided by each rating agency and market data provider.

Finally, the sukuk was usually issued in a series which have different maturities while the rating agency released rating or default status for the sukuk facility not for each series. This situation arise complication when calculating the expected value since the formula required default date should be fall before maturity date. In some cases the rating agency release default rating after maturity date of the junior series, consequently the expected market value of these series cannot be calculated. In order to avoid failure in calculation only series that have a maturity date after the sukuk was declared as default is covered in the calculation.

IV. RESULTS AND DISCUSSION

Corporate Sukuk Default in Malaysia: Table 1 shows the defaulted sukuk in Malaysia for the period 2007-2011. Default status is based on the criteria of one of two credit rating agency in Malaysia i.e. the Rating Agency Malaysia Berhad (RAM) with D rating and the Malaysian Rating Corporation Berhad (MARC) with D_{ID} rating. Overall, there are 15 cases of default that

meet the criteria of sample. The default events most commonly occurred in 2009 with 6 cases and the least occurred in 2010 with 1 case.

Table 1: Defaulted Corporate Sukuk in Malaysia (2007 - 2011)

Issuer	Sukuk Series	Rating Agency	Initial Rating	Issuance Date	Maturity Date	Default Date	Amount Issued (RM mil)	Amount Outstanding (RM mil)
ACE Polymers (M) Sdn Bhd	ACE PMERS 2 until 7 years	MARC	A _{ID}	15-Sep-2004	14-Sept-2006 until 2011	14-Sep-2007	70	65
BSA International Bhd	BSAINTNL 3 & 5 years	RAM	A2	19-Oct-2004	19-Oct-2007 and 2009	28-May-2008	150	45
Dawama Sdn Bhd Junior	DAWAMA 4 years	MARC	A _{+IS}	27-Apr-2009	27-Apr-2014	29-Apr-2011	20	5
	DAWAMA 5 years		A _{IS}	27-Apr-2009	27-Apr-2013	3-Oct-2011	120	80
Englotech Holding Bhd	ENGLOTECHS 4 until 7 years	MARC	A _{ID}	26-Sep-2005	26-Sep-2009 until 2012	27-Mar-2009	50	50
Evermaster Bhd	EVERMASTER 5 until 7 years	MARC	A _{ID}	30-Dec-2003	30-Dec-2008 until 2010	31-Dec-2008	50	50
Ingress Sukuk Bhd	INGRESS 5 until 7 years	MARC	A _{+ID}	9-Jul-2004	9-Jul-2009 until 2011 28-Feb-2007 until 2009	13-Jul-2009	160	145
Intelbest Corporation Sdn Bhd	INTELBEST 2 until 4 years	MARC	A _{+ID}	28-Feb-2005	28-Feb-2007 until 2009	29-Feb-2008	110	110
Malaysian International Tuna Port Sdn Bhd	MITP 5 until 10 years	MARC	A _{+ID}	17-May-2007	17-May-2012 until 2017	18-Nov-2009	240	240
Malaysian Merchant Marine Bhd	MMM 3, 5 & 7 years	MARC	AA _{ID}	28-Nov-2003	28-Nov-2006, 2008, 2010	2-Apr-2010	120	24
Memory Tech Sdn Bhd	MTSB 2 until 7 years	RAM	A2	28-Oct-2005	28-Oct-2007 until 2012	7-Jun-2007	320	320
Nam Fatt Corporation Bhd	NAM FATT 7 years	MARC	A _{+ID}	10-Feb-2006	10-Feb-2013	6-Apr-2010	250	50
Oxbridge Height Sdn Bhd	OXBRIDGE 4 until 6 years	RAM	A1	29-Apr-2005	29-Apr-2009 until 2011	6-Apr-2009	104	53
Peremba Jaya Holdings Sdn Bhd	PEREMBA 3 years	MARC	A _{ID}	8-Feb-2005	14-Jul-2008	16-Apr-2007	200	182.1
PSSB Ship Management Sdn Bhd	PSSB SHIP 1 until 7 years	MARC	AA _{ID}	15-Dec-2004	15-Dec-2005 until 2011	15-Dec-2009	35	20
Tracoma Holdings Bhd	TRACOMA 4 & 5 years	MARC	A _{ID}	28-Jan-2005	28-Jan-2009 and 2010	29-Jan-2009	100	100

There are 3 defaulted sukuk rated by RAM and another 12 was rated by MARC. The initial rating as shown in column 4 is ranging from A1 to A2 (RAM) and A_{ID} to AA_{ID} (MARC) which are classified as good rating in the investment grade.¹ Normally, sukuk or bond which classified in the investment grade is expected have low default probability and take a long time to default. However, according to RAM's default study (2012), in overall market (Islamic and conventional) issuers with A and AA initial rating contribute almost 31% of total default events over period 1992 until 2011. Interestingly, the highest default events concentrate in BBB initial rating which contributes about 39% of total default events. These facts imply that investors should not solely look at initial rating to predict default probability.

¹ According to MARC investment grade consist bond or sukuk with rating from AAA to BBB, while non-investment or speculative grade consist bond or sukuk with rating from BB to D.

Almost defaulted sukuk was issued in series ranging from 2 until 10 maturity years except for the Nam Fatt Corporation Bhd in a single series of 7 years. The average time to default from the issuance date is 3.6 years. The shortest time to default is 1.6 years after issuance date i.e. the Memory Tech SdnBhd's sukuk, while the longest one is 6.3 years i.e. the Malaysian Merchant Marine Bhd's sukuk. This fact indicates that the idea that the investment grade take a long time to default is not always true.

Estimated Investor Losses: In order to measure estimated investor losses, first of all the expected market price (P_d) of defaulted sukuk is calculated as in Equation 2 using yield of both government and corporate sukuk which have similar rating and remaining maturity. The expected price is then used to estimate losses as in Equation 1.

The result of estimated investor losses using government sukuk as benchmark is presented in Table 2. The smallest loss is the Oxbridge Height SdnBerhad 4 year's sukuk series with expected lost 0.28%. It means that expected recovery value (that is $100-EL$) of this sukuk is 99.72%. The biggest loss is the Malaysian International Tuna Port SdnBhd 10 year's sukuk series with expected loss 22.80% or in other word investors of this sukuk is expected to get 77.20% recovery value of the principal. The smallest loss corresponds to the shortest remaining tenure (0.1 years) and the biggest loss is shown by the longest remaining tenure (7.5 years).

The result of estimated investor losses using corporate sukuk as benchmark is presented in Table 3. The sukuk series which have smallest and biggest loss are same as those are estimated using government sukuk. The smallest one is the Oxbridge Height SdnBerhad 4 year's sukuk series with expected lost 0.02% and the biggest one is the Malaysian International Tuna Port SdnBhd 10 year's sukuk series with expected loss 23.80%. The findings as in Table 1 and Table 2 indicate that the estimated investor losses tend to increase when the remaining tenure increase.

Table 2: Estimated investor losses use government sukuk as benchmark

Issuer	Sukuk Series	Cuopon (%)	Coupon Freq/year	Remaining Tenure (years)	Government Sukuk Benchmark			
					Gov Sukuk Yield (%)	Expected Price	Gov Sukuk Price	Estimate Loss
ACE Polymers (M) Sdn Bhd	ACE PMERS 4 YRS	7.25	2	1.0	3.48	103.68	98.17	5.32%
	ACE PMERS 5 YRS	7.75	2	2.0	3.53	108.09	100.55	6.98%
	ACE PMERS 6 YRS	8.15	2	3.0	3.57	112.93	100.37	11.12%
	ACE PMERS 7 YRS	8.55	2	4.0	3.63	118.18	99.79	15.56%
BSA International Bhd	BSAINTNL 5 YRS	7.90	2	1.4	3.54	105.87	95.15	10.13%
Dawama Sdn Bhd Junior	DAWAMA 5 YRS	7.50	2	1.6	3.04	106.77	100.81	5.58%
	DAWAMA 4 YRS	8.50	2	2.6	3.33	114.62	102.48	10.59%
Englotech Holding Bhd	ENGLOTECHS 4 YRS	6.30	2	0.5	1.99	102.11	101.49	0.61%
	ENGLOTECHS 5 YRS	6.70	2	1.5	2.18	106.60	102.49	3.85%
	ENGLOTECHS 6 YRS	7.00	2	2.5	2.37	111.16	105.03	5.52%
	ENGLOTECHS 7 YRS	7.20	2	3.5	2.83	114.45	102.45	10.49%
Evermaster Bhd	EVERMASTER 6 YRS	7.50	2	1.0	2.86	104.53	97.69	6.54%
	EVERMASTER 7 YRS	7.75	2	2.0	3.02	109.10	101.25	7.20%
Ingress Sukuk Bhd	INGRESS 6 YRS	7.00	2	1.0	1.91	104.96	101.1	3.68%
	INGRESS 7 YRS	7.60	2	2.0	2.41	110.01	103.72	5.72%
Intelbest Corporation Sdn Bhd	INTELBEST 4 YRS	7.50	2	1.0	3.41	103.97	100.52	3.31%
Malaysian International Tuna Port Sdn Bhd	MITP 5 YRS	7.70	2	2.5	2.81	111.71	100.61	9.94%
	MITP 6 YRS	7.95	2	3.5	3.38	114.96	100.69	12.41%
	MITP 7 YRS	8.20	2	4.5	3.83	117.89	100.33	14.89%
	MITP 8 YRS	8.45	2	5.5	3.85	122.57	102.7	16.21%
	MITP 9 YRS	8.70	2	6.5	4.12	125.88	98.83	21.49%
	MITP 10 YRS	8.95	2	7.5	4.29	129.61	100.06	22.80%
Malaysian Merchant Marine Bhd	MMM 7 YRS	5.85	2	0.7	2.32	102.29	100.91	1.35%
Memory Tech Sdn Bhd	MTSB 2 YRS	5.95	2	0.4	3.34	100.98	97.34	3.61%
	MTSB 3 YRS	6.25	2	1.4	3.44	103.78	100.81	2.86%
	MTSB 4 YRS	6.60	2	2.4	3.49	107.07	100.19	6.43%
	MTSB 5 YRS	6.95	2	3.4	3.53	110.83	100.52	9.31%
	MTSB 6 YRS	7.35	2	4.4	3.55	115.32	104.1	9.73%
	MTSB 7 YRS	7.70	2	5.4	3.64	119.69	105.21	12.10%
Nam Fatt Corporation Bhd	NAM FATT 7 YRS	6.50	2	2.9	3.35	108.48	100.72	7.16%
Oxbridge Height Sdn Bhd	OXBRIDGE 4 YRS	7.00	2	0.1	1.88	100.32	100.04	0.28%
	OXBRIDGE 5 YRS	7.50	2	1.1	2.04	105.71	101.42	4.06%
	OXBRIDGE 6 YRS	8.00	2	2.1	2.45	111.10	104.12	6.28%
Peremba Jaya Holdings Sdn Bhd	PEREMBA 3 YRS	6.60	2	1.2	3.40	103.86	100.95	2.81%
PSSB Ship Management Sdn Bhd	PSSB SHIP 6 YRS	7.00	2	1.0	2.06	104.86	101.57	3.14%
	PSSB SHIP 7 YRS	7.25	2	2.0	2.33	109.56	103.55	5.49%
Tracoma Holdings Bhd	TRACOMA 5 YRS	7.60	2	1.0	2.47	105.02	101.21	3.63%

Table 3: Estimated investor losses use corporate sukuk as benchmark

Issuer	Sukuk Series	Cuopon (%)	Coupon Freq/year	Remaining Tenure (years)	Corporate Sukuk Benchmark			
					Corp Sukuk Yield (%)	Expected Price	Corp Sukuk Price	Estimate Loss
ACE Polymers (M) Sdn Bhd	ACE PMERS 4 YRS	7.25	2	1.0	5.46	101.72	99.54	2.15%
	ACE PMERS 5 YRS	7.75	2	2.0	6.19	102.90	99.70	3.11%
	ACE PMERS 6 YRS	8.15	2	3.0	6.36	104.82	103.14	1.61%
	ACE PMERS 7 YRS	8.55	2	4.0	6.84	105.90	100.53	5.07%
BSA International Bhd	BSAINTNL 5 YRS	7.90	2	1.4	7.35	100.70	98.61	2.08%
Dawama Sdn Bhd Junior	DAWAMA 5 YRS	7.50	2	1.6	5.21	103.40	100.91	2.40%
	DAWAMA 4 YRS	8.50	2	2.6	4.20	111.98	100.89	9.90%
Englotech Holding Bhd	ENGLOTECHS 4 YRS	6.30	2	0.5	6.10	100.10	99.58	0.51%
	ENGLOTECHS 5 YRS	6.70	2	1.5	6.78	99.89	99.37	0.52%
	ENGLOTECHS 6 YRS	7.00	2	2.5	7.10	99.77	98.96	0.82%
	ENGLOTECHS 7 YRS	7.20	2	3.5	7.38	99.45	98.67	0.79%
Evermaster Bhd	EVERMASTER 6 YRS	7.50	2	1.0	5.97	101.46	99.77	1.67%
	EVERMASTER 7 YRS	7.75	2	2.0	6.79	101.76	99.26	2.46%
Ingress Sukuk Bhd	INGRESS 6 YRS	7.00	2	1.0	8.95	98.19	97.95	0.25%
	INGRESS 7 YRS	7.60	2	2.0	8.63	98.15	97.59	0.57%
Intelbest Corporation Sdn Bhd	INTELBEST 4 YRS	7.50	2	1.0	5.78	101.64	94.19	7.33%
Malaysian International Tuna Port Sdn Bhd	MITP 5 YRS	7.70	2	2.5	6.07	103.72	96.76	6.71%
	MITP 6 YRS	7.95	2	3.5	6.50	104.47	94.34	9.70%
	MITP 7 YRS	8.20	2	4.5	7.13	104.05	89.02	14.45%
	MITP 8 YRS	8.45	2	5.5	7.37	104.80	86.35	17.61%
	MITP 9 YRS	8.70	2	6.5	7.64	105.35	83.41	20.83%
	MITP 10 YRS	8.95	2	7.5	7.90	105.86	80.46	23.99%
Malaysian Merchant Marine Bhd	MMM 7 YRS	5.85	2	0.7	3.21	101.70	101.65	0.05%
Memory Tech Sdn Bhd	MTSB 2 YRS	5.95	2	0.4	5.21	100.27	97.28	2.98%
	MTSB 3 YRS	6.25	2	1.4	5.36	101.17	93.41	7.67%
	MTSB 4 YRS	6.60	2	2.4	5.56	102.29	88.22	13.76%
	MTSB 5 YRS	6.95	2	3.4	6.12	102.50	91.22	11.00%
	MTSB 6 YRS	7.35	2	4.4	6.25	104.16	93.49	10.24%
	MTSB 7 YRS	7.70	2	5.4	6.42	105.74	91.64	13.33%
Nam Fatt Corporation Bhd	NAM FATT 7 YRS	6.50	2	2.9	6.36	100.35	95.26	5.07%
Oxbridge Height Sdn Bhd	OXBRIDGE 4 YRS	7.00	2	0.1	6.33	100.03	100.01	0.02%
	OXBRIDGE 5 YRS	7.50	2	1.1	6.80	100.70	99.53	1.16%
	OXBRIDGE 6 YRS	8.00	2	2.1	7.82	100.33	98.24	2.08%
Peremba Jaya Holdings Sdn Bhd	PEREMBA 3 YRS	6.60	2	1.2	5.40	101.42	92.64	8.65%
PSSB Ship Management Sdn Bhd	PSSB SHIP 6 YRS	7.00	2	1.0	4.24	102.67	101.26	1.38%
	PSSB SHIP 7 YRS	7.25	2	2.0	4.82	104.58	102.64	1.86%
Tracoma Holdings Bhd	TRACOMA 5 YRS	7.60	2	1.0	5.81	103.87	99.94	3.79%

In order to look at the findings more generally, the estimated losses are grouped based on the remaining tenure into six groups ranging from less than or equal to 1 year until more than 5 years with 1 year interval of each group. The average losses of each group are presented in Table 4.

Table 4: Estimated average investor losses

Remaining Tenure	Benchmark	
	Government Sukuk	Corporate Sukuk
< 1 yrs	3.76%	2.26%
2 yrs	5.47%	3.05%
3 yrs	8.15%	5.71%
4 yrs	11.94%	6.64%
5 yrs	12.31%	12.34%
> 5yrs	18.15%	18.94%

Table 4 show that the average investor losses ranging from 2.01% - 3.14% (for less than or equal to 1 year remaining tenure) to 18.15% - 18.94% (for more than 5 years remaining tenure). This finding indicates that the average losses tend to increase when the remaining tenure increase. This findings consistent with the theory in which sukuk with longer maturity more risky than the shorter one, consequently it face bigger losses. The losses will getting worse if seniority is applied among the sukuk series. In finance, seniority refers to the order of repayment in the event of a default or bankruptcy of the issuer in which senior sukuk must be repaid before subordinated (or junior) sukuk is repaid.

Table 5: Average annual yield

Remaining Tenure	Benchmark	
	Government Sukuk	Corporate Sukuk
< 1 yrs	2.57%	5.71%
2 yrs	2.89%	6.33%
3 yrs	3.05%	6.21%
4 yrs	3.34%	6.71%
5 yrs	3.69%	6.69%
> 5yrs	3.98%	7.33%

The average losses using corporate benchmark tend to be lower than the one using government benchmark. The finding is consistent with information in Table 5 which show that the average yield of corporate sukuk is relatively higher than one of corporate sukuk, therefore it give lower average losses. However, the average losses of the last two groups (groups of 5 and more than 5 years remaining tenure) almost have same value with those one in government benchmark. The possible explanation of this phenomenon is that market had difficulty when evaluate corporate sukuk which have long maturity since corporate sukuk is issued mostly in short

maturity (less than 5 years). Therefore, market tends to use value of government sukuk as a benchmark when evaluate corporate sukuk with long maturity, consequently its expected value close to the value of government sukuk.

V. CONCLUSION

This study has two main results. First, the estimated investor losses tend to increase when the remaining tenure of defaulted sukuk increase. This finding implies that investors who hold sukuk with longer maturity face higher risk and estimated to bear bigger losses in case of default. Second, the estimated investor losses using government sukuk as benchmark tend to be higher compare with the one using corporate sukuk. This finding provides the best and worst scenario of recovery value in restructuring of defaulted sukuk using haircut approach. Therefore, this finding may be used by market participants as benchmark in the restructuring process by provides border line of estimated recovery value in their negotiation. Further study might compare the findings with actual investor losses to check its accuracy.

REFERENCES

- Dumitrescu, A., 2006. Valuation of defaultable bonds and debt restructuring. *Journal of Corporate Finance*, 13: 94-111
- Hafizi A. M., Shahida S., MohdHafizuddin S.B.A., 2010. Sukuk defaults and its implication: A case study of Malaysian capital market. 8th International Conference on Islamic Economics and Finance, Qatar
- Julie, Ng and S. Lee, 2012. Corporate default and rating transition study, RAM Rating Services Berhad, May 2012
- Khniifer, M., 2010a. Shocking: 21 defaulted sukuk cases in the last 20 months! *BussinesIslamica Magazine*, November 2010: 24-26
- Khniifer, M., 2010b. Stand and default: Sukuk defaults bring innovative restructuring approaches to the Islamic finance industry. *Islamic Business & Finance*, October 2010: 40-41
- Kuwait Finance House, 2011. Global sukuk report 3Q2011, KFH Research Ltd, 21 October 2011
- Purwono, Y., 2012. A risk-neutral approach to the estimation of implied default probabilities and recovery value in ijarah sukuk prices. Islamic Capital Market Conference, Jakarta, June 2012
- Sturzenegger, F., Zettelmeyer, J., 2007, Creditor losses versus debt relief: Result from a decade of sovereign debt crises, *Journal of the European Economic Association*, 5: 343-351
- Sturzenegger, F., Zettelmeyer, J., 2008, Haircuts: Estimating investor losses in sovereign debt restructurings 1998-2005, *Journal of International Money and Finance*, 27: 780-805

Identification Accuracy of Asset Pricing Model in Jakarta Islamic Index Using Three Factor Model & Five Factor Model Approach

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ABSTRACT

This research is development of research conducted by Adriadi (2011) and has been modified. The purpose of this study was to test the validity of Five Factor Model to predicting stock return in Jakarta Islamic Index compared with Three Factor Model that can expected to help investors to invest in stocks that meet the criteria of sharia. This data used is a company registered in Jakarta Islamic Index for the year 2012 - 2014. This study uses the Mean Absolute Deviation to measure the average return of the two models. The results showed that Five Factor Model is able to provide a better prediction than Three Factor Model. The addition of variable Profitability and Investment Pattern in Three Factor Model is able to improve the predictions generated. A short time period in research and the number of companies that lack much make the Five Factor Model needs to be researched further.

Keywords: *Five Factor Model, Three Factor Model, Mean Absolute Deviation.*

I. INTRODUCTION

Public awareness on an investment product is getting higher in the age of globalization. Public investing can be called as an investor. The capital market became the place for investors to invest in financial assets. Investing is a muamalah activity that highly recommended, because with investment, the property owned as becoming more productive and also bring benefits to others and is the active form of Islamic economics. In accordance with Q.S. Al-Hadid, article 7: “Believe in Allah and His Messenger and spend in some of the wealth that God has made you ruler. So those who believe among you and spend (in part) wealth gained a great reward.”

The growth of the Islamic capital market has recently played some important roles that changed the paradigm of the financial sector. Several Islamic world's major index such as the Dow Jones Islamic Market Index (DJMI), RHB Shariah Index, and the Kuala Lumpur Shariah Index has been growing and gaining popularity amongst the Muslim community who are committed to the principles of Islam in running and managing their investments. By looking at the number of Muslim society in Indonesia, then on July 3, 2000 PT. Bursa Efek Indonesia launch Jakarta Islamic Index which offers investment with guaranteed halal. Purpose of the establishment of Jakarta Islamic Index (JII) is increase the confidence of investors to invest in Sharia-compliant stocks and provide benefits to investors in carrying out Islamic law to invest in Indonesia Stock Exchange.

In stock investing in capital markets, investors (*shahib almal*) expect returns to be earned in the future of the embedded equity investments. To be able to generate the desired return investors (*sahib al-mal*) in the future, the necessary analysis to determine whether the stock market reflect the true value of the company's shares traded.

Return is the yield obtained by the investor for allocating funds in the needy. In addition to returns, investors are also faced with the risks arising from economic factors affecting capital markets such as macro risks, industry risks, and risks of the company. Generally, the risk of stock investments can be reduced by combining several single securities in the portfolio. This is allows the investor to obtain a high return with a certain level of risk.

Three Factor Model is one tool that can be used by investors to assess the stock anywhere that has good performance and can be included in the portfolio. Three Factor Model assumes influenced not only by the performance of stock market risk, but Also the size of capitalization and value Book-Market Ratio of each issuer. Testing assessment methods with Five Factor Model that adds a variable Profitability and Investment Pattern has been done by Fama & French

(2015), this result showed that Five Factor Model can explain stock returns more than Three Factor Model.

Based on this, interesting to find out how the accuracy of Asset Pricing Model Approach using Three Factor Model and the Five Factor Model to predicting Return in Jakarta Islamic Index for the year 2012 to 2014. The purpose this study was conducted in order to determine how the accuracy in predicting the Five Factor Model expected returns compared to the Three Factor Model.

II. LITERATURE REVIEW

2.1. Investment

Understanding of the investment will lead to a way of thinking of a person in the investment act. These conditions require all parties conducting investment activities in order to understand and be able to do a proper analysis. Errors in performing the analysis will result in losses because of declining amount of funds used in investment activities. In general, the investment it is the form of an asset purchase transaction activity both real and financial shape that aim to make a profit in the future by considering the risks, income level, and the investment period. Shares are securities investments proof of ownership of a company (Bodie, et al: 2014). Each share represents one vote on all matters in the management of the company and use the voice in the company's annual meeting and distribution of profits.

Shares are categorized into two type, conventional stocks and islamic stocks. Islamic stocks are stocks that have characteristics in accordance with Islamic law, or better known as sharia compliant. While conventional stocks are stocks whose business is not in accordance with the principles of Islamic Sharia. Under the direction of the National Sharia Council (Dewan Syariah Nasional) and Bapepam - LK No. IX.A.13 on Issuance of Islamic securities, the type of main activity of a business entity that assessed do not meet Islamic law is as follows:

1. Businesses are classified as gambling and gambling games or prohibited trade.
2. Carrying out the financial services that implement the concept of usury, trading risks and containing gharar maysir.
3. Producing, distributing, trading and or provide: goods and or services that are unlawful because the substance (haram lidzatihi), goods and or services that are illegal not because

of substance (haram lighairihi) established by the DSN-MUI, as well as goods and or services moral damage and harmful.

4. Investing in companies that at the time the transaction level (ratio) of corporate debt to financial institutions ribawi more dominant of capital, unless the investment is stated kesyariahannya by DSN-MUI.

While the criteria for stocks that fall into the category of sharia are:

1. Do not conduct business activities as described above.
2. Not participate the delivery of goods or services and trade with supply and demand false.
3. Do not exceed the financial ratios as follows:
 - Total interest-based debt to total equity of no more than 82% (interest-based debt to total equity of no more than 45%: 55%).
 - Total interest income and other income is not kosher compared to total revenue (revenue) not more than 10% Investors can diversify their stock investments by establishing their portfolio. The portfolio is a combination of various securities or shares in investment aimed at diversifying some investment to pass so expect investors to get returns with minimal risk.

2.2. Return

Bodie, Kane, and Marcus (2014) arguing that a return is the income earned during the investment period per amount of funds invested. In practical terms, the return on an investment is the percentage of total income during the period of investment than the purchase price of the investment. If the sale price exceeds the purchase price then there is a capital gain. And vice versa, if the selling price is less than the purchase price then there is a capital loss. Stock returns can be divided into two type, realized return and expected return. Realized return is return that has occurred is calculated based on historical data. Expected return is the expected return in the future and still are not sure.

In the mathematical formula used to determine the expected return by Bodie, Kane, and Marcus (2014) are:

$$R_t = \frac{P_t - P_v}{P_v}$$

Where:

R_t = stock return or market index at month t.
 P_t = stock price or market index at month t.
 P_{t-1} = stock price or market index at month t-1.

2.3. Modern Portfolio Theory

The best portfolio is a portfolio that can give maximum return with risks that can be anticipated by investors. Modern Portfolio Theory is a theory that gives investors a way to maximize return and minimize portfolio risk by choosing a varied assets. Harry Markowitz basing the foundation of this theory in 1952 (Sharpe et al, 2005). The foundations are the assumptions for the normative approach in the selection of assets for inclusion in the portfolio.

The assumptions are:

1. Investor evaluate the portfolio by looking at the expected return and standard deviation of the portfolio to span one period.
2. Investors are never satisfied, so if given the choice between the two portfolios with a standard deviation Identics, they will choose the portfolio that give higher returns.
3. Investors are risk averse, so if given the choice between the two portfolios with expected returns Identics, they choose a portfolio with a lower standard deviation.
4. Asset individual can be divided is not limited, meaning that investors can buy some of the shares, if he wanted.
5. There is a risk-free rate is at a level that investors can lend or borrow money.
6. Taxes and transaction costs are irrelevant.
7. All investors have the same range of one period.
8. The risk-free interest rate is the same for all investors.
9. Information obtained freely and quickly available to all investors.
10. The investors have homogeneous expectations, meaning that they have the same perception in terms of expected returns, standard deviation, dank ovarian securities.

Capital Asset Pricing Model (CAPM) is a model that describes the relationship between risk and expected return, these models are usually used in the assessment of the price of securities. Model CAPM was introduced by Treynor, Sharpe and Litner. Capital Asset Pricing Model (CAPM) gives a correct prediction of the relationship between the risk of an asset and the level of expectation of return (expected return).

In the assessment of the risk, common stock classified as a risky investment. Own risk means the possibility of deviation from the expected return, whereas beta is a number of possible deviations from expected returns. CAPM equation can be written by:

$$E(R_i) = R_f + \beta [E(R_m) - R_f]$$

Where:

- E (R_i) = Expected Return stock i
- R_f = Return are not affected by market risk.
- E (R_m) = Expected Return market index.
- β = beta market risk premium

CAPM assumes that stock prices will not be affected by the unsystematic risk, because the risk can be eliminated by diversification. Shares offer a relatively higher risk (higher β) will be valued relatively more than the stocks that offer lower risk (lower β). Empirical research supports the argument of the βs as a good predictor for predicting the value of future stock prices.

2.4. Three Factor Model

Three Factor Model was formed with the background to reexamine the CAPM model. The study started after the discovery of the existence of other factors besides beta that can affect stock returns. The notion from Fama and French (1993) is that the market, size and book to market ratio (B / M) should be considered as factors that affect stock return in addition to beta market. This is when formulated in an equation would appear as follows:

$$E(R_i) = R_f + \beta_m [E(R_m) - R_f] + \beta_s SMB + \beta_h HML$$

Where:

- E (R_i) = Expected Return stock i
- R_f = Return are not affected by market risk.
- E (R_m) = Expected Return market index.
- β_m = Beta market risk premium.
- SMB = Small Minus Big
- β_s = Beta of SMB
- HML = High Book to Market minus Low Book to Market
- β_h = Beta of HML.

2.5. Five Factor Model

Factor model that was developed by Fama and French have the ability to explain the anomaly over the CAPM model. However, the market risk factor, size, and book to market ratio can not explain short-term reversal pattern (short term reversal). In the end, Fama and French giving the

idea that in addition to market risk, Size, and the book value, stock returns can also be influenced by the profitability and investment type (Fama & French, 2015).

Fama and French (2015) introduced the five-factor model that incorporates Three Factor Model plus Profitability factors (RMW or Robust Minus Weak) and Investment Pattern factors (CMA or Minus Conservative Aggressive). The risk factors considered in the Five Factor Models is market risk, company size SMB (Small Minus Big), book to market HML (High Minus Low), as well as the added Profitability RMW (Robust Minus Weak) and Investment Pattern CMA (Minus Conservative Aggressive).

Robust Minus Weak is the difference of the average return of companies that have strong profit (Robust) and a company that has a weak profit (Weak). Proxy of RMW is Return On Equity (ROE), where ROE can reflect how much profit is generated by the Company compared to the capital subscribed by Shareholders (Racicot & Theoret, 2015). Aggressive Conservative Minus is the difference of the average return the company has a conservative investment patterns (Conservative) and companies that have a pattern of aggressive investment (Aggressive). So the formula five factor model can be determined by the formula:

$$E (R_i) = R_f + \beta_m [E (R_m) - R_f] + \beta_s SMB + \beta_h HML + \beta_r RMW + \beta_c CMA$$

Where:

$E (R_i)$ = Expected Return stock i

R_f = Return are not affected by market risk.

$E (R_m)$ = Expected Return market index.

β_m = Beta market risk premium.

SMB = Small Minus Big

β_s = Beta of SMB

HML = High Book to Market minus Low Book to Market

β_h = Beta of HML.

RMW = Robust Minus Weak

β_r = Beta of RMW.

CMA = Conservative Minus Aggressive

β_c = Beta of CMA.

2.6. Accomplished Research Overview

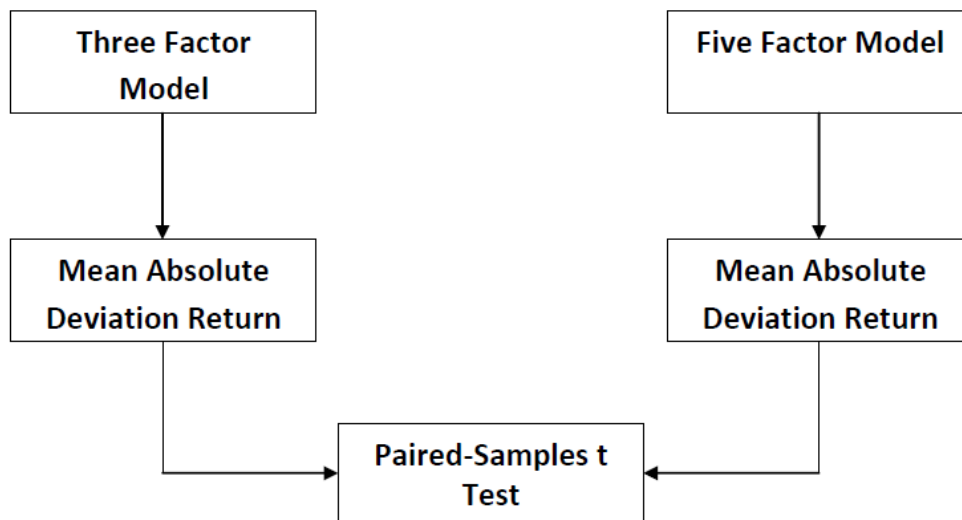
Research on Asset Pricing Model has been widely applied in the world. Fama and French (1992) argues that the company's size and the ratio of B / M plays a dominant role in explaining differences in the expected rate of return compared to the CAPM. Liew and Vassalou (2000) proved that the HML and SMB related to future economic growth. They are showed that the

majority of HML and SMB ability to explain the rate of return on assets related to the news of the Gross Domestic Product growth in the future.

Qi (2004) states that both models, CAPM and Fama-French Three Factor Model has a pretty good explanatory power. Statistically, there is no superiority between models with one another in terms of the performance of both models. But this is rejected by Bundoo (2006), Rogers and Securato (2007), that for the category of emerging markets, the Three Factor Model produce good ability in explaining the effect of firm size and B / M and markets in predicting stock returns are expected issuers.

In Indonesia, the research has done to test this models. Some of them are Rizkiana (2011), which examines the accuracy of the Three Factor Model with CAPM which prove that the Three Factor Model is more accurate in predicting the expected returns than the CAPM on LQ-45 index with timeframe of July-August 2010. Adriadi (2011) examined about the accuracy of the Five Factor Model with Three Factor Model on the LQ-45 index whose results showed that the Three Factor Model is better than the Five Factor Model. Based on the theoretical basis and previous research, it can be hypothesized:

H₁ : Five Factor Model is more accurate to predicting stock return in Jakarta Islamic Index compared with Three Factor Model.



III. RESEARCH METHODOLOGY

This study uses a quantitative approach, the research focuses on testing hypotheses, the data used is secondary data, and will produce results that can be generalized. The method used to analyze the data in this study using the comparative method, which is a statistical technique used to compare multiple regression model. The type of data used is quantitative data companies listed on the Jakarta Islamic Index in 2012 to 2014. This data can be searched on the www.idx.co.id. Here's a list of companies that enter the category Jakarta Islamic Index during 2012 to 2014.

No.	Stock Code	No.	Stock Code
1	AALI	10	BORN
2	ADRO	11	CTRA
3	AKRA	12	CPIN
4	ANTM	13	ELTY
5	ASII	14	ENRG
6	ASRI	15	EXCL
7	BKSL	16	HRUM
8	BMTR	17	ICBP
9	BSDE	18	INCO

No.	Stock Code	No.	Kode Saham	No.	Stock Code
19	INDF	28	MAPI	37	SMGR
20	INDY	29	MNCN	38	SSMS
21	INTP	30	MPPA	39	SMRA
22	ITMG	31	PGAS	40	TINS
23	JSMR	32	PTBA	41	TLKM
24	KLBF	33	PWON	42	TRAM
25	KRAS	34	SILO	43	UNTR
26	LPKR	35	SIMP	44	UNVR
27	LSIP	36	SMCB	45	WIKA

Table 1

The sampling technique used in this research is purposive sampling, sample selection techniques that using certain criteria. The criteria used in this study is a company that has been listed in the Jakarta Islamic Index and regularly report its financial statements from 2012 to 2014. Here is a sample of companies that terdaftar in Jakarta Islamic Index which have met the above criteria for purposive sampling.

No.	Stock Code	No.	Stock Code
1	AALI	10	ITMG
2	ADRO	11	LPKR
3	AKRA	12	LSIP
4	ASRI	13	MNCN
5	BSDE	14	PGAS
6	CPIN	15	PTBA
7	ICBP	16	SMGR
8	INDF	17	UNTR
9	INTP	18	UNVR

Table 2

Operationalization of the variables in this study are:

1. Three Factor Model. Indicators to measure it is by the formula:

$$E(R_i) = R_f + \beta_m [E(R_m) - R_f] + \beta_s SMB + \beta_h HML$$

2. Five Factor Model. Indicators to measure it is by the formula:

$$E(R_i) = R_f + \beta_m [E(R_m) - R_f] + \beta_s SMB + \beta_h HML + \beta_r RMW + \beta_c CMA$$

3.1. Comparison Test Using MAD

Mean Absolute Deviation (MAD) is the level of inequality that exists between actual returns received by investors, compared with the expected returns based on the model of Three Factor Model and the Five Factor Model. MAD level shows that the smaller the value which formed showed that the calculation of expected returns by the method used, its value is closer to the actual return.

$$MAD = \frac{\sum_{t=1}^n |R_{it} - E(R_{it})|}{n}$$

Where:

MAD = Mean Absolute Deviation.
 Actual Yield Rate = stock i in period t
 E (R_{it}) = Returns are expected to share i in period t
 n = number of data

IV. RESULT

Based normality test was done to asset valuation models Three Factor Model and the Five Factor Model by looking at the graph diagonal P-P plot shows that all three models have been distributed to normal. Three models of data spread around diagonal lines, which means that the data is

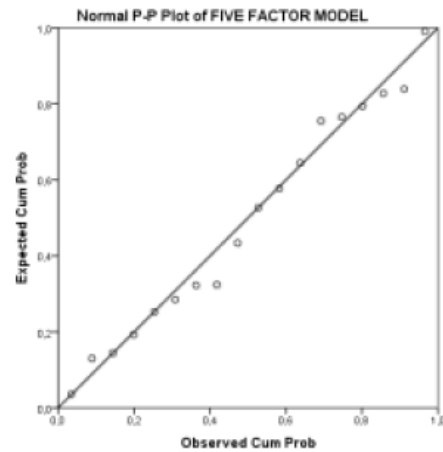
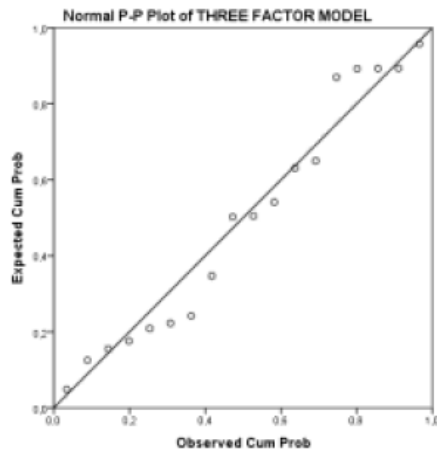
normally distributed. Whereas if the spread away from the diagonal line, the data used is not distributed normally.

To find out how much value are significance of the normal distribution data, then used the Kolmogorov-Smirnov test. This test is done to verify whether the data observed in the graph P-P plot has a normal distribution or not. The data has a value of more than 0.05 significance would say normally distributed and if the data has a significance value of less than 0.05 can be said to be normally distributed.

MAD Value

No.	Stock Code	MAD Three Factor Model	MAD Five Factor Model
1	AALI	0,0039404421894	0,0042885498929
2	ADRO	0,0050884279587	0,0051545028929
3	AKRA	0,0049753011726	0,0045246081848
4	ASRI	0,0028089555023	0,0039911375066
5	BSDE	0,0038413519622	0,0048311245584
6	CPIN	0,0034382947964	0,0039955609449
7	ICBP	0,0021577842837	0,0026365566995
8	INDF	0,0028940599496	0,0035783984080
9	INTP	0,0055826515795	0,0068587560705
10	ITMG	0,0042254546405	0,0046541400374
11	LPKR	0,0030626561424	0,0037833102232
12	LSIP	0,0030152916903	0,0033189013500
13	MNCN	0,0031279393750	0,0038827738768
14	PGAS	0,0026726831695	0,0033833873986
15	PTBA	0,0050948805003	0,0052830139572
16	SMGR	0,0038476491663	0,0051873702896
17	UNTR	0,0050915764696	0,0054568283838
18	UNVR	0,0041735286254	0,0054104599298

Table 3



Based on the results of Kolmogorov-Smirnov test was done on a sample of this research, it is known that the significance of the sample methods Three Factor Model and the Five Factor Model has a value of 0.826 and 0.956. The second significant value method indicates that the data processed in this study was distributed normally.

The ability to predict a stock returns is indispensable to investors to assist them in making investment decisions. Therefore, researchers continue to float an asset valuation models to find the best method in selecting the portfolio that can provide optimal decision making.

One-Sample Kolmogorov-Smirnov Test

		THREE FACTOR MODEL	FIVE FACTOR MODEL
N		18	18
Normal Parameters ^{a,b}	Mean	,0038354961	,0044566323
	Std. Deviation	,0010116446	,0010099102
Most Extreme Differences	Absolute	,148	,120
	Positive	,147	,120
	Negative	-,148	-,089
Kolmogorov-Smirnov Z		,627	,511
Asymp. Sig. (2-tailed)		,826	,956

a. Test distribution is Normal.

b. Calculated from data.

Table 4

Paired Samples Test									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	FIVE FACTOR MODEL - THREE FACTOR MODEL	,000621136 190722	,000470396 786269	,00011087358 5883	,00038721 3372267	,000855059 009177	5,602	17	,000

Table 5

This study did a comparison test using the Mean Absolute Deviation of the 18 companies that belong to the Jakarta Islamic Index. The method used is Three Factor Model and Five Factor Model. The results showed that there are differences between the both models of stock valuation of assets. This is shown in Table 5 above with one side that hypothesis test showed significance value less than 0.05 is 0.000. While the magnitude of the average value of Mean Absolute Deviation (MAD) of the method of Three Factor Model is at 0.00383 and methods Five Factor Model is equal to 0.00445, as shown in Table 4.

Based on the results of the data processed in this study was obtained value of MAD which we can conclude that the method of the Five Factor Model has a MAD greater value in calculating the expected returns compared to the Three Factor Model and have significant differences. In conclusion, the hypothesis H_0 is rejected and H_1 accepted.

The variables contained in Five Factor Model assessing stock returns based on the fundamentals of the company which describes that in addition to the viewpoint movement of the stock price index, this model also assessed in terms of the company's fundamentals (Fama & French, 2015). Addition of variables Profitability and Investment Pattern besides Book to Market Ratio and Firm Size makes Five Factor Model is still better to predicting Returns are expected in the company belonging to the Jakarta Islamic Index.

V. CONCLUSION

Based on testing using Mean Absolute Deviation (MAD) is done with Kolmogorov-Smirnov Test, showed that there are differences between the methods Three Factor Model and the Five Factor Model. Five Factor Model is still better in predicting stock returns compared Three Factor

Model. So to using of valuation models stock returns should use methods Five Factor Model. These results are in contrast to studies conducted by Adriadi (2011), this difference because the additional variables in Five Factor Model. Variables used by Adriadi (2011) is Contrarian and Liquidity, whereas in this study using Profitability and Investment Pattern.

The addition of variable Profitability and Investment Pattern besides Market Risk Premium, Firm Size, and Book to Market Ratio was able to make better predictions than just using the three variable. However, less research time period length and the number of companies that lack much make the Five Factor Model needs to be tested further.

REFERENCES

- Adriadi, Erlangga., 2011. Penilaian Pendapatan Investasi Saham Atas Dasar Three Factor Model Fama & French Dan Five Factor Model (Penambahan Contrarian Factor Dan Liquidity Factor). *Unpublished Thesis*. Airlangga University.
- Bodie, Z., Kane, A., Marcus, Alan J., 2014. Investments. *McGraw-Hill Education*.
- Bundoo, Sunil K. 2006. An Augmented Fama and French Three-Factor Model: New Evidence From An Emerging Stock Market. *Department of Economics & Statistics, University of Mauritius*.
- Fama, Eugene F., dan Kenneth R. French. 1993. Common risk factors in the returns on stocks and bonds. *Journal Of Financial Economics* 33, 3-56.
- Fama, Eugene F., dan Kenneth R. French. 1995. Size and Book-to-Market Factors in Earnings and Returns. *Journal Of Finance*, Vol. L, No.1.
- Fama, Eugene F., dan Kenneth R. French. 2006. Profitability, Investment, And Average Returns. *Journal Of Financial Economics* 82, 491–518.
- Fama, Eugene F., dan Kenneth R. French. 2014. Dissceting Anomalies With A Five Factor Model. *Unpublished Working Paper*. University Of Chicago and Dartmouth College.
- Fama, Eugene F., dan Kenneth R. French. 2015. A Five-Factor Asset Pricing Model. *Journal Of Financial Economics* 116. 1-22.
- Liew, J., Vassalou, M. 2000. Can Book-to-market, size and momentum be risk factors that predict economic growth? *Journal of Financial Economics*, 57, 221-245.
- Qi, Howard. 2004. An Empirical Study Comparing the CAPM and the Fama-French 3-Factor Model. *SSRN Papers - Id556671*.
- Racicot, Francois E., Theoret, Raymond. 2015. The q-Factor Model and The Redundancy Of The Value Factor: An Application To Hedge Funds. *Chaire D ' Information Financiere Et Organisanitonnelle*. ESG Uqam.
- Rizkiana, Sindi M., 2011. Studi Perbandingan Model Penilaian Aset: Model Tiga Faktor Fama dan French dengan Capital Asset Pricing Model pada Bursa Efek Indonesia. *Unpublished Thesis*. Diponegoro University.
- Rogers, Pablo dan Jose Roberto Securato. 2007. Comparative Study of CAPM, Fama and French And Reward Beta Approach In The Brazilian Market. *SSRN Papers - Id1027134*.

Sharpe, William F., Alexander, Gordon J., Bailey, Jeffery V., 2005. Investments. *McGraw-Hill Education*.

Islamic Investment and How to Take Advantage of Capital (The Case of Gold and Pearl Merchants in the City of Mataram Lombok Indonesia)

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ABSTRACT

This paper describes how the economic development of Islam in Indonesia and Islamic investment offender, specific investment is viewed from two musty mudharabah and ijarah. We know generally people are familiar with conventional investments that rely on the interest rate, but the author tries to see a bunch of people who do not invest based on the interest rate.

Community groups in question are gold and pearl merchants in the city of Mataram, they traded with the sharia principle informed with the actual quality of the goods, weighing, and make an appointment with either. Associated with investments, they provided capital among traders with profit sharing agreement at the end of the year, 60 percent to 40 percent owner of capital for business managers. Labor they take an average of 2 people for each trader with wage system 50 thousand rupiah per day. Contribution to the development of economic gold traders Mataram is helpful in employment, supporting the development of West Nusa Tenggara Tourism, both domestic and abroad, especially in the area of increased income tax payments, an increase in the welfare of the community with many traders who perform the Hajj.

Keywords: *Islamic investments, murabahah, ijarah, contribution and profit sharing*

I. BACKGROUND

Indonesia is one country whose population number four in the world, and the majority Muslim population. This condition is very potential for the development of Islamic investment depends on community participation. Habits of Indonesian people are still faced with the old habit of investing with a focus on interest rates. To eliminate this habit is to promote economic activities that are lawful Islamic, whether in production, consumption and distribution.

With the establishment of Islamic banks in Indonesia to provide fresh air for the development of Islamic economics, especially in investment activities. Glimpse of the Islamic economic system in the world and in Indonesia can be described briefly.

Economic system over the world usually is influenced by philosophical, ideology, religion, and political interest. Economics is a study how to achieve welfare and how to distribution. Welfare mean something has value and price include goods and services that is produced and traded by businessman. To distribution goods and services are determined by economic system. We have already known economic system over the world, capitalism, socialism, and the last Islamic Economic System.

Over the world the famous terminology is Islamic Economic, but in Indonesia Shari'ah Economic, because in 1990 Shari'ah bank was built for the first time that was founded by Majelis Ulama Indonesia (MUI) or Indonesian Cleric Assembly and ICMI (Indonesian Muslim Intellectual Ties).

At the core of the Islamic Economic System lies a collection of rules and institutions which affect economic behavior and outcomes. This core is defined by the shari'ah.

A central aspect of the Islamic Economic System is the emphasis placed on justice. It is via justice the rules governing the economic behavior of the individual and economic institutions in Islam can be understood. Justice in Islam is a multifaceted concept and the exist several words to define it. The most common word is usage which refers to the overall concept of justice is "adl". This word and its many synonyms imply the concepts of "right", as equivalent to fairness, "putting things in their right place", "equality", "balance", "temperance" and "moderation". In practice justice is defined as acting in accordance with the Law, which in turn contains both substantive and procedural justice covering economic issues. Substantive justice consists of those elements of justice contained in the substance of the Law, while procedural justice consists of rules of procedure assuring the attainment of justice contained in the substance

of the law. The notion of economic justice, and its attendant concept of distributive justice, is particularly important as an identifying characteristic of the Islamic Economic System because rules governing permissible and forbidden economic behavior on the part of consumers, producers and government, as well as questions of property rights and of production and distribution of wealth, are all based on the Islamic view of justice.

The first basic principle of property in Islam is that Allah is the ultimate owner of all property. In order that man becomes materially able to perform his duties and obligations, he been given the right of possessions. The second principle of property, therefore, establishes the right of the collectivity to the resources at man's disposal, based on the principle of justice, and the recognition of man's natural tendencies, right and obligations, individuals are allowed to appropriate for themselves the products resulting from the combination of their labor and certain of these resources- without the collectivity losing its original rights either in the resources or the products resulting from the individual's creative labour applied to these resources- in accordance with the rules, specified by shari'ah. The shari'ah also determines which natural resources will be retained as the exclusive property of the collectivity and which resources, and in what amount, will be at the disposal of individual members of the society.

Basically Islam contends that adherence to the rules specified by the Shari'ah will generate widespread economic benefits. These benefits include, a strong work ethic, honest business dealings, efficient production, non-extravagant consumption, distributive justice, productive circulation of accumulated surplus with full participation in risks and rewards, full compliance with terms of contracts, and maximum cooperation in economic activities with complete freedom of contracts within the bounds of shari'ah.

II. SHARI'AH ECONOMICS OR ISLAMIC ECONOMICS: A SOLUTION TO CURRENT CRISIS.

A growing trend of dissatisfaction with conventional economics has raised interests in finding an alternative paradigm leading to the revival of Islamic economics over the last few decades. On 8 August 2012, Dr. Izzuddin Edi Siswanto explained how Islamic economics may provide solutions to existing problems in the financial markets as well as its contribution and potentials to address development challenges.

The conventional economics and financial systems have been put to a test following recent global financial crises. George Soros, a global financier and philanthropist, viewed:

“There is a super bubble that has been going on for 25 years or so that started in 1980 when Margaret Thatcher became Prime Minister and Ronald Reagan became President. That is when the belief that markets are best left to their own devices became the dominant belief. Based on that we had a new phase of globalization and liberalization of financial markets. The idea is false. Markets do not correct towards equilibrium.” “The whole construct, this really powerful financial structure, has been built on false grounds. For the first time this entire system has been engaged in this economic crisis.”

Prof. Zubair Hassan, a prominent Shari’ah economics scholar, argued that current world situation has been a solid proof of the failure of capitalist economic systems to improve equality and welfare. The capitalist system has created massive capital accumulation in the last five decades since 1950, far bigger than the capital accumulated from the period of the prophet Adam to 1950.

Dr. Siswanto argued that the capitalist system has caused excessive leverage and speculation leading to what is called as the inverted pyramid of wealth and debt positioning welfare at the bottom of the inverted pyramid and debt gaining the biggest portion at the top of the inverted pyramid. He further argued that debt accumulates faster than wealth and minor shocks can make the system crash. The financial systems become fragile. Crashes are needed to “clean up” the system. Then, debts start to accumulate again faster than wealth recurring crashes.

From an Islamic economics’ point of view, there are at least two sources of danger: *Riba* (usury and interest on loans) and *Gharar* (gambling and wagering). The danger of *Riba* are due to several reasons: it separates debt creation from wealth creation; debt grows faster than wealth; debt maturities shorter than assets; and debt services become unbearable. *Riba* also shrinks the real sector causing lower production and therefore increasing inflation which can lead to lower economic growth. The danger of *Gharar* or gambling are due to its high transaction costs. Gambling is also a zero-sum game where one’s profit causes the other party’s loss. Given this criterion, Islamic economics excludes derivatives as they are essentially zero-sum games.

In contrast, a Sharia-based system aims to improve wealth and income distribution as well as the development of real sectors. In Islamic economics, debt creation is integrated with wealth creation. Moreover, excessive risk and zero-sum games are excluded. Also, finance is integrated with real transactions. Since real sectors are less risky than financial markets, Islamic finance is less risky than conventional finance.

To meet the above objectives, Sharia financial products are developed based on three main strategies: (i) modification of conventional products; (ii) an innovative Shari’ah-based products; and (iii) products developed to respond demand from consumers. Those Shari’ah

products must possess acceptable risk (ex ante) as indicated by high likelihood of success and inseparable from real activities. They must also have a clear payoff structure (ex post).

Islamic economics also acknowledges the importance of social safety nets. Non-profit safety-net is integrated into economic activities. Zakat or almsgiving as well as interest-free lending are common tools to help the poor access capital.

The development of Islamic economics must face a number of challenges. Pessimists often perceive that the difference between Islamic economics and conventional economics is not clear. Some view that it is simply a matter of 'branding'. Others raise concerns about the competitiveness of Islamic banking because at the end of the day consumers always want to obtain profits. Shari'ah financial institutions must also keep looking for innovative products. This is often difficult considering the lack of human capital. Shari'ah supervisory boards are often filled with those whose expertise are only in Shari'ah laws but have limited knowledge of economics. Having said that, looking at positive trends since 2000 in the development of Islamic financial sectors in Indonesia as well as Indonesia's growing middle income groups, Shari'ah financial products should have profitable markets in the country.

From the above description want to see how Islamic investment and how to take advantage of capital. Investment is the active form of Islamic economics, because each property is no zakat, if the property will be consumed gradually silenced by zakat, one of lessons of charity is encourage for every Muslim to invest his money, invested assets will not be consumed by the charity, but the benefits are.

We know the price of the investment, price is the value of the sale or purchase of something that is traded, the difference between the purchase price to the selling price is called the profit margin, price are formed in the aftermath of the market mechanism.

Al-priest according to Al-Ghozali, profit is the compensation of the exhaustion of travel, business risk and personal safety threats entrepreneurs, so it is reasonable for someone to gain the benefits of risk borne compensation.

According to Ibnu Taimiah, offers could come from domestically and imported products, changes in supply described as an increase or decrease in the number of goods on offer, while the demand is very determined and revenue expectations, depending on the size of price increases and the magnitude of changes in supply or demand. When all transactions are in accordance with the rules, the price increase happens is God's will.

Islamic principles in muamalah that must be considered by the perpetrators of Islamic investment:

1. Rizki not looking at forbidden things, both in terms of substance and how to get it, and do not use it for things that are forbidden.
2. Do not oppress and do not tyrannized
3. Fairness distribution of prosperity
4. Transactions carried out on the basis of the same pleasure pleasure
5. No element of usury, gambling, and obscenity

III. NORMATIVE UNDERSTANDING

There are several ways the development of capital and investment, among others:

3.1. Mudharabah

Mudharabah is allowed based on the Qur'an, sunnah, ijma and qiyas. Allah says in the Qur'an al-Muzammil: 20,

وَأَخْرُونَ يَصْرِيُونَ فِي الْأَرْضِ يَبْتَغُونَ مِنْ فَضْلِ اللَّهِ

Others travelling through the land, seeking of Allah's bounty.

And al-Jumu'ah: 10,

فَإِذَا قُضِيَتِ الصَّلَاةُ فَانْتَشِرُوا فِي الْأَرْضِ وَابْتَغُوا مِنْ فَضْلِ اللَّهِ

And when the Prayer is finished, then may you disperse through the land, and seek of the Bounty of Allah.

Prophet of Muhammad handed over to the Jews of Khaibar palm groves and fields Khaibar area that they do it at their own expense and the result divided by two (H.R. Bukhari 2329 and Muslim 15151).

In Mudharabah justice must be realized because both feel the benefits and bear the loss.

From Ijma, narrated from the Jamaah from the companions that they give the orphan's property to be mudharabah it and no one would deny.

According qiyas, mudharabah can analogy with musaqah because of the needs of the community.

Mudharabah generally divided into two:

- Mudharabah Muthlaqah, cooperation between owners of capital with business manager without being limited in determining the type of effort, time and territory.
- Mudharabah Muqayyadah, restricted mudharabah/specified mudharabah or the opposite of Mudharabah Muthlaqah.

Application in banking

Applied to finance products and financial.

On the fund raising side mudharabah applied to:

- Savings deposits, for special purposes, such as Hajj savings, deposits and other ordinary
- Special deposits (special investment), for certain businesses, such as any mudharabah, ijarah only.

On the side of financing applied to:

- Working capital financing, such as working capital and trade services
- Special investment, such as Mudharabah Muqayyadah

Benefits Mudharabah:

- Banks will enjoy increased profits if the profit sharing increased business manager
- The bank is not obliged to pay for the results to be permanent fund manager
- Return of principal financing tailored to the cash flow business manager
- Banks will be more selective search for lawful and profitable businesses

Risk Mudharabah:

- Side streaming, business manager does not use the funds referred to in the contract
- Negligence and willful misconduct
- Concealment of profits by managers when dishonest

Tenets of investment business

1. Two or more actors

Investors and managers of capital. Both are required to have competency activities; people who are not in a state of bankruptcy debts. People who go bankrupt debt, the crazy, small children who are minors it should not execute this transaction. Investment should the pagans, Jews, and Christians who can be trusted, but it should be monitored by the Muslims to the business conducted on the issue of permitted investments by Islamic teachings.

2. Transaction object

a. Capital

Capital requirements should be a medium of exchange, such as gold, silver or money in general. Investment should not be done using the goods, because the lack of clarity in the division of profits, unless the price of goods is determined by the value of money and the value that is used to start a business.

Investors may be adding fresh funds into the capital invested, with its own conditions must be clear so that the pros and cons. But if he gives new capital after the first operation of the bargain capital, and capital required to be mixed with the first, it should not be. As a consequence of the addition of the losses with gains another.

b. Business

Origin of the investment business is in the field of commerce or other related fields.

Business system investments are sometimes free, sometimes have certain criteria. Businesses with free investment is by way of handing money to the organizer without specifying the type, form, place and time and effort to coordinate with partners.

Capital managers may hire other people to do things that do not have to work themselves out of the business, as it offers merchandise, moving goods to warehouses and other storage.

Managing capital, if authorized by the owner of capital or assigned capital to take care of it with his own ideas, he should just invest it back to others.

Capital manager who has been given full authority to manage one's capital, may invite others to ally with the capital was.

Managing capital are not entitled to buy more goods than for capital investment, because it means that he adds the responsibility of the owner of capital without the consent.

Benefit Laws

a. Terms of profit

Clearly known, the percentage should be affirmed, as a half, a third, a quarter

b. Profit sharing code of conduct

Profits based on the agreement of both parties, but the loss is borne only by the capital alone, because it is a loss that showed reduced expression of capital, and it is a matter of capital owners, managers only power loss.

c. Used as reserve capital gains

Managers are not entitled to receive benefits before he handed back the existing capital. Because it is the excess profits of capital. If it has not become an extra, it is not called profit. If there is an advantage on one side and a loss on the other hand, the losses were to be covered in advance with the advantage that there is, then the two remaining divided according to agreement.

d. Managers should not take advantage before the division

Managers has the right to participate in profits merely looks yes profits. But retained the rights to the division at the end of the agreement, no rights for capital managers to take his share of the profits are there except the official end of the division. And sharing it only with the permission of the owners of capital.

Reason for not allowing for capital managers to take his share of the profits until after the division is as follows:

May occur after the loss, so that the profits are used to cover it, as has been explained as a function of the profit of capital reserves

e. Rights would not benefit either party was obtained prior to the end of the calculation to the business.

Actual ownership of each party to the profits distributed is unstable right and will not be permanent and filtered before finishing entire agreement with the existing establishment.

The final calculation permanent ownership advantages, its application can be of two kinds:

- *First*, the calculation of the end of the business, namely the way that capital owners can take back their capital and completed the cooperation ties between the two sides.
- *Second*, finish cleansing against profit calculations, ie by reducing assets and present and set its value numerically, where the owners of capital if he wants to take it. But if he wants to play again, means it must be a new business agreement, not to continue the effort.

Operational Fund Manager

Managers can take him from the operational funds for venture capital when He was on the way, according to the custom world trade.

Responsibility for managing the investment of capital

No responsibility for the management of the venture capital except for negligence or violations, together with the responsibility of those who giving something.

Way to use based business in the world of investment banking

Modern Islamic banking has been utilizing the services of this establishment and be a driving force in the development of capital projects. Banks play a role as a manager in the management and development of capital to be distributed to various locations capital development. Parties should be engaged in the business of investment banks acting as manager before the owners of the funds that act as nursery. Cooperation can be a partner, lender depending on the character of the business which binds both parties.

This form of cooperation is tied with some belief, the lack of responsibility of the manager of the venture capital investment except for negligence or breach, so is does not differ investment business through investment banking services with other businesses.

3.2. Ijarah

Ijarah is etymologically means wages and provide jobs. And this word became popular as a term of a contract. Allah said in al-Qur'an an-Nissa: 74,

فَلْيُقَاتِلْ فِي سَبِيلِ اللَّهِ الَّذِينَ يَشْرُونَ الْحَيَاةَ الدُّنْيَا بِالْآخِرَةِ
وَمَنْ يُقَاتِلْ فِي سَبِيلِ اللَّهِ فَيُقْتَلْ أَوْ يَغْلِبْ فَسَوْفَ نُؤْتِيهِ أَجْرًا عَظِيمًا ﴿٧٤﴾

Let those fight in the cause of Allah who sell the life of this world for the Hereafter. To him who fights in the cause of Allah whether he is slain or gets victory soon shall We give him a reward of great (value).

In al-Qur'an, al-Baqarah 233, Allah said:

وَالْوَالِدَاتُ يُرْضِعْنَ أَوْلَادَهُنَّ حَوْلَيْنِ كَامِلَيْنِ لِمَنْ أَرَادَ أَنْ يُتِمَّ الرَّضَاعَةَ وَعَلَى الْمَوْلُودِ لَهُ
رِزْقُهُنَّ وَكِسْوَتُهُنَّ بِالْمَعْرُوفِ لَا تُكَلَّفُ نَفْسٌ إِلَّا وُسْعَهَا لَا تُضَارَّ وَالِدَةٌ بَوْلِهَا
وَلَا مَوْلُودٌ لَهُ بِبَوْلِهَا وَعَلَى الْوَارِثِ مِثْلُ ذَلِكَ فَإِنْ أَرَادَا فِصَالًا عَنْ تَرَاضٍ مِنْهُمَا
وَتَشَاوُرٍ فَلَا جُنَاحَ عَلَيْهِمَا وَإِنْ أَرَدْتُمْ أَنْ تَسْتَرْضِعُوا أَوْلَادَكُمْ فَلَا جُنَاحَ عَلَيْكُمْ إِذَا
سَلَّمْتُمْ مَا ءَانَيْتُمْ بِالْمَعْرُوفِ وَأَتَّقُوا اللَّهَ وَاعْلَمُوا أَنَّ اللَّهَ بِمَا تَعْمَلُونَ بَصِيرٌ ﴿٢٣٣﴾

The mothers shall give suck to their offspring for two whole years, if the father desires to complete the term. But he shall bear the cost of their food and clothing on equitable terms. No soul shall have a burden laid on it greater than it can bear. No mother shall be treated unfairly on account of her child, an heir shall be chargeable in the same way. If they both decide on weaning, by mutual consent, and after due consultation, there is no blame on them. If you decide on a foster-mother for your offspring, there is no blame on you, provided you pay what you offered, on equitable terms. But fear Allah and know that Allah sees well what you do.

According Syara' Ijarah is a contract that contains a provision of benefits to compensate with certain conditions. Ijarah can also be defined as an agreement on the desired benefits, it is known, can be submitted, and is permissible to compensate the unknown.

When the process has been perfect ijarah agreement then the deal is fixed. Each party is held not entitled to cancel the contract unilaterally contract unless found defective. Ijarah contract term shall not include a requirement choose, because it prevents the use of the right. There are four pillars of ijarah ie two sides held a ceremony, greeting ijara, rewards, and use rights or benefits. Non Muslim is legitimate conduct Ijarah agreement with Muslims, as has been done by Ali on ijarah in the form of a dependent. In terms of leasing tangible goods required wage must know the type, level and nature, like the price of the contract of sale, as ijarah contract is for-profit, which is not valid without mentioning the value of compensation like buying and selling.

Ijarah or sale of services is a transaction object is a benefit or services or permissible in law and the benefits clearly known in the clear timeframe and with a clear rent. Including ijarah transaction binding both parties to the transaction that the buyer and seller services. Meaning that one of them should not cancel the transaction without the consent of both parties. There is a wide ijarah, ijarah with the transaction object particular object, for example rent a house, car, and ijarah transactions with objects specific job, for example employing people to build houses and others.

In ijarah a worker entitled to wages or salary if he has completed the job perfectly and professional obligations. Such workers must be paid their wages so the work is completed, the goods are damaged due to accidental workers are the responsibility of the owner of capital. If we are worried about saving in the bank, then we can lend to people who can be trusted to be developed as the capital of the profit-sharing system.

III. CASE STUDY

In this paper the author tried to lift gold and pearl merchant behavior in investing in Mataram city Lombok West Nusa Tenggara Indonesia. Reason for choosing gold and pearl merchant as a case study objects, because this business is done in down- dropped and contribute significantly to the region, especially in absorbing labor and the development of regional tourism and the number of the largest traders of gold and pearls are in the city of Mataram, in addition to the provincial capital, Mataram is the first city where gold trades mainly in districts Sekarbela.

The research method used was a qualitative study, the data source is the documentation and field data. Research procedures, conduct in-depth interviews with the head of gold and pearls and merchant association, community leaders and religious leaders and merchants.

Development of gold traders in the city of Mataram began in 1984 with marked many gold shops and pearls. 80 percent of the gold traders dominated by native Sekarbela which is one area in the city of Mataram. To see how the behavior of trading and investing writer interviewed several informants directly in the field.

Trade is an economic activity that can occur in the form of exchange, sale, manufacture, marketing, work and hiring and other human interaction to obtain a profit. Business conditions now tend to conflict with the sharia does not heed the ethical or moral values. Attention to business ethics with the rest of the business itself, since humans engage in commerce, we realized

that that these activities can not be separated from ethical concerns. For example, since human trade he knew about the possibility of fraud. Honesty, fairness, accuracy in the promise, not usury, and not precede each other in offering goods which are run by traders of gold and pearls can not be formed by itself, but there are other factors besides normative factors outlined by the Qur'an and hadith.

There are three factors that can affect an individual's behavior is the interpretation of the legal, environmental or organizational factors, individual factors and circumstances (Rafik Issa Beekun in Badroen Faisal et al 2006:59).

Interpretations of the legal, philosophical, legal system established to protect the human body and soul of a variety of factors that can eliminate human existence. Law and are believed to be living presence is no benefit to humans. Behavior of gold and pearl merchants also bound by existing law, both state and religious law.

Environment or the organization in which he lives, the behavior of the traders of gold and pearls can not be separated from the activity in the environment, if the environment all business with honesty, fairness, it will form a business conduct and fair.

The last factor individual inner experiences, experienced by traders gold and pearls, suppose a trader who has been accustomed to be honest in trade, then he will be the one who loves honesty, otherwise if you are already familiar with the behavior of dishonesty, then the weight for him to act honest in trade.

Most guidelines for trade and investment principles to be followed by traders of gold and pearls is Annisa letter Qur'an verse 29:

يَتَأْتِيهَا الَّذِينَ ءَامَنُوا لَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ إِلَّا أَنْ تَكُونَ
تِجَارَةً عَنْ تَرَاضٍ مِّنكُمْ وَلَا تَقْتُلُوا أَنْفُسَكُمْ إِنَّ اللَّهَ كَانَ بِكُمْ رَحِيمًا ﴿٢٩﴾

O you who believe! Eat not up your property- among yourselves in vanities: but let there be amongst you traffic and trade by mutual good-will; nor kill (or destroy) yourselves; for verily Allah has been to you Most Merciful!

Based on the testimony of gold and pearl traders we interviewed in the field said:

a merchant named T (pseudonym), said, I explain merchandise to the buyer with the actual, on the scales I have always tried to weigh rigorously, the agreement with the buyer always my keep, I never precede each other with other merchants in offering goods.

Narrative is more interesting than a dealer named B (pseudonym), my first ever trade dishonestly to explain the actual merchandise that is not primarily in terms of scales and levels of gold, it turns the situation can not last long, I often have trouble when purchasers or customers returning goods caused by my own, I finally realized that the lie does not bring benefits and tranquility, so I trade with the Islamic way, Thank God the results are better.

In terms of investment in gold and pearl traders realize that, multiply wealth of activities not prohibited in Islam, even Islam strongly recommends that property investment that one has to be more productive and bring benefits to others. Otherwise the treasure hoard activity was forbidden by God because of idle funds not provide benefits. Gold and pearl traders do not invest their money in the stock market, but channeling capital to traders of gold and other pearls with a profit- sharing system at the end of the year with the distribution of 40 percent to 60 percent for traders and owners of capital.

Normatively gold and pearl traders have applied already implemented a system to invest their capital in the mudharabah. Meaning that they assist each other in developing trade and capital. Besides mudharabah also ijarah or wage system have been implemented by traders, which employs people.

Associated with gold and pearl merchants, ijarah form is done by employing labor to serve the buyers or subscribers. Each trader employs 2 workers with wage 50 thousand rupiah per day. Contribution to the development of economic gold traders Mataram is helpful in employment, supporting the development of West Nusa Tenggara Tourism, both domestic and abroad, especially in the area of increased income tax payments, an increase in the welfare of the community with many traders who perform the Hajj.

So gold trader in an investment carried out by Islamic ijarah and mudharabah. They are not invested with interest, because they think that interest is riba, they often hear associated with muamalah recitation and practice in the field in trade and investment.

REFERENCES

- Abdullah Yusuf (2005), *The Holy Qur'an, Text and Translation*, Islamic Book Trust Kuala Lumpur
- Abdullah Al-Mushlih, Sahalah Ash-Shawi (2004), *Fikih Ekonomi Keuangan Islam*, Darul Haq, Jakarta (edisi Indonesia), 171 – 198
- Muhammad Syafi'i Antonio (2001), *Bank Syariah, Dari Teori ke Praktik*, Gema Insani Jakarta 137 – 139
- Wahbah Al-Zuhaili (2011), *Fiqih Islam Wa adilatuhu*, Gema Insani Jakarta, 476 - 513

Islamic Financial System and the Stability of Islamic Economic Order

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ABSTRACT

At the globalization era, muslim countries must give the role to strengthen their positions to face free trade at global era. Muslim countries have big population in the world so they become the market of the some products from developed countries. Besides that, at global era most of resources from another country don't get some barriers to enter another country. So every country especially muslim countries must prepare to face free trade and global era by increasing their competitive and comparative advantages. One of competitive advantage of muslim is their religions whose have Islamic financial system and their instruments of Islamic finance. Learning from monetary and economic crises, Islamic financial system show more reliable and stable compare with the capitalist financial system. Thus the implementation of Islamic financial system at globalization era and free trade give the opportunity to strengthen the stability of Islamic Economic Order in the global era.

Keyword: *Islamic Financial System, Stability, Islamic Economic Order*

I. INTRODUCTION

In Islamic texts, charging interest is regarded as exploitation of a person in need. A rudimentary form of Islamic finance existed from the time of the Prophet Muhammad, in the seventh century, but the modern version took root only during the colonial era. The first sharia-compliant bank was established in Egypt in 1963. Iran, where all banks must be sharia-compliant, is the largest market for Islamic banking. Saudi Arabia, Malaysia, United Arab Emirates, Kuwait, Qatar, Turkey and Indonesia hold about 91 percent of the remaining Islamic banking assets. The Islamic Bank of Britain, established in 2004, was the first such institution outside the Muslim world (Harvey, 2015, www.bloombergtv.com).

The Koran forbids charging interest or paying it. Yet even strictly observant Muslims can participate in modern-day commerce. They use alternative arrangements designed to comply with sharia, or Islamic law. These financial instruments, in which the buyer and the seller typically share risk as well as profit, are some of the fastest-growing on the market. Even companies and governments outside the Muslim world are using them. And why not? The world's Muslim population is growing rapidly and in many places growing wealthier, creating new customers for sharia-compliant bonds, mortgages and insurance. Fans of these arrangements think they can compete with conventional ones even for non-Muslim customers. How big Islamic finance can become, however, is a matter of debate (Harvey, 2015, www.bloombergtv.com).

The world today faces extraordinary economic circumstances a global financial crisis of a magnitude not seen since the Great Depression. A new global finance blueprint must emerge from this crisis. The influences shaping this new blueprint will be different to those that shaped the post-World War II finance and capital-market era. The new influences will include the emerging dominance of China, India, the Middle East, ASEAN and South America. Developed economies and emerging nations are casting for new inspiration (Myer and Saeed, 2008).

More profound in bridging Islamic banking with conventional banking is the prospect to reinforce the ongoing cross-cultural dialogue between Islamic and non-Islamic communities based on universal values (Myer and Saeed, 2008).

Islamic finance is founded on religious practice of justice, fairness, trustworthiness and honesty, while seeking to ensure an equitable distribution of wealth. It prohibits the payment of interest, and rests on the principle of a sharing of profit and loss. It views interest-based transactions as unjust, because the risk is borne primarily by the borrower (Myer and Saeed, 2008).

Islamic finance is based on the financing of tangible assets. Islamic institutions do not lend money at interest; rather they invest in the assets for which funds are sought. Islamic finance today manages assets in excess of US\$300 billion (\$A463 billion), and is growing at an annual rate of 15 to 20 per cent, with a presence spanning more than 300 Islamic financial institutions in 75 countries. This growth in Islamic banking and investment management will be a piece of any new system that emerges out of the ashes of Wall Street (Myer and Saeed, 2008).

For some time now, the global system has been experiencing a migration of personal and corporate wealth and economic strength from the nations of the West with its people living on a rich cocktail of various forms of debt to the nations of the East, a number of which are largely in surplus. This migration should accelerate in the next few years as the world, and particularly the West, works to deal with the lingering issues of the financial bail-out and subsequent restructure, as well as the now widely predicted slowdown in economic growth (Myer and Saeed, 2008).

Many of the nations of the East are in the Islamic world, particularly in the Middle East and, of course, our neighbours, Malaysia and Indonesia. Many, including all the Muslim nations, have large and growing populations providing strong prospects for a growing customer base. There are more than 1.4 billion followers of Islam in the world today, constituting 20 per cent of the world's population. Islam is the fastest-growing religion in the world. There are now about 400,000 followers of Islam in Australia, and their average age is well below the national average (Myer and Saeed, 2008).

The Islamic world is the source of most of the world's oil, and dependence on oil from Muslim nations is expected to grow. In the wake of the credit crunch, the Islamic world cannot be ignored, not only as an emerging consumer market and source of investment capital, but as a source of alternative ideas incorporated into the councils of the world (Myer and Saeed, 2008).

II. DATA

Assets of Islamic banks increased to \$1.3 trillion in mid-2013 from \$820 billion in 2008. Sales of Islamic bonds, called sukuk, grew to \$120 billion in 2013 from about \$6.6 billion in 2004. The U.K., which hopes to become a global center of Islamic finance, in mid-2014 became the first non-Muslim country to raise funds by selling sukuk; Luxembourg, South Africa and Hong Kong followed. Companies such as General Electric Capital and Goldman Sachs also have sold sukuk. Rather than lend money to a conventional borrower in exchange for interest, sukuk holders own a share of the asset their investment funds and receive income from any profit it

generates. Investors in Muslim-dominated countries in the Middle East and Asia aren't the only ones buying sukuk: There's strong demand in Europe and the U.S., too. Islamic insurance, which operates on a cooperative business model, is also expanding. Ernst & Young projects it will maintain double-digit growth, with member contributions totaling \$20 billion by 2017 (Harvey, 2015, www.bloombergtv.com).

III. LITERATURE REVIEW

Islamic finance is a fast growing segment of international financial markets. Deriving its core principles from the Quran and the Sharia, the objective of Islamic finance is to install a more equitable financial and economic order that at the same time is transaction-friendly. Thus, Islam could be seen as a foundation for the inclusion of the ethical and moral dimensions of economics and markets. This coincides with rising demand for Islamic financial products. Indeed, recent years have witnessed increasing efforts to develop and to institutionalise Islamic capital markets and above all, to make Islamic finance acceptable (and thus investable) to the mainstream (Rethel, 2011);

Rethel (2011) use the question of legitimacy to explore whether Islamic finance offers an alternative to the existing international financial order. To this end, Rethel (2011) takes a closer look at the knowledge base from which Islamic financial products are constructed and assessed as well as the emerging international regulatory framework for Islamic financial markets.

Rethel (2011) conclude that efforts to expand the social constituency of Islamic finance to the transnational sphere of global finance are overly focused on its epistemic legitimation as normal financial activity. As a consequence, the currently emerging power, knowledge and governance structures for Islamic finance tend to emulate, and therefore largely reproduce, the existing global financial order (Rethel, 2011).

3.1. Definition of Islamic Finance

Islamic finance is any finance that is compliant with the principles of Islamic law (*Shari'ah*). In terms of finance, *Shari'ah* explains in detail the ethical concepts of money and capital, the relationship between risk and profit and the social responsibilities of financial institutions (Tayyebi, 2008).

3.2. Differentiation between Islamic Finance and Conventional Finance

The evolution of Islamic banking and finance has come about from two main objectives, namely the elimination of interest-based (*riba*) finance and the development of low-risk products which would give confidence to regulators, shareholders and depositors alike. This latter aim was all the more necessary given the failure of some of the earlier Islamic banking models in Egypt, Pakistan and Malaysia in the 1950s (Tayyebi, 2008).

One of the most notable features of the current Islamic finance market is the development of a comprehensive range of product offerings, with the industry now having almost like-for-like parity with conventional banking, whether it be investment banking, commercial banking or personal financial services (Tayyebi, 2008).

Many of the primary products developed in Islamic banking were debt based in order to be more akin to the anatomy of conventional banking products. The use of these products, clearly similar to conventional instruments certainly appeased many of the stakeholders, including the financial services industry itself. However, those same resemblances did and continue to receive criticism from those wishing to see Islamic finance based on the core principles of *Shari'ah* (Tayyebi, 2008).

Nonetheless there are quite distinct aspects of Islamic finance which differentiate it from conventional modes of finance. Describing the Islamic financial system simply as 'interest-free' does not do justice to the system. Its essence stretches to the promotion of entrepreneurship, preservation of property rights and the transparency of contractual obligations. These and the other pivotal and underlying principles are formed through a thorough consideration of *Shari'ah* (Tayyebi, 2008).

The nature of capital as solely being a medium of exchange (ie no intrinsic value) is central to the prohibition of interest, and forms the central tenet of Islamic banking and finance. However other important principles include (Tayyebi, 2008):

- a. the prohibition of contractual risk
- b. advocating sharing of risk and return
- c. asset-banked finance (as banks cannot rely on issuing against collateral alone).

3.3. Interest (*riba*)

The most well-known aspect of an Islamic financial system is the prohibition of paying or receiving interest on capital. Essentially, any positive, fixed, predetermined rate tied to the maturity and the amount of principal, which is guaranteed irrespective of the performance of the investment, is considered *riba* and is so prohibited. This prohibition is not to be confused with a rate of return or profit on capital, as the earnings and sharing of profit is very much encouraged within Islam. Moreover, profit, determined ex post, symbolises the creation of additional wealth through successful entrepreneurship, whereas interest, determined ex ante, is a cost that is accrued irrespective of the outcome of business operations, and may create wealth, even if there are business losses (Tayyebi, 2008).

3.4. Risk And Uncertainty (*Gharar*)

Contractual risk is also forbidden. In general, this prohibits the selling of goods or services that the seller is not in a position to deliver or the making of a contract which is conditional on an unknown event. You cannot sell something you do not own. Also, the price and nature of the goods being transacted are defined in detail and agreed upon by both parties, thereby avoiding a sale that may represent a gamble (for example, conventional short sales or sales on margin are prohibited). Although the prohibition of interest can indeed be viewed as the nucleus of Islamic doctrine relating to finance, there are a number of other supporting principles which provide guidance for an Islamic financial system (Tayyebi, 2008):

- a. advocating risk sharing
- b. promotion of entrepreneurship discouraging speculative behaviour
- c. preservation of property rights.

These are evident through consideration of the Islamic financial system and conventional banking.

3.5. Instruments Of Islamic Finance

Given the restrictions outlined above, modern-day scholars have developed principle modes of financing which can be applied to contemporary financial scenarios while adhering to Islamic principles. Some common financial instruments currently being utilised in Islamic finance in various forms are as follows (Tayyebi, 2008):

3.5.1. For Financing Working Capital And Liquidity Management

Murabaha: this is effectively cost-plus financing, as used for trade and asset finance, allowing deferred payment by customers. Rather than lending money as in conventional loan, the bank purchases the requested commodity (thereby taking in on risk) and sells it to the customer at the agreed mark-up price. In recent time *murabaha* contracts have been the instrument of choice for many financial products, be it trade and asset finance or the provision of working capital facilities (Tayyebi, 2008).

Istisna'a: aimed at long-term construction projects, this along with *murabaha* products, is one of two types of finance which allows the sale of a commodity prior to it coming into existence. *Istisna'a* contracts are clearly aimed at long-term projects, and are frequently used to finance the construction of real estate developments and large assets such as ships (Tayyebi, 2008).

3.5.2. For Asset Finance

Ijara: this is a quasi-debt instrument essentially equivalent to leasing. Often used in the context of home purchasing, most aspects of an *ijara* are the same as those of conventional leasing, whereby the investor (lessor) purchases and leases the underlying asset to the prospective borrower (lessee) for a specified rent and term. *Ijara* are frequently used to finance the acquisition of real estate and equipment, although they have also been utilised to effect leveraged buy-outs in private equity transactions (Tayyebi, 2008).

Diminishing *musharakah*: recent times have witnessed a shift in emphasis away from *ijara* towards diminishing *musharakah* (DM) as a mode of financing Islamic mortgages. Many of the major Islamic mortgage providers have either already switched to DM (HSBC Amanah uses DM) or are planning to do so imminently. DM is a hybrid financing technique involving both *ijara* and *musharakah*. It appeals to Islamic investors because it is based on the fundamental principle of sharing risk. The attraction for financiers is twofold, in that it can incorporate a variable rate of return and has a credit profile that would be acceptable to most conventional institutions (Tayyebi, 2008).

3.5.3. Equity-Like Instruments

Musharakah: this is akin to a joint venture arrangement, through an equity participation contract. Ownership is distributed according to each partner's share in the financing, and profit and loss is shared by the partners. Such contracts are often used in connection with large project

finance and private equity funds. Despite it being a preferred option by many Islamic scholars, *musharakah* still captures only a tiny portion of all Islamic finance, as there can be questions over the control of the assets (Tayyebi, 2008).

Mudarabah: this is essentially an investment fund where one party provides the entire capital, and the other party provides the management (usually the bank, but can be the reverse). Profit sharing is agreed up-front, although the loss is borne by the provider of the funds alone (Tayyebi, 2008).

3.5.4. Fixed Income Investment

Sukuk: this is an investment certificate (bond) that represents a proportionate interest in a well-defined pool of assets that yield income and capital returns. Usually set up through the conventional securitisation process, with a special purpose vehicle acquiring the assets, the returns from the assets are passed to *sukuk* holders (investors). To date popular asset classes have included real estate. This method has been a popular way for many governments to raise funds for infrastructure, and accounts for the largest portion of Islamic finance (Tayyebi, 2008).

3.5.5. Islamic Public Finance

Zakah

Waqf

3.5.6. Islamic Microfinance

3.5.7. Islamic Insurance (Takaful)

IV. DISCUSSION

Even with its explosive growth, Islamic finance makes up just 1 percent or so of global financial assets. Champions of the approach argue that in the aftermath of the 2008 financial crisis, it can appeal beyond devout Muslims to other customers worried about the stability of the financial system or to those interested in ethical banking practices. They say sharia-based financing promotes stability because it prohibits speculation and the practice of overloading companies with debt. Money is channeled toward investments in enterprises that produce actual goods and services, rather than buying and selling on financial markets. Skeptics note that ethical banking enthusiasts are usually interested in an institution's environmental policies and

engagement with the local community, not whether it forbids profiting from alcohol, tobacco, gambling and pornography, as sharia requires. Some customers may be turned off by the dearth of women in management at most Islamic financial companies. Others may worry about institutions being exploited to funnel money to Islamic terrorists, a concern raised in a U.S. State Department memo about Islamic finance in the U.K. After Christian groups in South Korea raised the same issue, the government put off making tax changes to accommodate Islamic finance. The industry is also challenged by high costs due to the complexity of the instruments and the fees paid to scholars to certify sharia compliance. And many products, such as hedging instruments and short-term government securities, are in short supply. Progress in establishing common standards for sharia compliance has been slow, creating the risk that instruments could be declared unacceptable, as several sukuk have been after issuance (Harvey, 2015, www.bloombergvew.com).

Interest free mechanism of Islamic finance is considered as the distinguishing feature. It is believed that the global economic crisis has emerged due to excessive lending and involvement of interest based activities. One of the main reasons of financial crisis is excessive and unwise lending because conventional finance has the central objective of profit maximization through interest based lending while Islamic finance having the concept of prudent lending and profit and loss sharing investment activities makes Islamic finance more stable (Chapra, 2008) in Zaki et al (2011). Islamic finance has emerged as an alternative to the orthodox financial system. The world has witnessed some inherent flaws in the conventional system which can be replaced by practicing Islamic economic characteristics. Thus Islamic banks must formulate policies regarding prudent lending and investment activities in order to mitigate liquidity and other risks (Zaki, et all, 2011).

Islamic financial system has shown stability in recent economic crisis but due to its nature and involvement of different contractual mode of financing it is exposed to various unique natured risks which may hinder the growth and can challenge stability of Islamic banks in future or in long term context. Innovations, competition, economic changes, financial market condition have exposed Islamic banking and finance into new risks (Ismal 2009) in Zaki, et all (2011).

Thus innovative and appropriate risk management frameworks are needed which are adopted to mitigate special risks which rise due to profit and loss sharing and combinations of the acceptable Islamic mode of financing. Islamic banking and finance also needs resolution of regulatory issues and facilities such as interbank market and capital adequacy to mitigate risks and ensure effective risk management (Zaki et all, 2011). Most of the scholars agree that Islamic

bank shows more stability because of interest free nature (Turen, 1996) in Zaki et all (2011) but on the other hand equity based financing framework increases exposure of Islamic banks to risk (Quresh, 1984) in Zaki et all (2011). There must be a balanced regulation in Islamic banking and finance to ensure economic stability and better performance (Hassan and Chowdhury, 2004) in Zaki et all (2011).

V. CONCLUSION

Islamic financial system and their instruments of Islamic finance which cover *murabaha*, *istisna'a*, *ijara*, diminishing *musharakah*, *musharakah*, *mudarabah*, *sukuk*, zakah, waqf, Islamic microfinance and Islamic insurance (takaful) should be implemented based on Islamic Shariah rules at globalization era and free trade to increase and strengthen the stability of Islamic Economic Order in the global era.

REFERENCES

- Chapra, M. Umer. 2008, "The Global Financial Crisis: Can Islamic Finance Help Minimize The Severity and Frequency of Such A Crisis In The Future?" *A paper prepared for presentation at Islamic Development Bank*
- Harvey, Simon. 2015. *Islamic Finance*. www.bloombergvview.com
- Hassan, M.K, and M.A.M. Chowdhury. 2004. "Islamic Banking Regulations in Light of Basel II.", Proceedings of the Fifth Harvard Research Forum on Islamic Finance, April 12, 2004.
- Myer. Sid and Abdullah Saeed. 2008. Islamic Finance In The New Global Economic Order. www.smh.com.au.
- Qureshi, D.M. 1984, "Capital Financing in Islamic Banking", *Pakistan and Gulf Economist*, December 15, p. 8.
- Rethel, Lena. 2011. *Whose legitimacy? Islamic finance and the global financial order*. Review of International Political Economy, Volume 18 (Number 1). pp. 75-98. ISSN 0969-2290
- Rifki Ismal. 2009, "Liquidity Risk Management in Islamic Banking" <http://www.docstoc.com/docs/9463814/Liquidity-risk-management-in-islamicbanking>
- Tayyebi, Aziz. 2008. *Islamic Finance: An Ethical Alternative To Conventional Finance?* www.accaglobal.com
- Turen. S. 1996, "Performance and Risk Analysis of the Islamic Banks: The Case of Bahrain Islamic Bank" *J.KAU: Islamic Econ.*, Vol. 8, pp. 3-14

Zaki, Abdul Rehman et al.2011. Risk Mitigation in Islamic Finance through Policies and Regulatory Model- A Way to Long-Term Stability. *International Research Journal of Finance and Economics* ISSN 1450-2887 Issue 68.

Measuring Financial Inclusivity of the Muslim World Evidence from Panel Data Regression Analysis

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ABSTRACT

The study on financial inclusion has attracted plenty discussions and policy recommendation around the world, including Muslim populated-countries. The OIC countries (57 countries with Muslim population) are regarded as under developed regions in fostering broader financial services. This study is intended to undertake the current measurement of OIC countries financial inclusion by using several relevant indicators. Based on the study from IRTI and World Bank, several particular macro indicators used to measure financial inclusion level consist of commercial bank branches per 1000 km^2 and depositors with commercial banks per 1,000 adults as dependent variables. Moreover, the present of Islamic banking also contribute to development of broader financial inclusion in OIC countries. The method used is panel data regression analysis. The data covers 10 years time series (2004 – 2014) on financial access surveys of 57 OIC countries published in IMF website.

Keywords: *financial inclusion, OIC countries, financial access survey, panel data analysis*

I. INTRODUCTION

Financial inclusion is a part of development process encouraged by many international institutions like ADB, IFC-WB and IDB to be engine of economic development. It refers to a process ensuring the ease of available access on financial service for broader members of economy into formal financial products such as deposit and financing. This aims at several merit reasons. The more inclusive of financial outreach facilitates efficient allocation of productive resources thus can decrease cost of capital substantially. More appropriate access to financial services also makes easy management process in economy, faster development due to electronic technology used. An inclusive financial system can replace gradually informal financial system that tends to be exploitative such as money lender.

The study is needed to analyze the financial inclusion process in OIC countries. Inclusive financial service for OIC countries is important development steps to make the services accessible for all including the unbanked. Financial services namely financing and deposit can assist the people of OIC countries to be more productive and efficient in conducting economic activities and transactions. To measure how financial inclusion process of OIC countries has transformed becomes important study. The financial inclusion studies have selected several indicators, namely commercial bank branches and depositors with commercial bank, and affected by several socioeconomic indicators, for example see Sarma and Pais (2008) and Demircuc-Kunt and Klapper (2013).

The majority studies on financial inclusion have focused on several countries or worldwide. For the case of OIC countries, several existing paper on financial inclusion have been deeply emphasizing on theoretical framework and conceptual ideas for example see Mohieldin et. al (2012). One of empirical studies on financial inclusion process using Islamic countries as the object is written by Naceur, S.B. et. al (2015) examining the role of Islamic banking in promoting financial inclusion. This study on the other hand attempts to focus on the factors or variables affecting financial inclusion progress of OIC countries.

The objective of this study is to examine the financial inclusion level of OIC countries by using the Global financial index dataset and capture the position of OIC countries in the global position of financial inclusiveness. Moreover, the study further analyzes factors affecting financial inclusion progress from the commercial bank branches and depositors with commercial bank perspective. The scope of study addresses to employ data at country level within global data set in order to produce comprehensive outcome.

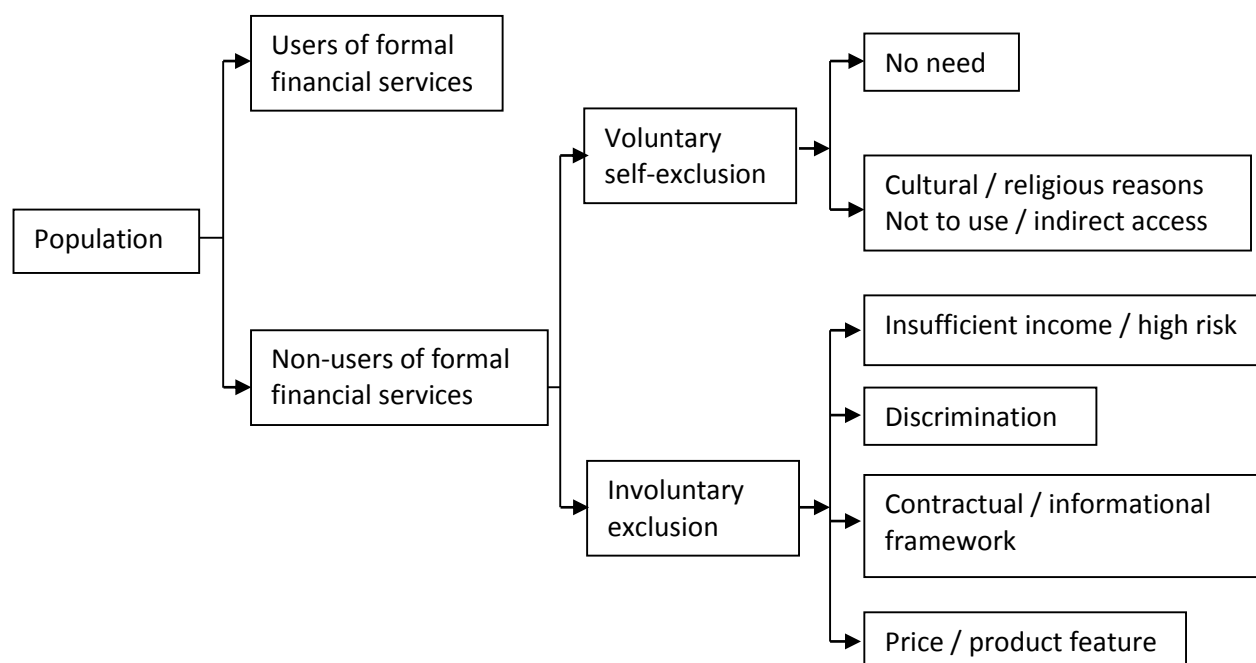
II. LITERATURE REVIEW

The literature on financial inclusion begins with the nexus between financial services and economic growth. Financial development and intermediation can be a prominent driver of economic growth and development. It has positive impact on poverty reduction and income inequality alleviation when targeted and implemented successfully. According to Mohieldin et. al (2012), the development of financial system on the right track can encourage people to save money by attracting them banking instrument to fulfill their financial needs, then such funds are channeled to investors, the process itself can broaden investment opportunities, increase investment volume, increase growth of real sector, enables individual and business entities to generate income and consumption.

Financial inclusion is a recent important concept promoted since 2 current decades as common objective for government and central bank in the world. The initial concept is actually to provide financial services to low-income segment and make it more affordable and reachable. The conventional concept of financial inclusion on economy is measured using several indicators namely proportion of population accessing commercial bank branches, ATM outreach per square kilometer, bank account owned by population, and other indicators acceptable. However, according to Beck and Demirguc-Kunt (2008), the availability of wider financial services do not guarantee more inclusive banking and financial system, because people may voluntarily select not to use financial services due to religious, cultural, and personal reasons, although they are able to access and afford the services.

The financial inclusion is conventionally defined as the share of population who can access financial services and Islamic perspective however explains in wider term that financial inclusion deals with development and inclusion. Financial inclusion from Islam encourages the inclusion of Islamic banking products through risk-sharing principles and wealth and income distribution through more inclusive Islamic banking products and objectives. The indicators of success financial inclusion program in general terms are based on the high rate or level finance indicators such as bank account per thousand adult, bank branches per 100,000 adults, adults with an account at a formal financial institution to total adults (in percent), adults saving at a financial institution in the past year to total adult (in percent) (World Bank, 2012).

Graph 1.
Factors of Financial Exclusion



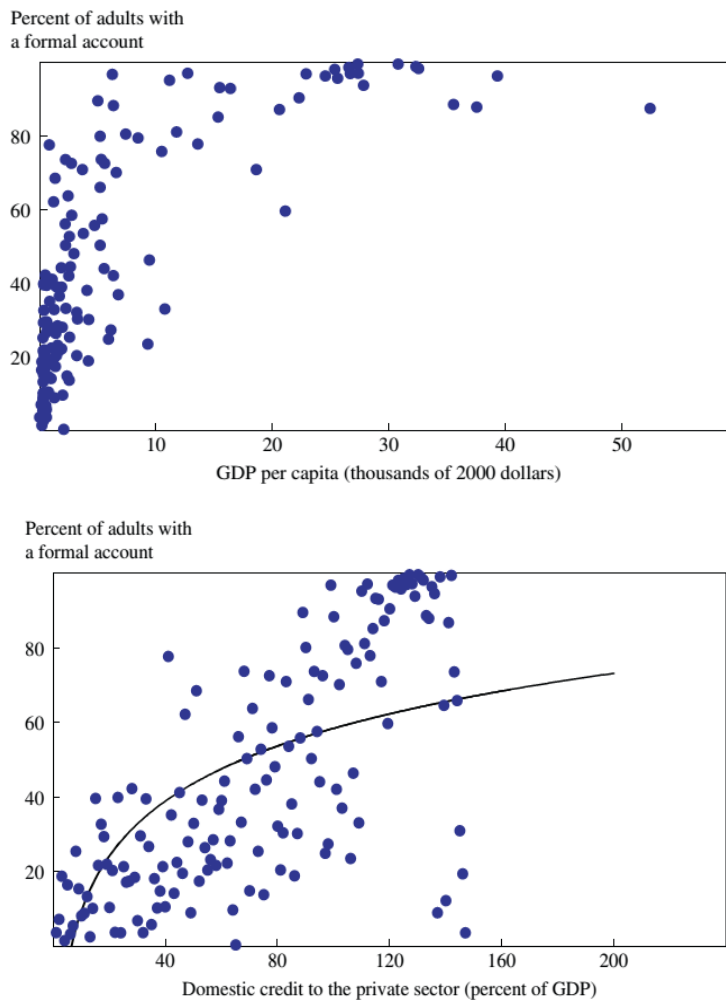
Source: The World Bank (2008) Finance for All? Policies and Pitfalls in Expanding Access, A World Bank Policy Research Report, World Bank, Washington, DC. USA

The study on country financial inclusion is related with development process in society. The level of more inclusive financial services is not always linear with the higher human development index of a country, for example refer Sarma and Pais, (2008). A country with high level of human development index does not guarantee the more inclusive financial and banking services. To measure the inclusiveness of a country financial sector is used IFI (index of financial inclusion). IFI is computed from three finance dimension comprising accessibility (penetration), availability, and usage. Accessibility is measured with number of bank account per 1000 population and availability is computed from bank branches and number of ATM per 100,000 people as proxies. Meanwhile, the usage dimension is represented by volume of credit plus deposit relative to the GDP. Such three dimensions construct the IFI computed in weighted index.

The particular analysis on primary data about financial inclusion using The Financial Inclusion Index Survey 2011 (The Global Findex) is developed by Demirguc-Kunt and Klapper (2013). The Global Findex 2011 is considered as comprehensive survey involving 150,000 respondents from over 148 countries representing 97 percent of world population. Such survey aims to examine the behavior of adult in dealing with save, borrow, make payments and manage risk. Demirguc-Kunt and Klapper (2013) defined financial inclusion as the use of formal

financial service. By employing the Global Financial Index Dataset 2011 intensively, the study focuses on the ownership and use of formal financial bank account as dependent variables. Percent of adult with formal bank account (financial inclusion measurement) is strongly related with GDP per capita and domestic credit to private sector (measured in percent of GDP). The higher GDP per capita and domestic credit to private sector will encourage the higher level of financial service use and make more inclusive. Income inequality measured by using Gini coefficient also contributes to financial inclusion indicators. Lower level of Gini coefficient is good condition to fasten financial service more inclusive. The ownership of asset and income do not belong to few people but more people who can access financial services.

Graph 2.
 Formal Account Penetration, GDP Per Capita and
 Financial Development in the World



Source: Demirguc-Kunt and Klapper (2013).

Several social economic indicators and infrastructures such as literacy rate, population concentration area, unemployment, road condition, and internet network, also support to the

development of financial inclusion for example see Sarma and Pais, (2008). Several studies for example by Demirguc-Kunt and Klapper (2013) incorporate banking and finance indicator such as domestic credit to private sector in percent of GDP and non performing finance / loan variable. Social indicator can have positive and negative impact of financial inclusion progress. For instance, adult literacy rate and Level of education can fasten the financial inclusion process because more educated people are aware of financial service use. On the other hand, the negative social economic indicators consist of rural population, unemployment, and Gini coefficient, which tend to discourage faster financial inclusiveness process. Those indicators are barriers of people to access financial services. The infrastructure indicators, namely road condition, internet subscribers, and cellular users, are similar to social indicators supporting better transformation of financial inclusiveness. On the other hand, banking variables such as NPL (nonperforming loan and financing), CAR (capital adequacy ratio), and foreign assets, do not support to development process of financial inclusion.

Table 1.
Summary of Indicator Impact as Independent Variables
on Financial Inclusion Process

Indicator	Impact	Category
GDP per capita	Positive	Socio economic
Adult literacy rate / Education level	Positive	Socio economic
Rural population / area concentration	Negative	Socio economic
Unemployment	Negative	Socio economic
Gini coefficient	Negative	Socio economic
Road condition	Positive	Infrastructure
Cellular / phone subscribers	Positive	Infrastructure
Internet subscribers	Positive	Infrastructure
NPL (nonperforming loan/financing)	Negative	Banking
CAR (capital adequacy ratio)	Negative	Banking
Foreign asset on bank	Negative	Banking

Source: Author Summary from Several Literature and Study

III. METHODOLOGY AND DATA

3.1. Data and Indicator

The study has employed data published by International Monetary Fund with range or coverage from 2004 to latest publication (2013). This article also benefits from the Global Financial Index Dataset (Survey around the world) released by World Bank directly to its website or recent study on particular topics utilizing World Bank Dataset. Moreover, SEISRIC OIC also contributes to sharpen the analysis process in the paper. The financial inclusion indicator and its affection variables have been developed from World Bank and International Monetary Fund standard.

The financial inclusion indicators are being used as measurement consisting of commercial bank branches per 1000 km² and depositors with commercial bank branches per 1000 adult. Both indicators are treated as dependent variables within the panel regression analysis system. Meanwhile, the independent variables / affecting variables represent socioeconomic, infrastructure and financial depth indicators. To represent socioeconomic indicator, GDP per capita and education level are proposed. Meanwhile, cellular and phone or internet subscription is standard to measure the infrastructure progress affecting the development of financial inclusion indicators. Due to strong relation between financial inclusion and financial depth, the domestic credit is used to study impact of domestic credit being created on financial inclusion indicators (commercial bank branches).

Table 2.
Data Summary and Definition

Category	Indicators	Definition and Measurement Unit
Financial Inclusion	Commercial Bank (CB)	Commercial bank branches per 1,000 km ²
	Depositors with Commercial Bank (DWC)	Depositors with commercial banks per 1,000 adults / Deposit accounts with commercial banks per 1,000 adults
Socioeconomic Variables	Growth Domestic Product Per Capita (GDP)	GDP per capita is gross domestic product divided by midyear population. Data are in current U.S. dollars.
	Education Level (Edlevel)	Gross enrolment ratio is the total enrollment in secondary education, regardless of age, expressed as a percentage of the population of official secondary education age.

Category	Indicators	Definition and Measurement Unit
		GER can exceed 100% due to the inclusion of over-aged and under-aged students because of early or late
Infrastructure Variable	Mobile Cellular (Cellular)	Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service that provide access to the PSTN using cellular technology. Data measurement is per 100 adult.
Financial Depth	Domestic Credit (DC)	Domestic Credit (Percent to GDP)

3.2. Research Method

The article has utilized two combinations of research methods consisting of qualitative and quantitative. Both explain similar research objectives with different approaches. Qualitative research method is designed to discuss the relations among variables being explained. Meanwhile, quantitative model relying on panel data regression analysis is expected to develop model within variables and observation.

Qualitative research method demonstrates and deliberates the strong relation among variables. The method uses the horizontal and vertical axis (x and y scatter) in order to relate two variables. Each variable is calculated from average of 2004 to 2013 data. The relationship between variables deal with GDP per capita and commercial bank branches, cellular subscription and commercial bank branches, GDP per capita and depositors with commercial bank branches, domestic credit and commercial bank branches, education level and depositors with commercial bank, and cellular subscription and depositors with commercial bank.

Quantitative method relies on panel data regression analysis. The regression analysis system incorporates commercial bank branches and depositors with commercial bank as dependent variables representing financial inclusion progress in OIC countries. Meanwhile, dependent variables or affecting factor to financial inclusion progress are represented by several socioeconomic indicators such as GDP per capita, cellular subscription and education level within OIC countries. The analysis also incorporates financial depth indicators namely domestic credit to study its impact on commercial bank branches development.

The panel data regression analysis involves three methodological steps namely Pooled OLS Model (PLS), Fixed Effect Model (FEM), and Random Effect Model (REM). Those steps and procedures are supposed to work under panel data regression analysis. PLS must be tested at the beginning of process before choosing FEM and REM. In many experiences, the most regular method applied is between FEM and REM. The PLS is considered neglecting the heterogeneity of data and observation by treating panel data as linear regression analysis. To select between FEM and REM, Hausmann test is applied. Meanwhile, F test is used to select between PLS and REM. For the purpose of smooth and better data observation, each equation and analysis would be constructed in LN (logarithm natural).

3.2.1. PLS Model

Pooled OLS model treats panel data regression analysis as linear regression, neglects and disallows the heterogeneity of data and observation. Within the equation of paper there are two models proposed:

$$\ln CB_{it} = \beta_1 + \beta_2 \ln GDP_{it} + \beta_3 \ln Cellular_{it} + \beta_4 \ln Edlevel_{it} + \beta_5 \ln DC + \mu_{it}$$

$$\ln DWC_{it} = \beta_1 + \beta_2 \ln GDP_{it} + \beta_3 \ln Cellular_{it} + \beta_4 \ln Edlevel_{it} + \mu_{it}$$

where:

- i : OIC countries as cross sectional objects with subject to the availability of data (it is supposed to be 57 OIC countries, in fact less than it).
- t : Observation of data (from 2004 to 2013 / 10 observation)

3.2.2. Fixed Effect Model (FEM) / LSDV Model (Least Square Dummy Variables Model)

FEM facilitates and allows the heterogeneity of data and observation among cross sectional unit by using each subject to have its own intercept treated as dummy variables. in the equation of this paper also two model bellow are proposed:

$$\ln CB_{it} = \alpha_1 + \alpha_2 D_{2i} + \alpha_3 D_{3i} + \dots + \alpha_n D_{ni} + \beta_2 \ln GDP_{it} + \beta_3 \ln Cellular_{it} + \beta_4 \ln Edlevel_{it} + \beta_5 \ln DC_{it} + \mu_{it}$$

$$\ln DWC_{it} = \alpha_1 + \alpha_2 D_{2i} + \alpha_3 D_{3i} + \dots + \alpha_n D_{ni} + \beta_2 \ln GDP_{it} + \beta_3 \ln Cellular_{it} + \beta_4 \ln Edlevel_{it} + \mu_{it}$$

where:

- i : OIC countries as cross sectional objects with subject to the availability of data (it is supposed to be 57 OIC countries, in fact less than it).

- t : Observation of data (from 2004 to 2013 / 10 observation)
 D_1 : Dummy Variable (Intercept) for country 1
 D_2 : Dummy Variable (Intercept) for country 2
 D_n : Dummy Variable (Intercept) for country n

3.2.3. Random Effect Model (REM) / Error Component Model (ECM)

REM is developed from FEM with special emphasize on its intercept. Unlike FEM, which is its intercept representing dummy variables of each cross sectional unit, REM relies on its own intercept adjusted by error term. In Random Effect Model, intercept being proposed is constructed from the deviation between average value of common intercept (β) and individual data from intercept value of each cross sectional unit represented by error term (ε). As illustration, the REM model is proposed bellow.

$$\ln CB_{it} = \beta_{1i} + \beta_2 \ln GDP_{it} + \beta_3 \ln Cellular_{it} + \beta_4 \ln Edlevel_{it} + \beta_5 \ln DC_{it} + \mu_{it}$$

$$\ln DWC_{it} = \beta_{1i} + \beta_2 \ln GDP_{it} + \beta_3 \ln Cellular_{it} + \beta_4 \ln Edlevel_{it} + \mu_{it}$$

In this model assumption, β_{1t} above is considered random variable with average value of β_1 (without additional i). Therefore, intercept vale of each cross sectional unit / subject is explained bellow:

$$\beta_{1i} = \beta_1 + \varepsilon_i$$

where:

- i : OIC countries as cross sectional objects with subject to the availability of data (it is supposed to be 57 OIC countries, in fact less than it).
 ε_i : a random error term with a mean value of zero and variance of σ_ε^2 .

IV. FINDING AND DISCUSSION

4.1. OIC FINANCIAL ACECESS AND ECONOMIC BACKGROUND

Muslim countries integrated into OIC (Organization of Islamic Cooperation) are potential and huge market with total approximately 1.7 billion populations living in 57 countries across continents. The GDP (PPP) of OIC countries contributes about 16 percent of World GDP. The economic size based on current GDP value of OIC countries is almost as big as European Union combined together or People Republic of China. OIC countries can produce GDP (PPP) at current price up to 16 trillion US dollar per year, while China is little bit higher 16.1 trillion US dollar and European Union is higher 17.4 trillion US dollar. Indonesia is the most populated

Muslim country with highest GDP. Meanwhile, middle-East countries, rich in oil natural resources, such as Saudi Arabia, Qatar and United Emirate Arab are among the highest GDP per capita representing the welfare and wellbeing of population.

Table 3.
Categorization of OIC Member State Based on Income Per Capita Group

Categories	OIC Members	Number of Countries
Low Income Group (US\$ 1035 or less)	Afghanistan, Bangladesh, Benin, Burkina Faso, Chad, Comoros, The Gambia, Guinea, Guinea Bissau, Kyrgyz Republic, Mali, Mozambique, Niger, Sierra Leone, Somalia, Tajikistan, Togo, Uganda	19
Lower Middle Income Group (US\$ 1036 to 4085)	Cameroon, Côte d'Ivoire, Djibouti, Egypt, Guyana, Indonesia, Mauritania, Morocco, Nigeria, Pakistan, Senegal, Sudan, Syria, Uzbekistan, Yemen	15
Upper Middle Income (US\$ 4086 to 12615)	Albania, Algeria, Azerbaijan, Gabon, Islamic Republic of Iran, Iraq, Jordan, Kazakhstan, Lebanon, Libya, Malaysia, Maldives, Suriname, Tunisia, Turkey, Turkmenistan	16
High Income Group (US\$ 12616 or more)	Bahrain, Brunei Darussalam, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates	7

Source: World Bank and SEISRIC OIC, 2014

The development of OIC countries also encourage the wider service of banking system, particularly Islamic banking, as the unique institution in Muslim countries. The banking system can enhance more efficient flows of capital, money and investment to find the right part to be utilized. Moreover, the banking sector with modern financial services like ATM and bank branches also develop. Such network financial services are creating several banking products for the people such as deposit, credit or financing and money transfer. The presence of banking sector is very essential to support economic development and better economic growth in OIC countries.

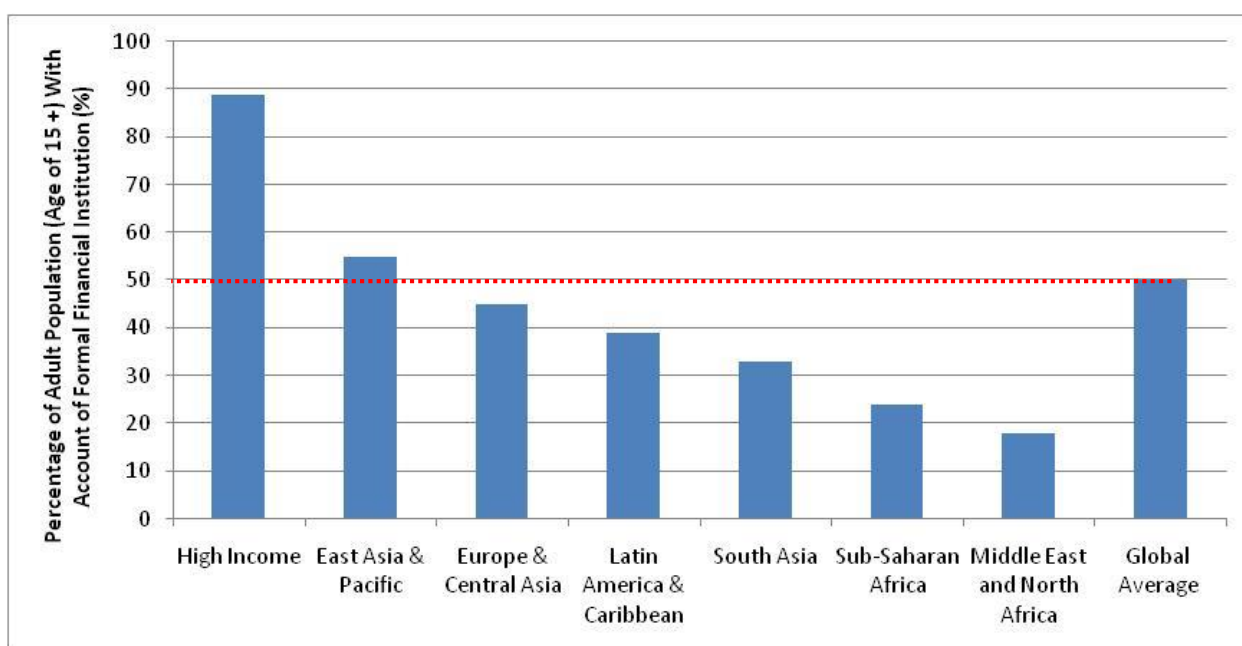
Of 7 billion world population, about 2 billion do not have financial access to the banking service especially bank account, and predominantly live in Muslim countries (approximately 25 %). The majority of OIC countries lag behind the developed countries and high income country in term of financial access. About 70 % of OIC adult population do not access bank account or use commercial financial and banking product.

Most of COMCEC countries (Commercial Cooperation of the Organization of the Islamic Cooperation have financial service / bank account penetration bellow global average.

The number of formal accounts of banking and financial institution in OIC countries dominating Sub-Saharan Africa, South Asia, Middle East, and North Africa are below 50 percent of their total population. Compared with high income countries, those countries lagged behind 50 percent. Almost 90 percent of population in high income countries has access to financial service institution. According to Moheildin, et al. (2012) lack of access of the poor to finance for OIC member countries becomes the most crucial factor in the failure to bring about a broad-based ownership of businesses, welfare of society, and development of industries.

Graph 3.

The Percentage of Adult Population with Bank Account Based On Region in the World
(Data 2011, Released By Global Financial Index)

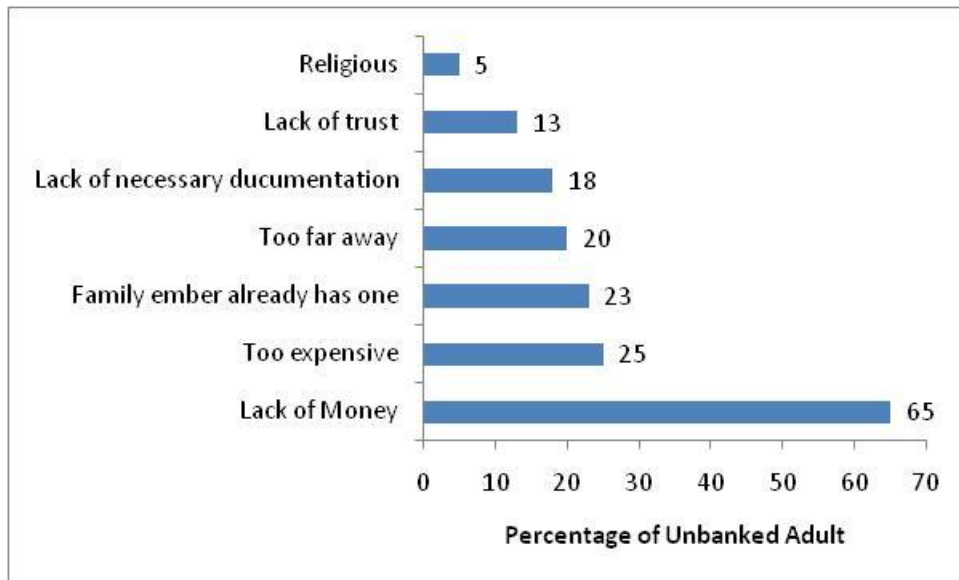


Source: Global Financial Index, 2011

The financial and banking services to be promoted more inclusive in the world are facing several reasons. Based on data published by Global Financial inclusion Index, explained by Demircuc-Kun and Klapper (2013) several reasons have made less adult to access financial services. The study concludes that seven primary reasons why adult around the world have not used financial and banking services. The main reason is lack of money, insufficient income, or poverty contributes the challenge for financial services to be more inclusive. The other main reasons are expensive financial service cost that must be paid by user, such as administration fee and interest / profit-sharing charge. The other three reasons are related with the technical problems to access financial services such as, one of the family already using the bank account, too far away bank office network, not having necessary documentation required by formal financial institution. The last two interesting reasons are lack of trust and religious. Both are

regarded as social reasons. Lack of trust indicates that in the society there have been several unreliable financial institution or many people still do not understand the benefit of accessing financial and banking services.

Graph 4.
The Reason for Adults/Respondents Not Having a Formal Financial and Banking Account (In Percent)



Note : Based on Survey Conducted By Global Financial Inclusion Index, 2012
Survey allows respondents to choose more than one reasons

Source : Demircuc-Kunt and Klapper calculation using World Bank dataset, 2012

The religious reason for not having financial account and using banking services is more difficult to solve from technical aspects such as widening the financial service outreach and promotion. The Global Financial Inclusion Index 2014 depicts that 5 percent respondents choosing for not having formal bank account due to religious obedience is equal to 125 million, 60 million living in OIC countries and its 25 million spreading out at Middle East and North African region. All *Abrahamic* religions (Islam, Christianity, and Judaism) teach not to deal with usury, and for Islam many believe that interest charge for non Islamic bank is part of usury practices. The presence of Islamic banking in Muslim world can facilitate the Muslim to access formal financial services and lower the Muslim from exclusion of financial services.

For OIC countries, the issues of access to finance have been an important part of policy concern to be developed. The financial inclusion is part of widespread reflecting the development process that produce equality access on finance and banking products. The process will encourage better intermediation function of OIC countries. According to statistical data, the financial access average for OIC member state remains lower than world average. One of basic

indicator used to measure access to finance is bank account per 1000 adult, which exhibits OIC countries below world average. The 440 adult populations per 1000 population as of 2011 in OIC countries are recorded to be able to own formal bank account. It is below the world average which already reaches 610 adult populations per 1000 population owning formal bank account. The disparity of adult owning formal bank account between low income and high income OIC countries is also wider. The ownership of lower income OIC countries is concentrated on 220 adult per 1000 populations. Meanwhile, almost per 1000 populations of high income OIC countries can access formal bank accounts.

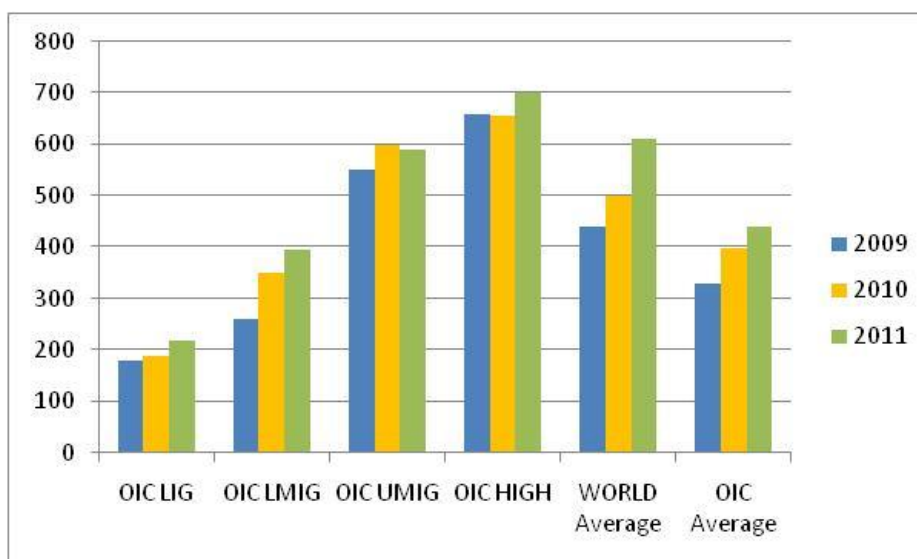
Table 4.
The Islamic Banking Presence in OIC Countries

OIC Countries with Islamic Banking System	OIC Countries without Islamic Banking System
Afghanistan, Albania, Algeria, Azerbaijan, Bahrain, Bangladesh, Brunei, Burkina Faso, Cameroon, Cote d'Ivoire, Djibouti, Egypt Arab Republic, Gambia, Indonesia, Iran Islamic Republic, Iraq, Jordan, Kuwait, Lebanon, Malaysia, Maldives, Mauritania, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, Senegal, Sudan, Syrian Arab Republic, Tunisia, Turkey, Uganda, United Arab Emirate, Wes Bank & Gaza, Yemen Republic	Benin, Chad, Comoros, Gabon, Guinea, Guinea-Bissau, Guyana, Kazakhstan, Kyrgyz Republic, Libya, Mali, Morocco, Mozambique, Niger, Sierra Leone, Somalia, Suriname, Tajikistan, Togo, Turkmenistan, Uzbekistan
Total: 36 OIC countries with IB system	Total: 21 OIC countries without IB system

Source: Naceur, S.B et al. classifying World Bank Dataset, 2015

The other financial access indicators such as the number of bank branches per 100,000 and adult saving at formal financial institution have shown similar trend. The Number of bank branches per 100,000 adults is important indicator for financial access in the OIC Member Countries to strengthen accessibility of financial services. The OIC member countries bank branches in 2011 are still 13 offices serving 100,000 populations. Other hand, the world average of bank branches per 100,000 populations has reached 16 offices. Through saving at formal financial institution, a reasonable sufficient level of savings is achievable as basic requirement to increase investments and to reach sustainable economic growth in OIC Member States. Level of adult saving at OIC high income countries is equal to developed countries / high income countries (23 % of total adult has saving at financial institution). However, for the rest of OIC countries, on average, less 10 percent of total adult has saving at financial institution, or lower that world average reaching 14 percent.

Graph 5.
Bank Accounts per 1,000 adults in OIC Member States



Source: COMCEC Data Calculated by Using World Bank Database, 2014

4.2. FINDING: PANEL DATA REGRESSION ANALYSIS

4.2.1. OIC Countries with Islamic Banking System and without Islamic Banking System

The development of Islamic banking system in OIC countries has gradually transformed into massive system. It also contributes to more inclusive financial services offering variety of financial product with specific market and schemes (*musyarakah, mudharabah, murabahah* contract). Of 57 OIC members, 36 countries have adopted Islamic Banking system into their financial system and 21 countries have not been interested to integrate. The countries like Egypt, Islamic Republic of Iran and Sudan have been pioneers for the promotion of Islamic banking system into monetary and financial system since 1980. Currently, several OIC countries in Middle East, such as Qatar, Bahrain, UEA, and Kuwait, in Asia, such as Malaysia and Indonesia, play significant role as International Islamic banking and financial hub. Even, a Europe country, namely UK, benefits from its development by opening International banking and finance center.

Table 5.
Summary of Panel Data Regression Analysis
Commercial Bank Branches (CB) as dependent variable (*Financial Inclusion Process*)

Without IB System			With IB System		
The Best Model: Fixed Effect Model			The Best Model: Random Effect Model		
Testing ($\alpha = 10\%$)			Testing ($\alpha = 10\%$)		
PLS and FEM	F Test (prob)	0.0000	PLS and FEM	F Test (prob)	0.0000
FEM and REM	Hausman Test (prob)	0.0147	FEM and REM	Hausman Test (prob)	0.1205
Independent Variables	Coefficient	Prob.	Independent Variables	Coefficient	Prob.
GDP	-0.337601	0.0685	GDP	0.194203	0.0029
Cellular	0.274861	0.0001	Cellular	0.131100	0.0004
Edlevel	0.771126	0.0037	Edlevel	0.666746	0.0000
DC	0.196627	0.0668	DC	0.134509	0.0011
R-squared	0.985923		R-squared	0.737176	
Prob (F-statistic)	0.000000		Prob (F-statistic)	0.000000	
DW Stat.	0.516475		DW Stat.	0.601335	

Note:

PLS and FEM (if F test prob. is less than 0.10 ($\alpha = 10\%$), then FEM is chosen). FEM and REM (if Hausman Test prob. is less than 0.10 ($\alpha = 10\%$), then FEM is also chosen). Coefficient of independent variables indicates impact on dependent variable if its probability (Prob.) is less 0.10 ($\alpha = 10\%$), it is considered significant affecting dependent variables.

Source: Author Calculation Based on E-views 7 Using IMF data, 2014

Analyzing financial inclusion process using commercial bank branches (CB) indicators concludes that education level has very significant role in supporting more inclusive financial services both in OIC countries with IB system and without IB system. Education level variable (Edlevel) has shown greater significant coefficient value which means greater impact also on the wider commercial banking branches (CB). Both can contribute around 0.66 up to 0.77 to the development of commercial bank branches in OIC countries with IB system and without IB system. The effort of government and authority in OIC countries to increase the level of education by 10 % will affect on the wider access on commercial bank branches around 6.6 to 7.7 %. The education level can be effective channel to improve financial inclusion process compared other variables namely income per capita, technology and domestic credit/financing supply, which have lower significant coefficient value.

In spite of their significant impact, the other variables such as income per capita (GDP), technology (cellular), and credit/financing supply (DC) have lower coefficient below 0.3 both in OIC countries with IB system and without IB system. To improve financial inclusion from

commercial bank branches channel perspective via promoting wider usage of telecommunication technology and providing credit / financing, is also important policy for OIC countries government. Both variables can contribute around 0.13 to 0.27 for developing commercial bank branches. 10 percent increase in telecommunication technology (cellular subscribers) and credit / financing (domestic credit) will lead to improve between 1.3 and 2.7 percent access of commercial bank branches in OIC countries regardless adopting IB system or not. For income per capita (GDP), there are different results between OIC countries with IB system and without IB system. GDP in OIC countries without IB system is not effective intervention variable for government due to negative coefficient (-0.34). Thus, in order to encourage wider commercial bank branches this should not be emphasized.

Table 6.
Summary of Panel Data Regression Analysis
Depositors with Commercial Banks (DWC) as dependent variable
(Financial Inclusion Process)

Without IB System			With IB System		
The Best Model: Random Effect Model			The Best Model: Random Effect Model		
Testing ($\alpha = 10\%$)			Testing ($\alpha = 10\%$)		
PLS and FEM	F Test (prob)	0.0000	PLS and FEM	F Test (prob)	0.0000
FEM and REM	Hausman Test (prob)	0.6168	FEM and REM	Hausman Test (prob)	0.2045
Independent Variables	Coefficient	Prob.	Independent Variables	Coefficient	Prob.
GDP	0.311556	0.0147	GDP	0.215589	0.0122
Cellular	0.123261	0.0063	Cellular	0.074148	0.1194
Edlevel	1.018144	0.0000	Edlevel	0.944366	0.0000
R-squared	0.710613		R-squared	0.480387	
Prob (F-statistic)	0.000000		Prob (F-statistic)	0.000000	
DW Stat.	0.735669		DW Stat.	1.086806	

Note:

PLS and FEM (if F test prob. is less than 0.10 ($\alpha = 10\%$), then FEM is chosen). FEM and REM (if Hausman Test prob. is less than 0.10 ($\alpha = 10\%$), then FEM is also chosen). Coefficient of independent variables indicates impact on dependent variable if its probability (Prob.) is less 0.10 ($\alpha = 10\%$), it is considered significant affecting dependent variables.

Source: Author Calculation Based on E-views 7 Using IMF Data, 2014

The other aspect to examine financial inclusion process from depositors with commercial bank (DWC) indicator has depicted similar conclusion that education level (Edlevel) is significant key for higher number of depositors with commercial bank. Education level in OIC

countries can be effective strategy to promote inclusive financial services. In OIC member countries with IB system and without IB system, education level coefficient affecting depositors with commercial bank is approximately 1. The policy from OIC countries to improve inclusive financial access by 10 % increase in education level will also contribute to 10 % increase in the number of depositors with commercial bank. This is normal perspective from more educated people to be aware of saving or investment by depositing money into bank.

Income per capita (GDP) both in OIC countries with IB system and without IB system has significant impact on depositors with commercial bank (DWC). From panel data regression analysis, income per capita (GDP) has significant coefficient value about 0.2 to 0.3. Government policy to improve income per capita by 10% in OIC countries will lead to increase in the number of depositors with commercial bank approximately 2% up to 3%. However, technological factor (telecommunication technology / cellular subscribers) for OIC countries with IB system is not significantly affecting the number of depositors with commercial bank. For the case of OIC countries without IB system the number of cellular subscribers has significant impact on depositors with commercial bank.

4.2.2. OIC Countries Based on Income Per Capita Classification

The income per capita level of OIC countries can bring about the position of financial inclusion process measured through two indicators: (1) commercial bank branches and (2) depositors with commercial bank. Upper middle to high income country (GDP per capita ranging from US\$ 4086 to 12615 and above) is supposed to experience better financial inclusion progress compared to lower middle to low income countries. Higher income per capita means better access to financial product in any aspects from saving, financing and banking services. OIC countries like Brunei Darussalam, Kuwait, Bahrain and Saudi Arabia, are countries with higher level of income per capita. Thus, such countries are assumed to have higher number of depositors with commercial bank and wider commercial bank branches. However, classification of OIC countries based on income per capita also comprises low income countries (US\$ 1035 or less) and lower middle income (US\$ 1036 to 4085) dominating the membership accounting for 34 countries. With lower level of income per capital, financial inclusion progress cannot work properly due to insufficient income as prominent factor for more inclusive financial services from depositors with commercial bank commercial bank branches.

Table 7.
Summary of Panel Data Regression Analysis
Commercial Bank Branches (CB) as dependent variable (*Financial Inclusion Process*)

Upper Middle to High Income			Lower Middle to Low Income		
The Best Model: Random Effect Model			The Best Model: Fixed Effect Model		
Testing ($\alpha = 10\%$)			Testing ($\alpha = 10\%$)		
PLS and FEM	F Test (prob)	0.0000	PLS and FEM	F Test (prob)	0.0000
FEM and REM	Hausman Test (prob)	0.2987	FEM and REM	Hausman Test (prob)	0.0937
Independent Variables	Coefficient	Prob.	Independent Variables	Coefficient	Prob.
GDP	0.164796	0.0781	GDP	0.037331	0.7433
Cellular	0.080077	0.1979	Cellular	0.191191	0.0000
Edlevel	0.082035	0.6516	Edlevel	0.811552	0.0000
DC	0.158398	0.0163	DC	0.094263	0.0833
R-squared	0.353176		R-squared	0.986378	
Prob (F-statistic)	0.000000		Prob (F-statistic)	0.000000	
DW Stat.	0.410096		DW Stat.	0.561161	

Note:

PLS and FEM (if F test prob. is less than 0.10 ($\alpha = 10\%$), then FEM is chosen). FEM and REM (if Hausman Test prob. is less than 0.10 ($\alpha = 10\%$), then FEM is also chosen). Coefficient of independent variables indicates impact on dependent variable if its probability (Prob.) is less 0.10 ($\alpha = 10\%$), it is considered significant affecting dependent variables.

Source: Author Calculation Based on E-views 7 Using IMF data, 2014

Panel data regression analysis on (commercial bank branches) CB indicator for upper middle to high income OIC countries depicts that income per capita (GDP) and credit / financing supply (DC) are significant factors with small impact. Coefficient value for both indicators is only about 0.15. Government in upper middle to high income OIC countries can rely on effective policy by increasing level of income per capita and domestic credit in order to create better access to commercial bank branches. 10 % increase in domestic credit and income per capita can contribute approximately 1.5 % increase in commercial bank branches for upper middle to high income OIC countries. For this case, telecommunication technology (Cellular) and education level (Edlevel) have no more impact on commercial bank branches. To support the development of financial inclusion in high income countries to be more inclusive, education and technology are not effective intervention.

The result for lower middle to low income OIC countries on the other hand concludes that education level (Edlevel) is the most significant factors to create higher number of commercial bank branches. Its coefficient value reaches 0.8 which means 10 % increase in

education level will be followed by 8 % increase in commercial bank branches in lower middle to low income OIC countries. Telecommunication technology (Cellular) and credit / financing supply are also contributing to the wider access of commercial bank branches with smaller impact (approximately 0.1 up to 0.2). Income per capita (GDP) for lower income OIC countries is not significant factor improving wider access of commercial bank branches. Promoting financial inclusion of low income OIC countries is effectively undertaken through education level gradually developed.

Table 8.
Summary of Panel Data Regression Analysis
Depositors with Commercial Banks (DWC) as dependent variable
(Financial Inclusion Process)

Upper Middle to High Income			Lower Middle to Low Income		
The Best Model: Random Effect Model			The Best Model: Random Effect Model		
Testing ($\alpha = 10\%$)			Testing ($\alpha = 10\%$)		
PLS and FEM	F Test (prob)	0.0000	PLS and FEM	F Test (prob)	0.0000
FEM and REM	Hausman Test (prob)	0.2020	FEM and REM	Hausman Test (prob)	0.8163
Independent Variables	Coefficient	Prob.	Independent Variables	Coefficient	Prob.
GDP	0.040834	0.5616	GDP	0.334342	0.0130
Cellular	0.091950	0.0427	Cellular	0.116503	0.0151
Edlevel	0.362590	0.0124	Edlevel	0.853348	0.0000
R-squared	0.256876		R-squared	0.564072	
Prob (F-statistic)	0.000000		Prob (F-statistic)	0.000000	
DW Stat.	0.498555		DW Stat.	1.074122	

Note:

PLS and FEM (if F test prob. is less than 0.10 ($\alpha = 10\%$), then FEM is chosen). FEM and REM (if Hausman Test prob. is less than 0.10 ($\alpha = 10\%$), then FEM is also chosen). Coefficient of independent variables indicates impact on dependent variable if its probability (Prob.) is less 0.10 ($\alpha = 10\%$), it is considered significant affecting dependent variables.

Source: Author Calculation Based on E-views 7 Using IMF data, 2014

Financial inclusion process in upper middle to high income OIC countries from depositors with commercial bank (DWC) indicator perspective is not significantly affected by the level of income per capita (GDP). Rather, Education level has significant impact on the increasing number of depositors with commercial bank. In addition, telecommunication technology affects less significant contribution on the development phase of the number depositors with commercial bank. To attract more depositors with commercial bank in higher

income OIC countries, socialization and education are more effective. The coefficient value of education level (Edlevel) on depositors with commercial bank (DWC) is 0.36 which means the increasing 10% level of education will lead to 3.6% increase in the number of depositors with commercial bank.

For the case of lower middle to low income OIC countries, incomes per capita (GDP), telecommunication technology (cellular), and education level (Edlevel) have significant impact on the depositors with commercial bank (DWC). The most significant impact comes from education level (Edlevel) with coefficient value of 0.85. Fewer impacts are contributed from GDP and Cellular. Government in lower income OIC countries can rely on those three channels to increase financial inclusiveness of the country from depositors with commercial bank (DWC) indicators. The most effective can be targeted from education level and income per capita, whereby the increase 10 % in education level can support 8.5% increase in the numbers of depositors with commercial bank (DWC) and 10 % increase in GDP can lead to 3.34% increase in DWC.

V. CONCLUSION

The development process of OIC countries promote the inclusion of financial services to be accessible including for the poor and unbanked. It is believed that more inclusive financial services can create effective transaction, more productive economic activities and supporting poverty alleviation programs. Although as great economy in the world with GDP 16 trillion US dollars per year, there have raised disparities in term of development process and welfare. The development process in financial service does not work effectively and lag behind world average development. About 70% of OIC adult population do not access bank account or use commercial financial and banking product. The number of formal accounts of banking and financial institution in OIC countries dominating Sub-Saharan Africa, South Asia, Middle East, and North Africa are below 50 percent of their total population. Compared with high income countries, those countries lagged behind 50 percent. Almost 90 percent of population in high income countries has access to financial service institution.

The financial inclusion process in OIC countries from commercial bank branches indicators tend to be affected by education level (Edlevel) in countries whereby Islamic banking is adopted or not. The impact of education level to lead financial inclusion process through commercial bank branches has been the most significant variables compared to income per capita

(GDP), telecommunication technology (Cellular) and domestic credit supply (DC). Although less impact, these variables mentioned are very important to consider in policy intervention by government in OIC countries. In order to create more accessible financial services through wider outreach of commercial bank branches, more telecommunication infrastructure should be expanded, particularly in OIC countries without IB system whereby cellular network improvement can have greater impact. Domestic financing/credit creation both in OIC countries with IB and without IB system needs to be considered in expanding broader commercial bank branches.

For the case of financial inclusion process from depositors with commercial bank (DWC), education level is the most significant factor affecting financial inclusion progress both in OIC countries with IB and without IB system. The other variable is income per capita (GDP) contributing significantly on the financial inclusion progress. The telecommunication technology (cellular) has different impact on financial inclusion progress, whereby OIC countries with IB system is significantly not affected by the quantity of cellular subscribers. Telecommunication technology networks tend to lead depositors with commercial bank in OIC countries without IB system.

Examining financial inclusion process by classifying OIC countries based on income per capita has concluded that education level is the most significant variable contributing to the development of commercial bank branches in lower middle to low income OIC countries. However, education level in upper middle to high income OIC countries is less significant variable compared to domestic credit and income per capita (GDP). In lower middle to low income OIC countries, income per capita (GDP) is not significantly contributing to the wider access of commercial bank branches. Domestic credit supply (DC) is variable affecting the wider development of commercial bank branches in any level of income per capita.

Education level is also significant variable affecting the growth of depositors with commercial bank in OIC countries regardless its income per capita level. In lower middle to low income per capita level, the impact of education level in contributing to development of depositor with commercial bank is far greater, than lower income per capita OIC countries. Telecommunication technology (cellular) is significantly affecting the development of depositor with commercial bank. For the case of upper middle to high income countries, income per capita is not reliable indicator for intervention in the development of depositors with commercial bank due to insignificant impact.

REFERENCES

- Beck, Thorsten, and Asli Demirguc-Kunt. "Access to Finance: An Unfinished Agenda." *The World Bank Economic Review*, 2008: pp. 383-396.
- Cheraghlou, Amin Mohseni. 2014. *The Role of Islamic Finance for Enhancing Financial Inclusion in COMCEC Member Countries*. Paper Presented in 2nd Meeting of the COMCEC Financial Cooperation Working Group: March 27 th, Ankara
- Demirguc-Kunt and Klapper. 2012. *Measuring Financial Inclusion: The Global Financial Index*. The World Bank Development Research Group: April 2012
- Demirguc-Kunt and Klapper. 2013. *Measuring Financial Inclusion: Explaining Variation in Use of Financial Services across and within Countries*. *Brookings Papers on Economic Activity*, spring 2013
- Global Financial Index. 2011. World Bank. www.worldbank.org
- Mohieldin, et. al. 2012. *The Role of Islamic Finance in Enhancing Financial Inclusion in Organization of Islamic Cooperation (OIC) Countries*. *Islamic Economic Studies*: Vol. 20, No. 2, December 2012 (55-120)
- Naceur, S.B et al. 2015. *Can Islamic Banking Increase Financial Inclusion?*. IMF Working Paper Series: Middle East and Central Asia: www.imf.org
- Sarma, M. and Pais, J. 2008. *Financial Inclusion and Development: A Cross Country Analysis*.
- Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation (COMCEC). 2014. *Financial Outlook of the OIC Member Countries 2014*. COMCEC Coordination Office: www.comcec.org
- The World Bank (2008) *Finance for All? Policies and Pitfalls in Expanding Access*, A World Bank Policy Research Report, World Bank, Washington, DC. USA

Role of Virtual Capital in Business Development for the Ummah

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ABSTRACT

The challenges of a very fluctuate business world today, demanding a high adaptability, creative while efficient in building a last longer excellence. Observing the success of businessmen in overcoming the limitations of physical capital ownership, proving that they have a tremendous potential power. The potential is basically derived from the noble values that were exemplified by Prophet Muhammad PBUH. For that the concept of the Virtual Capital that is not visible was formulated, but its presence can be felt. Virtual capital was built from members' intellectual synergy, boosted by capital based on the social and moral capital. The birth of Virtual Capital is determined by the embodiment of human potential business people among the Ummah is able to be expressed in the spirit and ideals of a strong will (Azam) and also sublimity. Utilization of human potentials could double the competency of the members in building a very strong Virtual Capital. Virtual Capital could also overcome the limitations or strengthen the physical capital that has already been held. Business excellence in this turbulent era will be largely determined by the presence of Virtual Capital that can be built and maintained by the Ummah.

Keywords: *Sublime Values, Virtual Capital, Human Potentials, Competence.*

I. BACKGROUND

Prophet Muhammad's life history is loaded with the noble values that are beneficial to the interests of mankind. Since a young age prophets have been faced with the challenges of poverty, and all of them were able to pass well-flower can even grow in a sustainable manner. Limitations of physical capital and material possessed were not a barrier to work and do business. Values of Honesty, Intelligence and Togetherness become exemplary even since he became a goatherd to cooperate and get successful trade. Honesty and responsibility were practiced in the business of the Prophet, were able to bring the trust of physical investors. The intelligence demonstrated through the ability (intellectuality) to carry out their work properly and well, to increase the trust (mutual trust) more for the parties. Togetherness (net-working) that was proved through mutual respect was able to produce the benefits that can be felt and also can become emotional ties to the parties.

Business activities require good cooperation between the parties concerned from the very beginning. Business success is highly dependent on the quality of cooperation among the parties. Instead, barriers even business failure, often preceded by weakness in the cooperation itself. Prerequisites of successful business cooperation in general requires the values of honesty, intelligence and togetherness, as evidenced by responsibilities, capabilities and benefits as expected by the parties to cooperate. To promote the progress of Ummah business today and for the times to come, all business activities need to be guided by the noble values. The limited resources of the financial economy, which is often perceived as the main obstacle in business development of the Ummah, will be resolved through the cooperation of qualified business. It is realized that basically the various business activities of the Ummah require considerable capital resources. While financial resources are controlled by the investors, would only be offered or deposited in the party that can be trusted, capable at once can be a bonding business for the parties to cooperate. Thus, to meet the limited economic resources of the Ummah during this time, then the noble values need to be re-emerged into the potential of the Ummah whose main business strength, flexibility as well economical.

Today's business environment experienced so many changes and faced a new business phenomenon that emerged during the last decade. It needs the efforts of anticipation and adaptation management using the new paradigm and more in line with these changes. Business people need to be aware that today's business environment is and will undergo continuous change, as it is said Hartanto (2009), that the Business World now was in a turbulent situation. The alterations are often basic, unpredictable, no clear pattern and continuous that cannot be

faced with certain standard way, because the changes generally do not have a precedent in the past. In such circumstances, it is necessary that not only the ability to adapt a moment, but also the ability and willingness to always adjust to developments on an ongoing basis. In an effort to always adapt to business development that is so volatile, the businessman faced with a situation where they need to be well prepared to work with competence and new insights.

Today experts start to realize that the success of a business development will be largely determined by the success of the businessmen in realizing and utilizing human potentials of the members of their company to the fullest and sustainable. Businessmen often do not realize the potential of their company members, in fact is a source of strength of the company's most valuable and most decisive advantages of the company. The existing management practice in various companies in Indonesia shows that the individual potential among the Ummah businesses tend to be ignored, even dwarfed. Critical issue for businesses among the Ummah today and for the future is how to get them to understand, raising and utilizing to the fullest individual potential to become effective business capital strength and efficient.

II. ACTUALIZATION OF HUMAN POTENTIAL OF THE UMMAH

Attitudes and organizational behavior is an activator of intelligent work. Attitudes and organizational behavior is a reflection of the individual potential owned by the businessmen among the Ummah to produce the best performance. Human potential, a positive potential is "embedded" in a person and ready to be raised for the common interest (organization). Human potentials (human potential) can be actualized by everyone who wants to bring it voluntarily, and can be further developed through a conducive environment. Hartanto (2009), categorizes human potentials as: Intellectual Potential - The potential is instilled in the members of the company in the form of a belief that they are able to answer the challenges of work and effort in the future as well (Competent Sense), passion to always update their competence (Innovative Learning spirit), a spirit to work hard to meet the challenges of the job as well as possible (Ethos), aware of the meaning of work and business, and strive to always work professionally and contribute to the best work (Conscious Business), and always tried to run errands and their responsibilities with far-reaching insights into the future to exceed the demands of today (aspiration). Next is, Social Potential - Potential members of the company's demonstrated ability to build a network of cooperation among the members that allow them create valuable synergies for the company and all its bettors. This potential is tangible in the determination and ability of the members of the company to be able to run an effective communication (Communication

Effectiveness) and a willingness to build commitment to the organization as a mirror of awareness about their membership of a community employment (Commitment to the organization) that they uphold and love. So this is a manifestation of social potential of the ability of members of the organization to establish a network of cooperation which have a high socio-economic. Socio-economic value was created, as this cooperation network gives members more choice, so that they can make the most of their freedom of choice to seek opportunities to cooperate and build valuable synergies. Next is the ethical potential - potential is formed of awareness and confidence of the members of the company about the economic significance of an ethical behavior. This ethical potential instilled in the members of the company who know and believe that ethical behavior is an honor, as well is the best guarantee to be able to build a better future for themselves and for the company (Insight ethical), which seeks to work in the best consistently good, despite the various obstacles and challenges in the workplace (Work Ethos) and is always responsible for all actions and decisions taken (Accountability).

The businessmen in the Ummah would have a ready-actualized human potential, as long as they are willing to bring it. Human potentials Ummah also including intellectual potential, the potential social and ethical potential. All three potential can be developed to the maximum to become the intellectual capital, social capital and capital trust, as well as an important element forming the virtual capital. Those who can realize all his potential (inside-out), will be able to increase the kinds of competence (outside-in) in them, as a smart businessman. Thus, the competence can be doubled so that the initial process is the embodiment of human potentials (character development) through the leadership role in a way stimulated the emergence of the human potential. Leaders may also encourage the human potential through the creation of a conducive-work culture for business people among the Ummah. Human potentials owned businesses need first to be raised first before it can be utilized. Embodiment of the individual potential of business requires a process of socialization at the start of the belief that generates attitudes and intentions towards the realization of an intelligent behavior. By realizing and utilizing the individual potential of the business is expected to be able to develop at the same time renewing their competence to answer the challenges of the contemporary business world, as well as to build a virtual capital of the company (Bagis, 2004).

Facing the challenges of the turbulent world of business today, companies are not just merely requires competent workers each field, but also require workers who are ready to renew their competence on an ongoing basis. Thus, better reflect the competence factor se-current capability, and is usually used as a measure of the quality of one's resources (HR). While the actualization of human potential, making the ability to be adaptive, in accordance with the

challenges of the changing world of work and business world. Capability built continuously shows the process of actualization of human potential that can generate new capabilities are required, as well as contextual. Embodiment of the human potential, in this case also means the embodiment of a positive character which is owned by the businessman, who has the potential power to build new competencies, and also creating smart businessmen among the Ummah. Human potentials can reflect the aspirations and ethical insights, innovative learning spirit (the spirit of change), the spirit of self-confidence (self-efficacy), the spirit of hard work (work ethos), and the spirit of cooperation (inclusive). While the competence of the members include, substantial and contextual knowledge, manual skills and social, as well as the ability of professional experience. The role of Transformational Leadership was introduced by Bass, BM (1998), it was believed to be capable to stimulate human potentials of the members, as it is more focused on efforts to cultivate human potential, while improving their new competencies.

Actualization of human potentials of businessmen among the Ummah maximally, may eventually create a useful Virtual Capital to realize a common goal of the organization (vision and mission).

III. CAPITAL PHYSICAL STRENGTHEN THE UMMAH'S VIRTUAL CAPITAL

Understanding the concept of the virtual capital as a form of intellect (knowledge), networks, and credibility, shows that the more and more utilization of the virtual capital, the more and more quality and value will be gained. Meanwhile the use of physical capital will be reduced or may be outdated. Thus, the effectiveness of the utilization of physical capital in today's business world will depend heavily on the support of virtual capital that accompanies it.

The contribution of physical capital in the company, the relative becomes inadequate in the face of the turbulent dynamics of the business environment. Capital needs to be able to sustain the business in the long term (Viability), can no longer be satisfied with the availability of physical capital in the company. Another necessary capital support is not limited, which is sourced from the high intellectual capabilities appropriate market development, the support of stakeholders are extensive and based on mutual trust which can be demonstrated. The existence of virtual capital is very powerful, can basically be appreciated financially in the capitalization of a company. The value of a company can be calculated based on the value of its assets and the value of its shares. For companies that already sell their shares (go-public), can follow the development of the stock market value that is capable to pass the asset value. The rising of shares,

be simply understood as the rise in the market price according to the law of supply and demand. Changes in a company's shares prices during this time, was more based on the achievement of corporate performance. Indeed the achievements and performance of the company not only can be judged on their ability to generate profits, but also the ability to build virtual capital on an ongoing basis. Microsoft as a successful company in the world, has a capital value of company shares far exceeds the initial value of the assets of the company. His achievement is more due to the level of trust constituents, top quality soft-ware products that can be used by the parties.

By utilizing all elements of virtual capital as has been exemplified by the Prophet Muhammad PBUH, the entrepreneurs among the Ummah should not hesitate and unencumbered by the limitations of physical capital ownership which handcuff so far. Building a virtual capital and use it as the main capital in the business at the same time it is a rational choice Islami, amid the challenges of the global business world. Utilization of virtual capital becomes more efficient because business cooperation is established on the basis of trust and the ability to be sustainable at the same time. Virtual Capital is also able to strengthen and improve the quality of the ownership of physical capital is relatively limited. Ownership of virtual capital at the same time is able to attract additional physical capital efficiently. In turn smooth flow of goods and money into increasing among the Ummah businessmen had the same virtual capital. Utilization of virtual capital better ensure the continuity of business Ummah, because the parties will participate in sustaining mutually beneficial cooperation. Thus, businesses based on virtual capital Ummah can guarantee business into business long-lived (the living Company).

IV. CONCLUSION

The challenges of the contemporary business world, especially among the business sector Ummah may not be faced only with the power of physical capital is very limited, while the dynamics of the business environment that is increasingly demanding needs of large capital and more diverse. Changes in business environment today and in the days to come, requires the support of the parties (stakeholders) is not limited. The company's desire to stay alive in the midst of the challenges of an increasingly volatile, requiring the availability of capital to continue to change, adapt to business needs. While physical capital and competencies (knowledge, skills and experience) of the Ummah would be a less than adequate, meet the high changes in the business world and the world of work. It is necessary for the ownership of virtual capital that is able to meet the expectations of the parties to be able to live in the long term. The new human

potentials into a virtual capital when the potential for someone to voluntarily merged, and enriched by the potential of others and are used for mutual business interests of the Ummah. Virtual capital is invisible, but its presence can be felt by the parties, as well as providing reinforcement on the existence of physical capital which has been more reliable businesses. Virtual capital can be used to create a wealth of high-value, when a business is run intelligently. Development of a company based on virtual capital is expected to ensure business continuity according to expectations of the parties Thus a business that is based on virtual capital can continue to create great benefits for future generations and the economic multiplier effect for the Ummah.

REFERENCES

- Azmi, Sabahuddin (2010), *An Islamic Approach to Business Ethics*, Lecturer, College of Islamic Banking, World Al - Lootah University, Dubai
- Bagis, A.A. (2004), *Aktualisasi Potensi Insani para anggota dalam membangun Kecerdasan Organisasional Bisnis*, Disertasi ITB Bandung.
- Bagis dan Busyairi (2010), *Peranan Potensi Insani, Kompetensi dan Lingkungan Kampus terhadap Produktivitas Dosen*, laporan penelitian Magister Manajemen Universitas Mataram.
- Bagis (2013), *Pengembangan Entrepreneurship dengan berbasis Keunggulan Kreatif*, Makalah Seminar Nasional APMMI II Mataram.
- Bass, B.M. (1998), *Transformational Leadership: Industrial, Military, and Educational Impact*, Lawrence Erlbaum, New Jersey.
- Beauchamp, T.L dan Bowie, N.E. (1997), *Ethical Theory and Business*, Prentice Hall, New Jersey.
- Bennis, W., Mason, R.O., dan Mitroff I.I. (1993), *Credibility: How Leaders Gain and Lose it, Why People Demand It*, San Fransisco.
- Cleveland, H. (2002), *No Body in Charge, Essays on the Future on Leadership*, Jossey.
- Drucker, P. F., (1999), *Management Challenges for The 21st Century*, Harper Collins, New yowrk.
- De Geus, A. (1997), *The Living Company*, Harvard Business School Press, Boston
- Hartanto, F.M. (2009), *Paradigma Baru Manajemen Indonesia: Menciptakan Nilai dengan Bertumpu pada Kebajikan dan Potensi Insani*. Integre dan Mizan Bandung.
- Heifetz, R.A., dan Linsky, M. (2002), *Leadership on the Line, Staying Alive through the Dangers of Leading*, Boston, Harvard Business School Press.
- McGill, M.E. dan Slocum, J.W. (1994), *The Smarter Organization*, Published by John Wiley, England.

- McKnight, DH. and Chervany, NL. (1996), *The Meaning of Trust*, [Retrieved September 23, 2012], <http://misrc.umn.edu/wpaper/WorkongPape>
- O' Reilly, C.A. dan Jeffrey, P. (2000), *Hidden Value*, Harvard Business School Press, Boston, Massachusetts.
- Pfeffer, J. (1994), *Competitive Advantage through People: Unlashing the Power of the Work*, Harvard Business School Press, Boston.
- Pfeffer, J. dan Sutton, R.I. (2000), *The Knowing-Doing Gap*, Harvard Business School Press, Boston.
- Porter, B.D. dan Hernacki, M. (1999), *Quantum Business, Membiasakan Berbisnis Secara Etis dan Sehat*, Penerbit Kaifa Bandung, 5 – 22.
- Stewart, D. (1996), *Business Ethics*, Mc. Graw-Hill, Departement of Philosophy Ohio University.
- Zaman, Asad, (2013), "Re-Defining Islamic Economics" paper prepared for the 9th International Conference on Islamic Economics and Finance to appear as Chapter in *Islamic Economics: Basic Concepts, New Thinking and Future Directions*, Cambridge Scholars Publishing.

Strengthening the Economic of Malay Countries by Integrating Islamic Banking and Unifying Currencies

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ABSTRACT

Indonesia, Malaysia, and Brunei Darussalam are the three largest Muslim country in the ASEAN region which is developing Islamic banking in order to advance the country's economics.

Besides the similarities and have a culture, equally evolved into more developed countries, it would require a stronger foundation in the face of the world economics which is currently being affected by the strong position of the US Dollar, bringing the currency in the Malay countries have less-strong competitiveness, so time for the Malay countries were aligned into wards economic growth to come together and have the bargaining power of the stronger currencies in the world by unifying each currencies to be single currencies.

Keywords: *islamic banking, currency, efficiency.*

I. INTRODUCTION

Countries clump wither influenced by culture, the use of the Malay language with the characteristic of each country, as well as social life people are divided into three main countries, namely Indonesia, Malaysia, and Brunei Darussalam.

In addition, the role of conventional banks are more inclined towards liberalism. Where the transaction costs and loan interest burden one side (customer) is not considered a maximum in driving economic growth.

Economy, both in countries clump wither nor in the world to use their own currency vulnerable affected by other giant currencies, such as US dollar, Euro, Yuan, and so forth.

II. DEVELOPMENT OF ISLAMIC BANKING

Renewed interest in Islamic banking and finance is driven not only by rapid growth but also by the financial crisis that occurred repeatedly over the past decade, with the global financial crisis recently for 2007-2009 being the most severe.

Many observers of the current financial crisis lies in the failure in corporate governance. Some researchers lately focused on a comparison of the performance of conventional banks with Islamic banks. Wilson (2010) noted the potential contribution of Islamic banks and reform of governance in restoring the credibility and stability in the international financial markets.

Several recent studies have extended the analysis of Islamic banks to cover a wider range of performance measures. This includes measures such as loan / financing, loan loss provisions, capital buffers, profitability, cost effectiveness, capitalization, asset quality, and intermediation ratio (Abedifar et al, 2013; .. Beck et al, 2013; Abdul-Karim et al, Khediri et al.; 2014.; Farook et al, 2014 .; Daher et al., 2015).

In a recent study, a severe financial crisis, traced back to the mid-2007 until the end of 2009, causing the collapse of investment banks largely because of loss of confidence in the mortgage credit market in the United States. The financial crisis has focused attention on the weaknesses of the conventional financial system which in turn has led to the identification of sharia finance as an alternative. Islamic finance has been found to be resistant to shocks due to

its inherent stability (Mirakhor, 2008) and that the banking and finance world without usury (riba) and maysir (gambling) is a better alternative (Siddiqi, 2008).

In the rules, the purpose of procurement of Islamic banking has actually been set forth in Act No. 21 of 2008 Article 3 of Islamic banking which states that: "Islamic Banking aims to support the implementation of national development in order to improve justice, solidarity and equitable welfare of people." (Explanation: Within reach the purpose of supporting the implementation of national development, Islamic Banking stick to the Sharia as a whole [*kaffah*] and consistent [*istiqomah*]).

If the bank is known to function as an intermediary is the conventional (link) between the parties that the excess funds and need funds in addition to carrying out the functions of financial services, then the Islamic bank has a different function with conventional banks. According to Law No. 21 of 2008 Article 4 paragraph (1), (2), (3) and (4) provide some functions in Islamic banks as follows:

- a. Sharia Bank and Sharia Business Unit shall perform the functions of collecting and distributing public funds.
- b. Sharia Bank and Sharia Business Unit can perform a social function in the form of treasury institution, which receives funds from the charity, donation, charity, grants, or other social funds and channel them to the organization zakat (Explanation: what is meant by "other social funds", among others, Bank revenue derived from the imposition of sanctions against the Customer [*ta'zir*]).
- c. Sharia Bank and Sharia Business Unit can collect social funds derived from waqf money and distribute it to the manager of waqf (*Nazhir*) in accordance with the will of the giver waqf (*wakif*).
- d. Implementation of social functions referred to in paragraph (2) and (4) in accordance with the provisions of the legislation.

Indonesian Institute of Accountants in Indonesia Sharia Banking Accounting Guidelines (2003: 1) explains that the function of Islamic banks as:

- a. Investment Manager
Islamic banks can manage the investments on customer funds using Mudharabah contract as an investment agent.
- b. Investor

Islamic banks can invest its own funds and customer funds entrusted to it by using the tools of investment in accordance with sharia. Gains derived divided proportionally according the agreed ratio between the bank and the owner of the funds.

c. Financial service providers and payment traffic

Islamic banks can conduct banking services such as non-sharia bank is not contrary to Islamic principles.

d. Developer social function

Islamic banks can provide social services in the form of zakat fund management, infaq, charity and virtue loans (*qardhulhasan*) in accordance with applicable regulations.

From the details of the principles, objectives and functions of the Islamic bank there are some great lines that can be concluded that the principles of the Islamic bank based on sharia principles, economic democracy and the principle of prudence. The purpose of which is to support the implementation of Islamic banks of national development in order to improve justice, togetherness, and equitable welfare. While the function of Islamic banks can be concluded that as a collector of public funds to be managed and distributed in the form of investment and provide banking services in accordance with Islamic principles and become bearers of social function.

The rate of growth of Islamic banking at the global level will no doubt. Assets of Islamic financial institutions in the world is estimated to reach 250 billion US dollars, grew by an average of more than 15 percent per year. In Indonesia, the Islamic banking business volume over the last five years the average growth of 60 percent per year. In 2005, Islamic banking Indonesia booked a profit of Rp 238.6 billion, an increase of 47 percent from the previous year. Even so, Indonesia has a very broad potential market for Islamic banking, it still lags far behind Malaysia.

Last year, the Malaysian Islamic banking make profits of more than one billion ringgit (272 million dollars). The end of March 2006, Islamic banking assets in the neighboring country is nearly 12 percent of the total national banking assets. While in Indonesia, Islamic banking assets in March 2006 a new period recorded 1.40 percent of total banking assets. Bank Indonesia predicts, accelerated growth of Islamic banking in Indonesia will start this year.

Office channeling policy implementation, support the government accelerated form of management accounts on a pilgrimage which will be entrusted Islamic banking, as well as the presence of new investors will encourage the growth of Islamic business. Islamic banking consultant, Adiwarman Anwar Karim, argued, among other things the development of Islamic banking will be marked issuance of sharia-based bonds or sukuk are prepared by the government.

A number of foreign banks in Indonesia, such as Citibank and HSBC, welcomed the issuance of sukuk by opening Islamic business unit. Meanwhile, a number of investors from the Gulf countries are also preparing to buy banks in Indonesia to be converted into Islamic banks. Criteria bank selected assets generally relatively small, between Rp 500 billion and Rp 2 trillion. Once converted, these banks attempted syndicating financing large projects, involve global financial institutions.

The existence of Islamic banking in Indonesia pioneered by the founding of Bank Muamalat Indonesia, initiated by the Indonesian Ulema Council (MUI) with the aim to accommodate the various aspirations and opinions in Islamic society have found that many bank interest was unlawful because it includes usury and also to take banking principles caution.

When viewed in terms of economic and business value, this is a major breakthrough because 80% of Indonesia's population is Muslim, of course this is a very potential business. Although some Muslims found that bank interest is not riba but avail, because the interest is given or taken by the bank are small so it will not be harmed or didzolimi each other, but still, for Muslims the establishment of Islamic banks is a major advance.

Islamic banking system in Indonesia was orphaned at Bank Indonesia. Ideally, the Indonesian government established a special financial institution level Islamic Bank Indonesia, Bank Indonesia Sharia.

Since the establishment of Islamic financial services, the Sultanate of Brunei got an important position in the international Islamic banking. However, the Islamic banking industry in Brunei has a number of challenges to be faced, including human resources are less skilled.

In mid-October 2012, Brunei Standard Chartered Bank (SCB) said it is considering the introduction of Islamic banking products this year to meet the growing demand for Islamic banking services in the Sultanate. The notification follows the launch of the Islamic Bank of Brunei which replaces the International Bank Brunei as the only bank operating in the country.

Tubes Amanah Islam Brunei is the first financial institution that offers savings and financing according to the principles of Islam, which was launched in 1991. Two years later his presence followed by the Islamic Bank of Brunei. They were joined in 2000 to the Islamic Development Bank of Brunei.

SCB CEO, Lai Pei-Si, said the launch of an Islamic bank in Brunei is the logical thing. Because society Brunei require Islamic banking products. "We hope that the presence of Islamic

products, can bring a more comprehensive solution to the Brunei Islamic," he said as quoted by the Oxford Business Group, Friday (25/1).

Managing Director of Bank Islam Brunei Darussalam, Javed Ahmad, said the Islamic banking market share is expected to increase to 60 percent from current levels of 40 to 55 percent. Ahmad calls Brunei force led economic and political stability are strong, good infrastructure and government support, was able to build a reputation as a center for Islamic finance. "With a more aggressive marketing, it is not impossible Brunei became the center of Islamic finance in the next few years."

December Global Consulting Firm Ernst & Young said the value of the global Islamic banking reached 1.55 trillion dollars in 2012 and projected to reach 1.8 trillion dollars this year. The growth of the Muslim population in the Middle East, North Africa and Asia became the main driver of the increase in demand for Islamic financial services. From the banking side, the Sultanate of Brunei clearly benefited, especially after launching the first sukuk short-term government property, worth BND150 Billion Sukuk Ijarah or 111 Billion US Dollars for the three-month certificate in April 2006.

Autoriti Monetari Brunei Darussalam (AMBD) as the central bank announced the price of the successful issuance of sukuk all its worth BND100 82 billion or 122.5 billion US dollars at the rate of 0.16 per cent rent. Observers from the Economic Research Center and the University Kebangsaan Malaysia Islamic Finance, Abdul Ghafar Ismail, said that Brunei must meet demand for the development of Islamic banking products if it wants if it wants to maintain its position in the market. "Product innovation Islamic banks could encourage Islamic banking industry so that the impact on economic growth."

Economists believe that the Sultanate continues to work to address these challenges, especially with the increase in the training of staff. Because the human resources to be a factor of success in the field.

After strengthening the operational base and regulatory framework, Brunei taking steps to address the shortage of trained industry professionals in the Islamic financial sector by providing on the job training. Sultanate itself has provided a strong foundation for developing the industry. Experts suggest the Sultanate must shift its focus to export expertise and consolidate its global role in Islamic banking.

III. UNIFICATION OF CURRENCY

What is unusual advantage enjoyed by the member states that adopt a regional single currency? Determination of the single currency has the potential to improve the efficiency of economic performance of its members. The efficiency improvements arise through several things, among others:

- a. Reduced costs of trade transactions among member countries through the loss of a currency transaction costs and exchange rate risk that usually follow the process of payment in commercial transactions between countries,
- b. Increased transparency of prices of a product produced by different countries in the single currency area is concerned. In the case of countries uni-Europe, a decrease in the cost of transactions occurring reach 0.25-0.5% of the total Gross Domestic Product (GDP) of each country member of the EU. On the other hand, because the prices of products is expressed in the same currency, then consumers in the region can easily do a price comparison of similar goods. Therefore, the possibility of manufacturers to take excessive advantage becomes more difficult, so in the end the consumer will benefit. Both of these individuals would have the effect of increasing the economic activity in member countries of the single currency area, which in turn will have the effect of increasing the economic welfare of these countries.

Another advantage that also follow the implementation of the single currency system is the reduced cost of managing the monetary policy of the countries of the single currency area. This is caused by the convergence of monetary policy management for each member state the single currency area at a joint monetary policy authority that was mandated by the entire region. In addition, the adoption of the single currency also give credibility and disciplined management of macroeconomic policies for its member countries.

In the case of the European Union, the management of monetary policy is conducted by the European Central Bank (European Central Bank / ECB), which is mandated by all member states of the European Union. Thus, the task of managing monetary policy in each member state to be lost along with the costs associated therein. The central bank in each member state just function like branches of central banks that carry out functions as the central monetary authority for the whole of the single currency area.

This last advantage, at the same time also the major costs of the application of the single currency system. The loss of function of the management of monetary policy in each member

state has implications for reduced tool region / policy instruments to intervene in the management of the domestic economy of the country concerned. The state's ability to use monetary policy as a tool to stimulate the economy or to contract individually be lost.

Position monetary policy can only be changed by the Central Bank that the region has the same implications for all member countries. Thus, the ability of each member state to act in dealing with domestic economic problems to be limited to the rest of the macro-economic policy management instruments staying her course.

Furthermore, the implementation of monetary policy collectively also cause restriction to the freedom of management of fiscal policy by each member state. Decision expansion or contraction of fiscal policy can only be taken as long as it does not interfere with monetary stability of the country concerned, so as not to put pressure disturbance to the condition of the economies of the other member states.

Discussion of the advantages and disadvantages of the application of the single currency area above brings us to the criteria of the single currency area. Economic criteria that need to be fulfilled by the optimal area for the application of the single currency at least cover the following aspects aspects:

1. The high intensity of trade between the countries involved in the region,
2. The high level of similarity of the pattern of economic cycles and structural disorders member countries of the region, both in terms of supply / production, as well as on the demand side, and
3. Convergence pattern of economic development of the countries that joined in the region.

Convergence pattern of economic development here means convergence of per capita income growth (GDP per capita) allied countries, where per capita income growth relatively advanced countries tend to grow more slowly than countries that are relatively still building.

The first criterion is absolutely necessary that regional member countries can receive maximum benefit from the introduction of the single currency area. The second criterion is needed to minimize the occurrence of pressure on each of the member countries to undertake economic stabilization policy responses individually. Meanwhile, the divergence of economic development level will also tend to cause each member to perform pattern of economic management policies tend to differ. Therefore, to ensure the continuity of a single currency area, the third-laden economy must be met.

In the case of allied countries, particularly in the case of Indonesia and Malaysia; at least two of the three criteria above gives a pretty good indication. The intensity of trade between countries continued to show rising trend until now. It is driven by the commitment of the countries that are members of the ASEAN to realize the ASEAN free trade area (ASEAN Free Trade Area - AFTA) and bad experiences during the Asian economic crisis in 1998.

In addition, the tendency of the rapid development of production networks in the ASEAN region also helped propel the rising intensity of trade between the countries allied rapidly. The trend of increasing trade in terms of intensity this provides a great opportunity for the member countries of the region to be able to receive a relatively high profit from currency unification process through the reduction of trade transaction costs and increased price transparency of the resulting product.

The pattern of economic cycles and structural disruption to the economy in the ASEAN (including countries clump wither) also showed a trend which is increasingly in sync with one another. Cycle lethargy and accelerating economic growth in ASEAN countries tend to correlate high and tend to occur at the same time. It is also supported by the significant positive correlation of structural disorder on the economies of Asian countries, especially after the period of the Asian financial crisis in 1998.

Structural similarity interference patterns that occur in ASEAN member countries is causing a reaction that policy will be taken to address the structural disruption of the respective economies also become tend to be similar. Therefore, ASEAN countries tend to have the potential to reap the benefits of the application of the single currency through increased efficiencies generated by the harmonization of monetary policy in the region.

ASEAN countries need to intensify cooperation in the harmonization of monetary and financial sector can help increase the net benefits of the economic integration process underway. Currently, for the ASEAN countries to improve the process of monetary and financial policy coordination, by setting up a single currency policy as a long-term goal.

IV. CONCLUSIONS

Based on information about the progress of Islamic banking in the country-the country of residence clumps, decisions need to be taken in establishing a unified Islamic banking among countries that are not glued to wither conventional capitalist economy, such as by building a

Malay Islamic banking center in which there is a special organization for the parent Islamic banking in their respective countries. It is not impossible if the integration is successful, then the capitalist system of economy in this case played by conventional banks, can be evaluated by the countries in the world and take particular attention to economic development clump wither through massive application of Islamic banking and structured.

In addition, as has been explained that by uniting currencies during economic and political conditions in the region is stable and has a harmonious movement of economic growth, then the currency union have a huge impact for the development and strengthening of regional economic position in the world. Because the calculation of the strength of the economy is not only based on a single country, but is also influenced by economic developments in the countries that use the currency in the region.

REFERENCES

- Mansor H. Ibrahim., 2015. *Issues in Islamic banking and finance: Islamic banks, Shari'ah-compliant investment and sukuk*. Pacific-Basin Finance Journal. PACFIN-00772; No of Pages 7.
- Sabur Mollah., Mahbub Zaman., 2015. *Shari'ah supervision, corporate governance and performance: Conventional vs. Islamic banks*. Journal of Banking & Finance 58 (2015) 418–435.
- Romzie Rosman., Norazlina Abd Wahab., Zairy Zainol, 2014. *Efficiency of Islamic banks during the financial crisis: An analysis of Middle Eastern and Asian countries*. Pacific-Basin Finance Journal 28 (2014) 76–90
- <http://www.republika.co.id/berita/ekonomi/syariah-ekonomi/13/01/25/mh6542-perbankan-syariah-brunei-terkendala-kualitas-sdm>
- Sjamsul Arifin., <http://internasional.kompas.com/read/2012/01/26/01592441/Pelajaran.dari.Krisis.Euro>
- Arief Ramayandi., Ari Tjahjawardita., <https://inspirasitabloid.wordpress.com/2010/08/30/wacana-penerapan-mata-uang-tunggal-asean-sebuah-komentar/>

The Comparative Study between Islamic and Conventional Credit Card: *Aqad* and Historical Perspectives

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ABSTRACT

Purpose – This study refined about, first is comparison between Islamic Credit Card in Indonesia and Malaysia, both in *aqad* (contract) and historical perspectives. Second purposes is to differentiate the Islamic and Conventional Credit Card in both countries.

Design/methodology/approach –The project will use qualitative method where the source will obtained secondary data from several of literatures, journal research, articles, magazines and newspaper whether come from hard copy or websites.

Findings – There is similarity phenomena of Islamic Credit Card between Indonesian and Malaysian Cases, either in contract (*aqad*) and historical perspectives. For the second purpose it is found that the differentiation factors in the Islamic credit cards like no compounding on profit, control mechanism by merchant give additional features that give Islamic credit card advantages over the conventional, in term of transaction and rebate system.

Project type – General review.

I. INTRODUCTION

A credit card is a banking product to give convenient payment mode as it can be readily used for making any purchases. However, the use of this card should in carefully, could be the customer would owe more than they can pay and having financial problems. Hence the government through The Regulation of Central Bank of Indonesia (PBI) No. 14/PBI/2012 by restricting the ownership of credit card it is aim for customer and issuer protection. Steve Marta, Te General Manager of Indonesian Credit Card Association (AKKI) said that AKKI and The Credit Card Issuer (Bank and Non-Bank) will cooperate to identify the customer (Income between 3 – 10 Million Rupiah) who had more than two of credit card issuer would be withdrawn. (www.tribunnews.com, Oct 20th 2014).

But this protection purpose by the government inversely with the growth of credit card in Indonesia, in term of Numbers of Credit Card, Numbers and Value of Transaction between 2009 – May 2015 as Table shown below:

Year	Number of Card	Number of Transaction	Value of Transaction (million)
2009	12.259.295	177.817.542	132.651.567
2010	13.574.673	194.675.233	158.687.057
2011	14.785.382	205.303.560	178.160.763
2012	14.817.168	217.956.183	197.558.986
2013	15.091.684	235.695.969	219.026.985
2014	16.043.347	250.543.218	250.177.517
Mei 2015	16.226.878	108.769.861	109.481.656

Source: AKKI, June 2015

Based on the table above that neither of number of card, number of transaction and its values has shown decrease of graph. All of those items has shown increase of trend, year to year.

The use of a credit card as a payment instrument would enables customer to make purchases of goods and payment for services instead of using cash. The comparison at any merchant, locally or internationally, it shows the same credit card brand as that on the credit card.

The credit card issuer will pay the merchant on customer behalf first and bill it later. After that, the customer will receive monthly statement and required to settle at least the minimum payment amount before the due date.

Various studies have examined the credit card usage in the context of conventional banks rather than Islamic banks (Merrick, 1999; Warwick and Mansfield, 2000; Kenner et al., 2001; Kaynak, 2001). Recently most of conventional credit card studies directly focus on examining behavioral customer usage (Parahoo: 2012; Ming-Tenh et.al: 2013; Chen: 2013; and Veludo de Oliveira: 2014) as well as Islamic Credit Card (Dali et.al.: 2015; Amin, Hanuddin: 2012; Amin, Hanuddin: 2013 and Ahmed et.al.: 2010).

Credit card referred as the means of payment which involves the concept of buying first and paying later (Yee et al., 2007). For simplicity, credit card is best described as “buy now” and “pay later” option. (Amin, Hanuddin: 2012). A card that assures a seller that the person using it has a satisfactory credit rating and that the issuer will see to it that the seller receives payment for the merchandise delivered.²

A credit card is a payment card that involves a line of credit that is issued to the cardholder. A cardholder is provided with the ability to pay a merchant (goods and services providers) if cash is unavailable. The amount of the purchase becomes the cardholder’s debt to the credit card issuer.³

Mathews and Slocum (1969) and Slocum and Mathews (1970) classify credit cardholders into two categories, based on their “use” of credit cards. The first group is labeled “installment users” because they elect to pay an amount less than their monthly balance and by rolling over part of the debt, they consequently pay interest charges.

The second group is labeled “convenience users”. This group considers cards as substitutes for cash and they pay all the balance due within the billing cycle. More recent terminology (see Worthington, 2005) categories these repayment behaviors as “transactions” (those who repay in full at the end of each billing cycle) and “revolvers” (those who do not repay in full and hence take debt and pay interest on that debt). In both studies, the researchers compare cardholders based on their social class.

² <http://www.bartleby.com/61/59/C0735900.html>

³ http://www.bma.gov.bh/cmsrule/media/pdf/publication/Credi_Cards_English.pdf

They find that upper class cardholders, in comparison with lower class cardholders, have a greater tendency to use cards for the convenience they offer and to pay the whole sum due within the billing period.⁴

Based on Islamic Financial Report 2014, Indonesia as 9th largest of Islamic Financial Asset in The world, meanwhile the 1st Largest is Malaysia. (bisnisyariah.com, Oct 4th 2014, retrieved July 2015). Since the studies of credit card mostly focus in examining of behavioral studies in term of customer usage both in conventional and Islamic credit card hence the first aim of this study is provide general review of Islamic credit card in Indonesia and Malaysia to bring wider perspective for customer.

II. DEVELOPMENT A CREDIT CARD

The credit card was the successor of a variety of merchant credit schemes. It was first used in the 1920s, in the United States, specifically to sell fuel to a growing number of automobile owners. In 1938 several companies started to accept each other's cards. The concept of using a card for purchases was described in 1887 by Edward Bellamy in his utopian novel Looking Backward.

The modern credit card was the successor of a variety of merchant credit schemes. It was first used in the 1920s, in the United States, specifically to sell fuel to a growing number of automobile owners. In 1938 several companies started to accept each other's cards. Western Union had begun issuing charge cards to its frequent customers in 1914. Some charge cards were printed on paper card stock, but were easily counterfeited.

The Charge-Plate was an early predecessor to the credit card and used during the 1930s and late 1940s. It was a 2 1/2" x 1 1/4" rectangle of sheet metal, similar to a military dog tag that was embossed with the customer's name, city and state (no address). It held a small paper card for a signature. It was laid in the imprinter first, and then a charge slips on top of it, onto which an inked ribbon was pressed. Charge-Plates were issued by large-scale merchants to their regular customers, much like department store credit cards of today.

In some cases, the plates were kept in the issuing store rather than held by customers. When an authorized user made a purchase, a clerk retrieved the plate from the store's files and

⁴ www.emeraldinsight.com/0265-2323.htm

then processed the purchase. Charge-Plates speeded back-office bookkeeping that was done manually in paper ledgers in each store, before computers.

The concept of paying different merchants using the same card was invented in 1950 by Ralph Schneider and Frank X. McNamara, founders of Diners Club, to consolidate multiple cards. The Diners Club, which was created partially through a merger with Dine and Sign, produced the first "general purpose" charge card, and required the entire bill to be paid with each statement.

That was followed by Carte Blanche and in 1958 by American Express which created a world-wide credit card network. Bank of America created the BankAmerica Card in 1958, a product which eventually evolved into the Visa system ("Chargex" also became Visa).

MasterCard came to being in 1966 when a group of credit-issuing banks established Master Charge. The fractured nature of the US banking system meant that credit cards became an effective way for those who were travelling around the country to move their credit to places where they could not directly use their banking facilities.

In 1966 Barclaycard in the UK launched the first credit card outside of the US. In contrast, although having reached very high adoption levels in the US, Canada and the UK, it is important to note that many cultures were much more cash-oriented in the latter half of the twentieth century, or had developed alternative forms of cash-less payments.

In these places, the take-up of credit cards was initially much slower. It took until the 1990s to reach anything like the percentage market-penetration levels achieved in the US, Canada or UK.

In many countries acceptance still remains poor as the use of a credit card system depends on the banking system being perceived as reliable. In contrast, because of the legislative framework surrounding banking system overdrafts, some countries, France in particular, were much faster to develop and adopt chip-based credit cards which are now seen as major anti-fraud credit devices.

The design of the credit card itself has become a major selling point in recent years. The value of the card to the issuer is often related to the customer's usage of the card, or to the customer's financial worth. In most cases a percentage of the value of the card is returned to the affinity group.

In Indonesia, the development of credit card started by 1980s, when Duta Bank introduce this payment method publicly. Duta bank cooperate with Visa and Mastercard International only targeting for high level of customer, especially for international travelers. (www.neraca.co.id, July 21st 2012, retrieved July 2015).

III. ISLAMIC CREDIT CARDS

Islamic finance is finance under Islamic law (or Shariah) principles. The basic sources of Shariah are the Qur'an and the Sunna, which are followed by the consensus of the jurists and interpreters of Islamic law. The central feature of the Islamic finance system is the prohibition in the Qur'an of the payment and receipt of interest (or riba).

According Oxford dictionary, "It was a card that published by a Bank or another entities that would give benefit to its holder to get any goods by a postponed payment (debt)."

"Debt" by the "Syarak" perspective according to Al-Qadhi Ibn 'Arabi define as change process of belonging (by purchase-sales or another similar ways) that one of the part doing by cash and another part doing by debt (at the fix time or not).

Meanwhile the "Majma' Fiqh Islami" defined credit card as a statement that legalized by the publishment or producer to an individu or a part by a contract between both sides which allowed the holder to purchase of products and services from the entities that accept the credit card without cash payment because guaranteed by the publisher or the producer.

Credit Cards are a very convenient method of making purchases without carrying cash. This convenience has caused their proliferation, and almost everyone has one. The way a normal credit card works is that you make purchases using your card and the bank issuing the card will pay on your behalf to the merchant providing you the product or service.

Many consumers have gotten used to this, and use the card as a loan machine. From the customer side (the card holder), he is given a loan for that amount and given a grace period (normally 26 days to a month) to repay the amount interest free. If the card holder decides he does not want to pay the full amount, he pays the minimum (printed on the monthly statement), and the rest of the unpaid balance gets deferred in the form of a loan with compound interest. In short, this has become a very pervasive aspect of our modern life.

For the Muslim, a Credit Card can be had, but extreme care must be taken not to be late in paying the statement balance in full, so as not to incur interest. If you travel on a regular basis, you may miss a statement, so maybe you want to talk to your bank about this and explain that you travel and make other arrangements.⁵

Three types of credit card issuers now operate in the Islamic card space: major global banks that set up separate Islamic banking companies; traditional banks converting to the Islamic model; and Islamic startups. As the market emerges, entrants must foster both a sustainable business model and the ability deal with such core issues as interoperability with global card companies, product design, and processing venues.

IV. DEVELOPMENT ISLAMIC CREDIT CARD

About 50 years long range period of establishment differences between conventional credit card and Islamic credit card. Since the introduction of the first credit card in 1914 by Western Union in the USA, as for the year 1995 there were 36,000 banks issuing 450 million credit cards throughout the world (Kaynak et al, 1995). Islamic financial institutions are relatively recent creations: one of the first Islamic banks was set up in Egypt in 1963. Although the origin of modern Islamic banking was in Egypt, it probably would not have developed as an important financial force without the strong support of Saudi investors.

The Islamic Development Bank (IDB) was established in 1975 and gave momentum to the Islamic banking movement. It was the first time in modern Muslim history that an international financial institution committed itself to conduct its activities in conformity with the Shariah.

Instead of working on the basis of interest, the bank was authorized to levy a service fee to cover its administrative expenses.

Since the creation of the IDB, a number of Islamic banking institutions have been established all over the world and some countries have taken the necessary steps to organize their 11 banking systems along Islamic lines. The first private Islamic commercial bank, the Dubai Islamic Bank, was founded in 1975.⁶

⁵ <http://muslim-investor.com/principles/credit-cards.html>

⁶ <http://www.islamicfinance.de/ukislamiccreditcard.pdf>

Indonesian banks continue to grow their shariah-compliant credit-card businesses. For example, Bank Danamon Syariah has offered a non-interest-bearing credit card for the past several years. Bank Internasional Indonesia has recently begun to offer shariah credit cards with several different levels of service and BNI Syariah launched a card named the Hasanah Card. All these offerings are linked to the MasterCard worldwide platform, and in each case the “credit” is structured to comply with shariah principles. In some cases, such as that of Bank Danamon Syariah, the card is based on the scheme of kafalah, in which the bank acts as guarantor for the card holder's purchases from merchants, while in others (ijarah) the card issuer provides a neutral payment platform for card holders, or in a qardh scheme the card issuer provides cash advances through ATMs. In contrast, Bank Syariah Mandiri has developed a shariah debit card which mimics the utility of credit cards, and is based on the concept of murabahah. As the pressure for consumer and small-business credit continues to grow, more credit-card offerings are expected to be introduced to the marketplace.⁷

In Malaysia, cards were first introduced in the mid-1970s (Loke, 2007). At the early stage, credit cards were only issued to professionals or those considered successful businesspersons by card issuing companies. By the end of 1970s, an estimated 20,000 cards were issued. During that time, owning a credit card was considered a symbol of prestige. However, with the passage of time, eligibility criteria for obtaining credit cards have been increasingly relaxed. As a result, the number of cardholders reached to about three million by the turn of the last century. (Ahmed et.al. 2010)

In the Malaysian context, there are only eight banks (AmIslamic Bank Bhd., Bank Islam (M) Bhd., Bank Simpanan Nasional, Bank Kerjasama Rakyat (M) Bhd., CIMB Islamic Bank Bhd., HSBC Amanah (M) Bhd., Maybank Islamic Bhd. and RHB Islamic Bank Bhd.) offering Islamic credit cards. The number of Islamic credit card issuers is relatively small compared to their conventional counterparts. (Dali et.al.: 2015)

V. FEATURES OF ISLAMIC CREDIT CARDS

Many marketing strategies for Islamic credit cards talked about product features rather than selling the ethical values and concept underneath to the consumers. The equation that always in the mind of consumer about Islamic financial product is cheap. Meaning to say that, in any

⁷ GLOBAL BUSINESS GUIDE INDONESIA - 2013

Islamic debt-financing facilities, the rate of return to the financier should be at the lowest point of the profitability quadrant.

Islam permits the use of credit card so long it does not involve the element of usury. As an example if the withdrawing cash advance from the credit facility will result payment of an interest, it is prohibited.

Similarly if there is an additional interest charge due to delay in payment, it is prohibited also. Therefore, if the credit card serves as a charge card, where you only pay the principle amount that you use plus the service charges, it is permitted.

Dr. Monzer Kahf in Live Fatwa on Islam on line dated August 8, 2001 responded, *“Signing a credit card contract and using it in a way that generated payable interest is haram. It is then borrowing on interest. Signing the contract, using it, and making the payments within the grace period and making no cash withdrawals (whenever cash withdrawals generate interest), is permissible because it amounts to a contract that gives you a choice to deal or not to deal with interest.”*⁸

This product is open to Muslims as well as non-Muslims. A small fee may be charged annually for the credit card. There also have value-added benefits of conventional credit cards e.g. bonus points, gifts, shopping discounts, travelers' cheques etc. It just needs to have some kind of collateral of some form, which has been agreed to earlier with your financial institution, may be required.

A credit limit will be based on your collateral value. It may be possible to obtain general Takaful coverage. Some banks may provide other services such as “zakah” payment via this credit card. It may be possible to apply for a supplementary card.⁹

VI. THE DIFFERENCES BETWEEN ISLAMIC AND CONVENTIONAL

There is no money lending. Since the transaction of credit card is based on trade (Bai'), the element of usury will be eliminated from the loan transaction that is applied in the conventional money lending.

⁸ Monzer Kahf, Live Fatwa on Islam, Islamonline.net

⁹ <http://www.islamicmortgages.co.uk/index.php?id=76>

There are none compounding of profit. Profit margin for the cardholders is fixed for the whole tenure between three and five years and the actual profit is charged based on the remaining balance. The monthly profit is calculated on a monthly basis, based on outstanding due or total transactions made for that particular month.

There is no controlling on transactions of merchant. Users are allowed to carry out only halal, or permissible transactions (Syaria compliant). The bank will decline transactions for six categories of non-*halal* related activities, including bars, discos, night clubs, purchase of beers, escort and massage services and gambling.

Islamic credit card can attract non-Muslim customers due to the attractive features offered. There will be no compounding factor for cardholders and the financing charges are on par with other credit cards offers.

Free rate on cash advance when bondholder withdraw cash advance from their credit cards, there shall be charges on the outstanding balance until fully settlement is made. If not, the charges or interest will accumulate throughout. The Islamic credit card is ready to forgo charges on the cash advance withdrawal. If that possible, Islamic credit card is offering free cash line to the customer.

However looking from the bank's view, this option is expensive due to the asset and liability management conflict. In other words the return rate for the deposit is higher than the interest rate charged to the credit facility. This may cause liquidity mismatch.

Then when become a late charge in Islamic Credit cards when sometimes late charges are imposed to customer who delays payment. In the case of Al-Taslif credit card, there shall be no charges for late payment which is outstanding not more than 30 calendar days.

If the late charges become effective due to administrative costs to maintain problematic credit facilities, then it is acceptable. But if it is meant as a means of interest then it is prohibited or *haram*.

Nonetheless, when it faces on the charges, the late charges computation is by multiplying the percentage (%) with outstanding balances, not by imposing flat and fixed rate.

Although the Banks claims that the late charges are for maintenance costs, it does not make any sense, why the computation is done in percentile. Maintenance costs should be fixed and does not depending on the amount of outstanding.

The value of the outstanding should not be the baseline to compute the late charges fee. Therefore, it suitable if that the credit cards impose flat rate for the late charges regardless of the minimum payment amount.

Controlling issue become risk in lack of validation the parties involved in the contract of exchange may pose some security issues. As example, nowadays purchasing online is easy by using credit cards. In the sale and purchase in e-commerce, the parties involved in the transaction has never met and don't know each other.

What happens if a minor committed in the transaction without the consent of the credit card owner? Is the transaction valid? In common situation the transaction is valid so long the service has been rendered and the benefits of the service have been utilized by the purchaser. But how can we minimize this unethical conduct?

As a recommendation the issuer credit card can implement pin code system for the credit cards. Pin code must be entered before transaction can be made. Pin code would help to minimize any misuse of credit cards by the unauthorized personnel.

There are bonus points and rewards nowadays. Many issuer give a bonus points and rewards system in the credit card in order to maintain loyal customers and as well ass increasing total sign ups. This bonus point and rewards can be permissible because it is like a gift (*hibah*) so long is not interest-lending base.

VII. CONCLUSION

There is similarity phenomena of Islamic Credit Card between Indonesian and Malaysian Cases, either in contract (aqad) and historical perspectives. Aqad (contract) of Islamic Credit Card in Indonesia mostly using Kafalah, Ijarah and Qardhul Hasanah meanwhile in Malaysia using Bai al Inah and/or tawarruq. In historical perspectives there is similarity phenomena of Islamic Credit Card "birth" in both countries that is willingness to use credit card in Syariah Compliant.

Potential fraud is a real threat that all consumers face in using credit cards because it can make cost to cardholder and high losses to the issuer. So, as the issuer, they must always alert for fraudulent scams and have taken security measures to protect the possible frauds. However, a cardholder also needs to take necessary steps to minimize the risk of being a victim of fraud.

Finally the differentiation factors in the Islamic credit cards compare to conventional ones which is no compounding on profit, control mechanism by merchant give additional features that give Islamic credit card advantages over the conventional. Islamic credit card based on halal only transaction, rebate (ibra) system.

REFERENCES

- Adil Manzoor Bakhshi,(2006), “*Developing a financial model for Islamic credit card for the UK*. Dissertation submitted in partial fulfillment for the degree of MSc in International Banking & Finance, University of Salford
- Ahmed, ZU., Ismail, I., Sohail, MS., Tabsh, I., dan Alias, H. (2010), “Malaysian consumers’ credit card usage behavior”, *Asia Pacific Journal of Marketing and Logistics* Vol. 22 No. 4, 2010 pp. 528-544
- Amin, H. (2012), “Patronage factors of Malaysian local customers toward Islamic credit cards”, *Management Research Review* Vol. 35 No. 6, 2012 pp. 512-530
- Amin, H. (2013), “Factors influencing Malaysian bank customers to choose Islamic credit cards: Empirical evidence from the TRA model”, *Journal of Islamic Marketing* Vol. 4 No. 3, 2013 pp. 245-263
- Chekitan S. Dev and Don E. Schultz (2005), "In the Mix: A Customer-Focused Approach Can Bring the Current Marketing Mix into the 21st Century" ., *Marketing Management* v.14 n.1
- Dali, NRSM., Yousafzai, S., dan Hamid, HA. (2015), “Credit cards preferences of Islamic and conventional credit card”, *Journal of Islamic Marketing* Vol. 6 No. 1, 2015 pp. 72-94
- Devlin H.L., Worthington S., Gerrard P. (2006).”An analysis of main and subsidiary credit card holding and spending”.*International Journal of Bank Marketing*, Vol. 25 No. 2, 2007 pp. 89-101 pp. 91.
- Feng Bai Xiangmin Chen, (2013),"Analysis on the new types and countermeasures of credit card fraud in mainland China", *Journal of Financial Crime*, Vol. 20 Iss 3 pp. 267 – 271
- Houghton Mifflin Company,*The American Heritage® Dictionary of the English Language, Fourth Edition* copyright ©2000 .
- Imam Al-Ghazali, Halal & Haram Dalam Islam, Cetakan ketiga, Jasmin Enterprise, Kuala Lumpur (2000)
- Kaynak, E. (2001), “Consumers’ attitudes and intentions towards credit card usage in an advanced developing country”, *Journal of Financial Services Marketing*, Vol. 6, pp. 24-39.
- Kaynak, E., Kucukemiroglu, O. and Ozmen, A. (1995). Correlates of Credit Card Acceptance and Usage in an Advance Developing Middle Eastern Country. *Journal of Service Marketing*, 9(4), 52-63.
- Kenner, J., Mize, L., Gilbert, P. and Saracino, M. (2001), “University students’ knowledge of credit and credit card use”, *The Family Relations and Human Development Resource Biennial*, Vol. 4, p. 76.
- Kotler, P., *Principal of Marketing*, (10th Edition) Printice Hall, New Jersey, 2004

- Loke, Y.J. (2007), "Determinants of merchant participation in credit card payment schemes", *Review of Network Economics*, Vol. 6 No. 4, pp. 474-94.
- Merrick, B. (1999), "Teenagers' lack of financial knowledge", *Credit Union Magazine*, Vol. 65, p. 20.
- Sanjai K. Parahoo, (2012), "Credit where it is due: drivers of loyalty to credit cards", *International Journal of Bank Marketing*, Vol. 30 Iss 1 pp. 4 – 19
- Tania Modesto Veludo-de-Oliveira Marcelo Augusto Falciano Renato Villas Boas Perito, (2014), "Effects of credit card usage on young Brazilians' compulsive buying", *Young Consumers*, Vol. 15 Iss 2 pp. 111 – 124
- Warwick, J. and Mansfield, P. (2000), "Credit card consumers: college students' knowledge and attitude", *Journal of Consumer Marketing*, Vol. 17, pp. 617-26.
- Wendy Ming-Yen Teoh Siong-Choy Chong Shi Mid Yong, (2013), "Exploring the factors influencing credit card spending behavior among Malaysians", *International Journal of Bank Marketing*, Vol. 31 Iss 6 pp. 481 -500
- Yee, C.S., Eam, L.H. and Sanusi, N.A. (2007), "The consumer choice of Islamic-based credit card: an analysis of bivariate probit model", in Sanusi, N.A., Harun, M. and Samsudin, S. (Eds), *Readings in Islamic Economics and Finance*, Universiti Utara Malaysia Press, Sintok.

www.neraca.co.id, July 21st 2012, retrieved July 2015

www.tribunnews.com, retrieved July 2015

The Effect of Sukuk Financing to Company Performance and Stock Performance of the Issuer Listed in Indonesia Stock Exchange (IDX) Year 2009-2013

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ABSTRACT

This study Aiming to Determine Whether the sukuk Affect the company's performance and stock performance of companies listed in the Indonesia Stock Exchange. The approach is a quantitative approach using analytical techniques PLS (Partial Least Square) with three latent variables namely sukuk as exogenous, firm performance as endogenous intervening variables, and the performance of the stock as an endogenous variable. The indicators used to reflect sukuk in this study are Sukuk to Equity Ratio and Sukuk to Liability Ratio, and the indicators used to reflect the company's performance are Return on Assets, Return on Equity and Earnings per Share. While the stock's performance is reflected by Price to Book value and price earning ratio.

The results showed that sukuk has a significant effect to corporate performance, as well as the performance of the company has a significant effect to the performance of the stock. While sukuk does not have significant effect to the performance of the stock.

Keywords: *Sukuk, Corporate Performance, Stock Performance*

I. PRELIMINARY

1.1. Background

Islamic financial industry is now progressing quite rapidly. Marked by the development of financial instruments, such as Islamic banking continues to grow beat conventional banking, followed by the emergence of Islamic capital market to meet the interests of investors who want to base their investment activities based on the principles - principles of sharia as well as the interests of those who require additional capital that does not infringe Islamic law.

Nowadays, it appears one of the instruments of investment of *sukuk*, or better known as Islamic bonds. *Sukuk* product development began in the Middle East countries, Southeast Asia and up to now spread to many other European and Asian countries. *Sukuk* as one of Islamic financial instruments have contributed significantly along with an increase in global Islamic finance industry.

Ahmed (2007) states that Islamic financial instruments, especially *sukuk*, is increasingly becoming an important consideration - both Muslim and non-Muslim - from the perspective of investment and product innovation. Potential magnitude as *sukuk* fund future change into a fund at this time. *Sukuk* can be issued for assets existing and will exist in the future. In addition, the institution - an institution that became the infrastructure supporting the global Islamic finance has also been established, such as the *Accounting and Auditing Organization for Islamic Institution (AAOIFI)*, *International Financial Services Board (IFSB)*, *International Islamic Financial Market (IIFM)*, and the *Islamic Research and Training Institute (IRTI)* (Endri, 2009).

One of the financial instruments is based on Islamic economy is a financial instrument on investment activity in the capital market known as *Sukuk*. *Sukuk* according Ryandono (2009: 350) is defined as follows:

Sukuk are securities that contain contract (contract) financing based on Islamic principles. *Sukuk* issued by agencies / institutions / organizations both private and government to investors (*sukuk holders*). *Sukuk* requires the issuer to pay income to investors in the form of profit-sharing or margins or fees during the contract period. Issuers must pay back the investment fund to investors at maturity.

Referring to the market conditions in Indonesia, Islamic banking and finance industry is also growing rapidly. According to data from the Directorate of Islamic Banking of Bank Indonesia, the government has issued Shariah Securities (SBSN) with outstanding amounted to

Rp 98.8 trillion to December 2012. Early in 2009 the government also published a series of Retail *Sukuk* SR-001 and continued with Retail *Sukuk* SR-002 in 2010, the SR-003 in 2011, and SR-004 in 2012. Ali Rama (www.iseifd.org) states that "the excess over the global *sukuk* is large enough to be a signal the prospects of *sukuk* as an alternative source of financing to finance the construction in the country, especially the development of infrastructure". In addition, Indonesia Stock Exchange of data accumulated corporate *sukuk* issuance until the year 2011 amounting to Rp 7.915 trillion, also increased compared to the year 2010 amounted to Rp 7.815 trillion. Especially for corporate *sukuk* is an opportunity and an alternative for the company to meet its funding needs. *Sukuk* growth from year to year the company also provides a signal that Islamic financial instruments could have been a sponsor of its financing needs for the present and the future, which the company can issue *sukuk* as an alternative funding is in addition to issuing shares that had been wont to do.

Principles of Islamic bonds is fundamentally different from conventional bonds. Since there is convergence of opinion of fiqh that interest is forbidden in Islam because it is a form of usury, it appears the questions about the discount in the evaluation of investments. Then the instruments that have a component of interest (*interest-bearing instrument*) is out of the list of permitted investments. As with any company that guarantees funds through long-term debt instruments such as conventional bonds certainly provide income to investors in the form of interest or coupon (Huda & Nasution, 2007). Conventional bonds also is one product of debt financing that is not kosher. Then came the so-called alternative sharia bonds (*sukuk*).

According to the fatwa Indonesian Ulema Council (MUI), *Sukūk* is a long-term securities issued based on Islamic principles issuers to holders *Sukūk* which requires the issuer to pay income to the holder *Sukūk* in the form of profit-sharing / margin / *fee* and pay back funds *Sukūk* at maturity. It can be concluded from the above statement that MUI *Sukūk* in the theory of financial management is part of the balance of the company's capital structure, which means *Sukūk* is part of the company's capital structure decisions.

The use of *sukuk* as an alternative source of funding is a new company that is attractive. As is generally known, according Darsono and Hestuningrum (2012) companies in achieving a desired goal requires a source of financing that can be obtained through internal financing and external financing. Company funding decisions will affect the condition of the company's capital structure is a mix of funding sources permanent (long-term). The capital structure is very important for companies to be able to maximize the value of the company. Therefore, the

management will try to establish an optimal funding mix is called the optimal capital structure. In addition, changes in the company's capital structure will also affect the *returns* obtained by investors in the capital market as it relates to the change in value of the company.

In general, in order to meet the funding needs of the company in carrying out its activities, the company may choose an alternative source of additional funds exist, including through stock or long-term debt (bonds). Both types of funding sources has advantages and disadvantages that should be considered by the company as it will change the capital structure (*capital structure*) that exist.

There are several theories that are often raised about the funding decision-making companies, two of which are the *Trade-off Theory* and *Pecking Order Theory*.

Trade off theory states that the company determines the level of its capital structure at a level of capital structure to be achieved over time. The Company will seek to balance the benefits of the cost of the use of debt with bankruptcy costs and agency costs in the capital structure. While *Pecking order theory* states that funding decisions will follow a hierarchy, where internal funding source is preferred than funding from external sources. This theory could explain why companies that have high profit levels would have a small level of debt. (Darsono and Hestuningrum, 2012).

Companies tend to choose the issuance of shares due to its characteristics more flexible (no binding obligations to pay interest and principal) than bonds which seem more rigid. However, when viewed from the flexibility in decision making, companies prefer financing bonds rather than stocks. The company's efforts to obtain and increase the capital has become an integral part of investing activities, mainly in the capital market.

Based on this background, the researchers took the title "The Effect of Sukuk Financing to Company Performance And Stock Performance Issuers Listed in Indonesia Stock Exchange (IDX) Year 2009-2013".

1.2. Formulation of the Problem

From the above background, the formulation of the problem in this research are:

1. Are *Sukuk* significant effect on the performance of companies listed on the Stock Exchange in 2009-2013?

2. Does the performance of the company significant effect on the performance of the issuer's shares are listed on the Stock Exchange in 2009-2013?
3. Are *Sukuk* significant effect on the performance of shares listed on the Stock Exchange in 2009-2013?

1.3. Research Purposes

The aim of this study is:

1. To determine whether the *sukuk* significant effect on the performance of companies listed on the Stock Exchange in 2009-2013?
2. To determine whether the performance of the company have a significant effect on the performance of the issuer's shares are listed on the Stock Exchange in 2009-2013?
3. To determine whether a significant effect on the performance of *sukuk* issuer's shares are listed on the Stock Exchange in 2009-2013?

II. BASIS OF LITERATURE AND HYPOTHESES

2.1. Sukuk

National Sharia Board (DSN) No. 32 / DSN-MUI / IX / 2002 defines Islamic bonds as "a long-term securities based on sharia principles issued by the Issuer to holders of Islamic bonds, which require the Issuer to pay income to the holders of Islamic bonds in the form of profit-sharing / margin / *fee* and repay funds bonds at maturity."

While Huda and Nasution (2007: 88) defines *sukuk* as follows: *Sukuk* or Islamic bond is a form of funding (*financing*) and also investment (*Investment*) allow some form of structure that can be offered to keep avoid usury. "*Sukuk* is not a fixed-interest debt, but rather a concomitant funding based on the principle of sharing. The transaction, not contract debts but inclusion. The bonds of this type commonly called *muqaradhah bond*, where *muqaradhah* is another name of *mudaraba*. In the simplest form of Islamic bonds issued by a company or issuer as managers or *mudharib* and purchased by investors *shahib mall*."

Collected funds channeled to developing a long business or building a new unit that is completely different from the old business. Form a special allocation (*specially dedicated*) in sharia known as *mudaraba muqayyadah*. Upon its investment, investors are entitled to a certain benefit ratio is calculated on a professional and paid periodically.

Meanwhile, according to the regulations of the Capital Market Supervisory Agency and Financial Institution (Bapepam-LK), *sukuk* are Islamic securities in the form of a certificate or proof of ownership of equal value and represent a certain part (not separated or divided (*syuyu'/ Undivided share*) above:

- a. Certain intangible assets (*a'yan maujudat*);
- b. The value of the benefits on tangible assets (*manafiul a'yan*) whether certain existing and will exist;
- c. Services (*al khadamat*) which already exist or will be there;
- d. Asset particular project (*maujudat masyru 'mu'ayyan*); and / or
- e. Investment activities that have been determined (*nasyath ististmarin khashah*)

2.2. *Sukuk* Issuance as Corporate Finance

Sukuk is one of the sources of financing used by the company to fund its activities. Companies generally use debt or bonds, so that the ratio used to describe the proportion of the use of debt to finance the company's activities one of which is the *Debt to Equity Ratio* (DER). In this study *sukuk* calculated using several proxy or approach to the ratio that measures the proportion of the use of *sukuk* to finance the operational activities of the company, ie the ratio of *Sukuk to Equity Ratio*, and the *Sukuk to Total Liability Ratio*.

2.2.1. *Sukuk* to Equity Ratio (SER)

This ratio measures the proportion of funds from the *sukuk* on the company's equity. The greater this ratio indicates that a large portion of *sukuk* compared with the composition of the equity capital of other companies. SER is calculated using the following formula:

$$SER = \frac{\text{Sukuk}}{\text{Total Equity}} \dots \dots \dots (1)$$

2.2.2. *Sukuk* to Total Liability Ratio (SL)

This ratio is used to measure the proportion of the total *sukuk* obligations that become obligations of the company. SL is calculated using the following formula:

$$SL = \frac{\text{Sukuk}}{\text{Total Liability}} \dots \dots \dots (2)$$

2.3. Company Financial Performance

Measurement of company performance are classified into two dimensional categories by Venktraman and Ramanujam (1986) in Suta (2005: 4), the financial performance and operational performance. Enterprise performance categories used in this study is the financial performance because, in general, the performance of companies that considered by investors in making investment analysis or investment policy is financial performance.

The easiest method to determine the fundamental condition of the company is analyzing the financial statements issued by the company. In each company's financial statements available information needed by investors to make decisions. The financial report is an important information for investors in making investment decisions. Benefits of such financial statements to be optimal for the investor if the investor can analyze further through financial ratio analysis. Horigan (1965) in Tuasikal (2001) "states that financial ratios are useful for predicting the company's financial difficulties, results of operations, financial condition of the company today and in the future, as well as a guide for investors regarding the performance of the past and the future."

In addition, Ryandono (2009: 77) explains that "information about the financial assets in the market will determine the price movement of capital". The better financial performance, the stock price higher so that the market revenue increases. Suta (2005: 12) classifies financial performance into two approaches, namely the size of the accounting basis (*accounting-based measure*) and market-based measures (*market-based measure*). Accounting-based measures include sales growth, profitability, return on assets, and earnings per share, while the market-based measure is the total stock returns.

The approach used in this study is based on the size of the accounting (*accounting*) because this study is intended to look at the company's intrinsic value and performance of the company with financial ratios. Thus, the size of the performance-based accounting or accounting is more appropriate to use as an independent variable for the performance of accounting for the condition or intrinsic value of the company. Suta (2005: 12) says that "accounting information is presented in the form of financial statements".

2.4. Stock

Shares (*stock*) is one of the instruments most popular financial markets. Issuing shares is one of the companies when deciding to finance the company. On the other hand, stocks are selected

investment instruments that many investors because the stock is able to provide an attractive level of profits. Shares can be defined as a sign of ownership of an individual or party (entity) within a company or Limited Liability Company. By including the capital, then that party has a claim on the company's revenue, a claim on the assets of the company, and is entitled to attend the General Meeting of Shareholders (AGM) (IDX: 2012).

Ryandono (2009: 244) explains that "equity or stock is one form of capital investment in an entity (entity) is carried out by depositing a certain sum of money with the aim to master some of the rights of ownership of the company". Shareholders or investors get results through the distribution of dividends and *capital gains*. The company issuing the shares is generally limited liability (PT).

2.5. Sukuk Influence on Company Performance

Mujahid, and Fitrijanti (2010) explained that the issuance (*sukuk*) will impact on the availability of funds that can be used by companies to carry out the investment and operational activities. Increased investment activities and operations of the company will create the production and distribution of goods and services also increased.

The high productivity and distribution of goods and services will increase economic wheel. Insufficient *supply* of goods and services will encourage the movement of *demand* from consumers. Equilibrium price is reached from this economic activity will also create optimal profit levels, so the *net income* of the company will increase. The greater *net income* showed the more effective companies in its operational activities, so that with the issuance of this *sukuk*, financial performance is increasing.

2.6. The Influence of the Company's Performance Stock Performance

Good financial performance will improve investor hopes to make a profit on the investment they invest, thus increasing the interest of investors to invest in the shares of the company. The increased interest of investors to buy stocks will increase demand so that the stock price to rise. Therefore, in general, the financial performance moving direction of the share price. If financial performance is good, then the stock price will rise. (Tjun and Wijaya, 2009).

Opinions Tjun and Wijaya is in line with theory expressed by Ryandono (2009: 77), that the information about the financial assets circulating in the capital market will determine the price movement. Of both theories can be concluded that the better financial performance, the

stock price higher so that the market revenue will increase. In this study, an indicator of the performance of the company are as follows:

2.6.1. Effect of *Return on Assets (ROA)* of the Company's Performance

Sudana (2009: 26) explains that this ratio shows the company's ability to use all the assets owned to generate a profit after tax. The greater the ROA, means more efficient use of assets of the company or in other words with the same amount of assets that can generate greater profits. ROA is calculated using the following formula:

$$ROA = \frac{\text{Earnings after taxes} \dots \dots \dots (4)}{\text{Total Assets}}$$

2.6.2. Effect of *Return On Equity* to Corporate Performance

Return on equity is a ratio which is very important for the owner of the company (*the common stockholders*), because this ratio shows the level of return generated by the management of capital provided by the owners of the company. In other words, ROE shows the benefits to be enjoyed by shareholders. The growth prospects of the company ROE shows that the better because it means the potential for increased corporate profits. This is captured by investors as a positive signal of the company thereby increasing the confidence of investors and would facilitate the management of the company to attract capital in the form of shares. If there is an increase demand for shares of a company, then it will indirectly raise the price of such shares on the capital market (Sartono, 2001):

$$ROE = \frac{\text{Earnings after taxes} \dots \dots \dots (5)}{\text{Total Equity}}$$

2.6.3. Effect *Earning Per Share* for Corporate Performance

Earnings per share ratio (*Earning Per Share*) shows the amount of money generated (*return*) of each share. The larger the EPS value greater benefits received shareholder. Brigham and Houston (2001) explains that EPS is the company's ability to distribute the income to its shareholders. The higher the company's ability to distribute earnings to shareholders, reflecting the greater success of the business of the company. EPS is calculated using the following formula:

$$EPS = \frac{\text{Earnings after tax} \dots \dots \dots (6)}{\text{Share}}$$

2.7. *Sukuk* Influence on Stock Performance

Subalno (2009) explains that "fundamental analysis is an analysis related to the company's fundamentals are shown in the financial statements." On the basis of the financial statements that investors can assess the company's financial performance, especially in terms of making investments decisions. In addition, investors in the transaction in the capital market will base his decision on a variety of information in its possession. Information about *sukuk* is also one of the information that will affect investors' decision to invest. *Sukuk* issuance will impact on the availability of funds that can be used by companies to carry out the investment and operational activities.

This *sukuk* issuance would then give a *signal* or sign of how the effect on the performance of the company's shares at the same issue *sukuk* issue shares in the stock exchange market. *Signalling theory* applies here, where every action contains the information. The company *went public* can inform the company as transparent to investors (Subalno, 2009). This theory is strengthened by Jogiyanto (2008: 491) "If a relevant new information coming into the market are related to an asset, this information will be used to analyze and interpret the value of the assets concerned. The result is the possibility of a shift to a new equilibrium price."

Indicators of the performance shares are as follows:

1. Influence of Price to Book Value of the Company's Stock Performance

Price to Book Value ratio measures the financial market assessment of the management and organization of the company as a growing concern. The book value of shares reflect the historical value of the assets of the company. The company is well managed and operating efficiently can have a higher market value than the book value of its assets. PBV is calculated using the following formula:

$$PBV = \frac{\text{Market price per share} \dots \dots \dots (7)}{\text{Book Value per share}}$$

2. Effect of Price Earning Ratio of Stocks Performance Company

This ratio measures how investors assess the prospects for growth in the future, and reflected in the share price paid by the investor is willing to every dollar profits from the company (Sudana, 2009: 27). The higher this ratio indicates that investors have good expectations about the development of the company in the future, so to a certain income per share, investors are willing to pay a high price. PER is calculated using the following formula:

$$\text{PER} = \frac{\text{Market Price per Share}}{\text{Earning per Share}} \dots\dots\dots (8)$$

2.8. Hypothesis

Based on the background of the problem formulation of the problem, and the theoretical basis that has been described previously, in the research will be formulated several hypotheses. The hypothesis in this study are:

H1: *Sukuk* significant effect on the performance of the company.

H2: The performance of the company significant effect on the performance of stock

H3: *Sukuk* significant effect on stock performance.

III. RESEARCH METHODS

3.1. Research Approach

This study uses a quantitative approach using analytical technique PLS, PLS use of reason in this study is consistent with the literature written by Ghozali (2008) is as follows:

1. PLS aims to predict a relationship between variables. This is generally in line with the objective of which is to see the effect of financing penilitian sukuk on the profitability of the company.
2. PLS can be used for research that has little theoretical basis. This is consistent with the study because not enough are many theories that reveal the influence of sukuk financing to company profitability.
3. PLS can be used to estimate the model with small sample sizes.

3.2. Identification of Variable

1. The independent variable is the amount of sukuk or sukuk issued by companies called sukuk company.
2. Intervening variable is the performance of the company.
3. The dependent variable is the performance of the stock.

3.3. Definition of Operations

The operational definition in this study are:

1. Sukuk company or also called corporate sukuk is the amount of sukuk issued by companies listed on the Indonesian Stock Exchange (BEI). In this study, the indicators used are:
 - a. Sukuk to Equity Ratio is calculated by equation (1)
 - b. Sukuk to Total Liability Ratio is calculated by equation (2)
2. Performance is measured financial performance. Indicators used in the variable performance of the company are:
 - a. Return On Asset (ROA) is calculated by equation (3)
 - b. Return On Equity (ROE) is calculated by equation (4)
 - c. Earning Per Share (EPS) is calculated by equation (5)
3. Stock performance is the acquisition price and the value of stocks in the stock market is influenced by the performance of the operating and financial performance, the indicators used in the variable share performance are:
 - a. Price to Book Value (PBV) is calculated by equation (6)
 - b. Price Earning Ratio (PER) is calculated by equation (7)

3.4. Type and Source of Data

Secondary data used in this study a company's annual financial statement data sukuk issuer period from 2009 till 2013.

3.5. Sample and Population

The population used is the companies included in the group that meets the following criteria:

1. Noted as issuing sukuk issuers in the year 2009-2013.
2. Companies listed on the Stock Exchange and publish annual reports (annual report) in the year 2009-2013.

3.6. Engineering Analysis

Techniques of analysis in this study uses PLS technique in which there is a test *measurement* models, the validity and reliability of indicators and indicators of *structural* test model, that the correlation between the variables measured, which is a *partial least square* t test.

IV. RESULTS AND DISCUSSION

4.1. Model Analysis and Testing Hypotheses

The results of calculation test the validity of each indicator of Phase I are presented in the following table:

Table 1
Table outer loadings

	sukuk	Company Performance	Stock Performance
EPS		0.776	
PBV			1.000
PER			0.069
ROA		0.917	
ROE		-0.080	
SER	0.997		
SL	0.389		

Source: Data processed

Table 1 shows that the indicator SL, ROE, and PER should be excluded from the calculation because it does not meet the validity figure 0.5.

Results of testing the validity of each indicator calculation phase II are presented in the following table:

Table 2
Table outer loadings

	sukuk	company performance	stock performance
EPS		0755	
PBV			1,000
ROA		0939	
SER	1,000		

Source: Data processed

In the phase II test the validity of all the indicators meet the validity figure 0.5. So that all the indicators have been declared invalid.

Discriminant validity of the test results are presented in the following table:

Table 3.
Table cross loading

	Sukuk	company performance	stock performance
EPS	0206	0755	1032379
PBV	0000	0429	1,000
ROA	0000	0939	0405
SER	1,000	0041	0085

Source: Data processed

From the table above shows that the EPS indicator has a greater correlation to the construct of performance compared to konstruksya own shares (Corporate Performance). So the EPS indicator should be removed or excluded from the calculation.

Here is the overall end result of the test on the PLS *algorithm* with indicators all meet the standards of validity.

Table 4.
Validity of Test Results
(Outer Loading Test Results)

Indicator	Variables	Value Outer Loading	Information
SER	Sukuk	1,000	Valid
ROA	Company Performance	1,000	Valid
PBS	Stock Performance	1,000	Valid

Source: Adapted from Output SmartPLS

Based on the above results, the indicators are generating *output outer loading* values above 0.50 then all these indicators as valid.

Test Reliability

Table 5.
Composite Reliability

	Composite Reliability	Information
Sukuk	1,000	Reliable
Company Performance	1,000	Reliable
Stock Performance	1,000	Reliable

Based on the *reliability of composite* table above, it can be seen that all of the dimensions and variables meet the standards of reliability because it has a CR value above 0.70. This shows that all variables have a high enough reliability to perform the desired function throughout a given period. Research can be continued into the next stage of the analysis is test structural models (*inner model*).

Testing Structural Model (*Inner Model*)

Table 6.
R Square

	R Square
Sukuk	
Company Performance	0.347
Stock Performance	0.175

Based on *R Square* Table above it can be seen that the performance of the company as much as 34.7% influenced *sukuk* and the rest influenced by other factors beyond research. While the stock performance variables, as much as 17.5% influenced by the performance of the company and *sukuk*, rest influenced by other factors beyond research.

Test results *bootstrapping*

Table 4.9
Test bootstrapping

	original sample estimate	the mean of subsamples	Standard deviation	T - Statistic
sukuk -> company performance	0.589	0.592	0,146	4.045
sukuk -> share performance	-0.138	-0.095	0.169	0.817
the performance of the company -> stock performance	0.484	0,462	0.108	4.492

Based on the table above, can be interpreted as follows:

1. There is a significant influence on the performance of the company *sukuk* with a value of T-statistic $4.045 > 1.96$. With results like these, the research hypothesis H1 is accepted or can be supported by empirical data.
2. There is a significant influence of the company's performance against the performance of the stock with a value of T statistic $4.492 > 1.96$. With results like these, the research hypothesis H2 is accepted or can be supported by empirical data.

3. There is no significant effect on the performance of sukuk shares with a value of $0.817 < T$ statistic of 1.96. With results like these, the research hypothesis H3 is rejected.

4.2. Discussion

Results of quantitative analysis shows that *sukuk* has a significant positive effect on the performance of the company with a value of 4.045 t-Statistically, then with this hypothesis is accepted as true.

The analysis showed that the performance of the company a significant positive effect on the performance of the company's shares with a value of t-statistic 4.492. With these results, the research hypothesis is accepted truth.

The analysis shows that *sukuk* not significant effect on the performance of the company's shares with a value of t-statistic 0.817. With these results, the research hypothesis is rejected truth.

Based on the analysis of *R-Square* performance is influenced by a 17.5% share of *sukuk* and corporate performance, while the remainder is equal to 82.5% is influenced by other factors outside of the study.

V. CONCLUSION

Based on the value of the analysis and testing of hypotheses, it can take several conclusions as follows:

1. Sukuk issued by companies have a significant influence on the performance of the company with a value of $4.045 t \text{ statistic} > 1.96$. With these results the research hypothesis is accepted truth.
2. The performance of the company has a significant influence on the performance of the stock with a value of t-statistic $4.492 > 1.96$. With these results, the research hypothesis is accepted truth.
3. Sukuk issued by the company has no significant effect on the performance of the stock with a value of t-statistic $0.817 < 1.96$. With these results, the research hypothesis is rejected.

REFERENCES

- Achsien, H. 2000. *IGGI Islamic Investment in Capital Market*. Jakarta: Gramedia Pustaka Utama.
- Afaf, Nafiah. 2007. *Analysis of Effect of Announcement Issuance of Stock Return Against the Jakarta Stock Exchange*. Thesis S2 is not published. Bogor Bogor Agricultural University.
- Al-Amine Muhammad, and Muhammad al-Bashir. 2008. *Sukuk Market: inovations and Challenges*. Saudi Arabia: IRTI Publications (2008).
- Al-Quran and its interpretation. 2003. *Zhilalil Quran Tafsir Fi*. Volume 6. Jakarta: Gema Humanities Press.
- Anshori, Muslich and Sri Iswati. 2009. *Quantitative Research Methodology*. Surabaya: Airlangga University Press.
- Capital Market Supervisory Agency and Financial Institution. 2006. *Regulation No. IX.A.13. about the issuance of Islamic securities*. Jakarta
- Brigham, Eugene F. & Joel F. Houston. 2004. *Fundamentals of Financial Management*. Translation by Ali Akbar Yulianto. Jakarta: Salemba Four.
- Darsono and Ratri Dian H.2012. *Influence Of Capital Structure Characteristics of Companies Manufacturing Companies Listed In Indonesia Stock Exchange*. Volume I, No. 1. Diponegoro Journal of Accounting.
- National Sharia Council. 2002. *Fatwa No. 32 / DSN / MUI / IX / 2002 on Islamic Bonds*. (Online) www.bapepam.go.id, accessed on October 1, 2014.
- National Sharia Council. 2002. *Fatwa No. 33 / DSN / MUI / IX / 2002 on Syariah Mudharabah Bonds*. (Online) www.bapepam.go.id, accessed on October 1, 2014.
- National Sharia Council. 2004. *Fatwa No. 41 / DSN / MUI / III / 2004 on Syariah Ijarah Bonds*. (Online) www.bapepam.go.id, accessed on October 1, 2014.
- National Sharia Council. 2004. *Fatwa No. 40 / DSN / MUI / X on Capital Markets and General Guidelines for the Application of Sharia in the capital market*. (Online) www.bapepam.go.id, accessed on October 1, 2014.
- Ghozali, Imam. (2006). *Structural Equation Modeling: An alternative method to the PLS*. Semarang: Publisher Agency Diponegoro University.
- Harahap, Sofyan Syafri. 2004. *Critical Analysis of Financial Statements*. Jakarta: King Grafindo Persada.
- . 2004. *Sukuk as Funding Instrument Negrara*. Journal of Islamic Economics. Vol II, 2
- Hartono, Jogiyanto. 2009. *The Portfolio Theory and Investment Analysis*. Sixth edition. Yogyakarta: BPFE.
- Huda Mustafa Nurul and Edwin Nasution.2008. *Investment in Islamic Capital Markets*. Jakarta: Kencana Prenada Media Group.
- Idris, Umar Mohammed. 2007. *Evaluation of Research Developments on the Islamic Securities*. International Centre of Education in Islamic Finance, Malaysia.
- Karim, Adiwarman. 2004. *Bank Islam: Fiqh and Financial Analysis*. Jakarta: King Grafindo Persada.
- Keown, Arthur J, et al. 2003. *The basics of financial management*. Translation by Chaerul D.Djakman. Jakarta: Salemba four.

- Mujahid, and Tettet Fitrijanti. 2010. *Effect of issuance of Islamic Bonds (Sukuk) Market Reaction Against Company*. SNA XIII. UnSoed Purwokerto.
- Pratiwi, Widiati. 2012. *Effect of Implementation of Good Corporate Governance Information Against Price Increases Shares of PT Adhi Karya (Persero) Tbk*. Thesis. Indonesian Education University.
- Rahardjo, Budi. 2009. *Basics Fundamental Analysis Stocks: Financial Report Company*. Yogyakarta: Gadjah Mada University Press.
- Rival, Veithzal. Et al. 2010. *Islamic Financial Management Theory Concepts and Applications: A Practical Guide for Financial Institutions and Businesses, practitioners, and students*. Bogor: Ghalia Indonesia.
- Rohmatunnisa, Dina. 2008. *Design of Ijarah Sukuk*. Dissertation. Nottingham University
- Ryandono, Mohammed H. 2009. *Nafik Stock Exchange and Investment Sharia*. Jakarta: The porch.
- Santika, Rista Good. 2011. *Determining Capital Structure Manufacturing Company in Indonesia Stock Exchange*. The dynamics of financial and Banking, Vol 3. 2 ISSN: 1979-4878.
- Septianasari, Clarashinta C. 2009. *Liquidity Risk and Expected Return Businesses including Jakarta Islamic Index Group*. Surabaya: Bachelor University Press.
- Sole, Juan. 2008. *Prospect and Challenges for Developing Corporate Sukuk and Bond Markets Lessons from a Kuwait Case Study*. International Journal of Islamic and Middle Eastern Finance and Management Vol.1 1, 2008.
- Solimun. 2005. *Structur Equation Modeling, Lizrel and Amos*. Matter of unity. Faculty of Mathematics, University of Brawijaya.
- Sudana, I Made. 2009. *Financial Management Theory and Practice*. Surabaya: Airlangga University Press.
- Subalno. 2009. *Analysis of Fundamental Factors and Economic Conditions of the Stock Return*. Thesis. Diponegoro University graduate.
- Sukmaningrum, Puji Sucia. 2012. *Market Reaction To The Announcement Issuance of Sharia in Indonesia Stock Exchange*. Bachelor Airlangga University
- Sunarsih. 2008. *Potential of Islamic Bonds as a Source of Medium and Long Term Funding for Companies in Indonesia*. Jurnal Syir'ah Ash- Sharia Faculty of UIN Sunan Kalidjaga. Vol. 42 No. 1.
- Suryabrata, Sumadi. 2009. *Research Methodology*. Jakarta: King Grafindo Persada.
- Suta, I Putu Gede Ary. 2005 *Market Performance Public Companies in Indonesia: An Analysis of Corporate Reputation*. Jakarta: Yayasan Satria SAD Bhakti.
- Tandelilin, Eduardus. 2001. *Investment Analysis and Portfolio Management*. Yogyakarta. BPFE Yogyakarta
- Wahid, Nazaruddin Abdul. 2010. *Understanding and Dissecting Sukuk Bonds In Islamic Banking*. Yogyakarta: Ar-Ruzz Media
- Widhy Setyowati. 2002. *The effect of the content of the Financial Information Against Abnormal Stock Return (Miscellaneous Industry Case Study on the Jakarta Stock Exchange)*. Journal of Business and Economics. STIE graduate thesis program, Semarang.
- Wirawatipertiwi. 2011. *Effect of Financial Performance of the Shares Income Before and During Shares Listed on the Jakarta Islamic Index*. Airlangga University Degree Program

Yamin, S. and Kurniawan. 2009. *Structural Equation Modeling: Learning is easier questionnaire data analysis techniques with LISREL-PLS*. Jakarta: Salemba Infotek.

The Profit Sharing Implementation for Funding in Indonesian Syariah Banking

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ABSTRACT

One of the characteristics of Islamic banking is using the concept of profit sharing. This characteristic distinguishes the operation of Islamic banking with conventional banking. In applying the concept of profit sharing, most of the activities of Islamic banking especially in the distribution of funds or financing are actually dominated by the profit-sharing agreement. However, financing in the Islamic banking today mostly is dominated by features that use non-profit-sharing agreement such as murabahah. This paper examines about why the realization of financing of Islamic banking in Indonesia is still dominated by financing non-profit-sharing, and what solutions can be done in order to increase the financing based on profit sharing concept. This is consistent with the objectives stated in the blueprint for the development of Islamic banking in Indonesia, which clearly states that the vision will be achieved ten years. They are to establish Islamic banking system that is competitive, efficient, which meets the prudential principle, and to support the real sector through profit sharing financing and real transactions in the context of fairness, mutual help, and for betterment in order to achieve the mutual benefits for the society

Keywords: *Islamic banking, profit sharing, syariah financing, mudharabah, musyarakah*

I. INTRODUCTION

Indonesian Islamic banking has been continuously developing in the last two decades. The Banking Act Number 10 Year 1998 has regulated in detail about the legal basis and type of business that can be operated by syariah banking. In addition, some policy and rules from Central Bank of Indonesia endorsed the efforts to improve the knowledge of the society about syariah banking and fatwa from Indonesian *Ulama* Council (Majelis Ulama Indonesia/MUI) about bank interest has also pushed the growth of syariah banking.

In its operation, syariah bank as intermediary institution plays two main roles as fund collector from the society and fund distributor to the public. Different from conventional bank, syariah bank implements profit sharing mechanism. In the activity of fund collection, the principles of profit sharing mechanism is implemented in saving product and deposit that used *mudharabah* agreement (*akad*). Meanwhile, in the activity of fund distribution, the funding implements agreement (*akad*) of *mudharabah* and *musyarakah*.

Since it implements profit sharing concept, the activity in syariah bank especially fund distribution or financing is actually dominated by *akad* of profit sharing (Hadi, 2011). However, funding in Indonesian syariah bank at this time is dominated by products that implements non-profit sharing such as *murabahah*. The statistics of Indonesian syariah banking indicated that in the last five year, the realization of funding with profit sharing principle is around 30% per year, which consists of 9% of funding with *mudharabah* and 21% for funding with *musyarakah*. The highest realization of funding in the *akad murabahah* is 50.7% (Bank Indonesia, 2015). In detail, the statistics can be seen in table 1 and 2 below:

Table 1.
Composition of Funding in Syariah Public Bank
and Syariah Business Unit (in Billion Rupiah)

<i>Akad</i>	Year				
	2010	2011	2012	2013	2014
<i>Mudharabah</i>	8,631	10,229	12,023	13,625	14,354
<i>Musyarakah</i>	14,624	18,960	27,667	39,874	49,387
<i>Murabahah</i>	37,508	56,365	88,004	110,565	117,371
<i>Salam</i>	0	0	0	0	0
<i>Istishna</i>	347	326	376	582	633
<i>Ijarah</i>	2,341	3,839	7,345	10,481	11,620

<i>Akad</i>	Year				
	2010	2011	2012	2013	2014
<i>Qardh</i>	4,731	12,937	12,090	8,995	5,965
Others	0	0	0	0	0
Total	68,181	102,655	147,505	184,122	199,330

Source: Bank Indonesia, 2015

Table 2.
Composition of Funding in Syariah Public Bank
and Syariah Business Unit (in percentage)

<i>Akad</i>	Year					Average per Year
	2010	2011	2012	2013	2014	
<i>Mudharabah</i>	12,66	9,96	8,15	7,40	7,20	9,08
<i>Musyarakah</i>	21,45	18,47	18,76	21,66	24,78	21,02
<i>Murabahah</i>	55,01	54,91	59,66	60,05	58,88	57,70
<i>Salam</i>	0,00	0,00	0,00	0,00	0,00	0,00
<i>Istishna</i>	0,51	0,32	0,25	0,32	0,32	0,34
<i>Ijarah</i>	3,43	3,74	4,98	5,69	5,83	4,73
<i>Qardh</i>	6,94	12,60	8,20	4,89	2,99	7,12
Others	0,00	0,00	0,00	0,00	0,00	0,00
Total	100	100	100	100	100	100

Source: Bank Indonesia, 2015 (reprocessed data)

The domination of *akad murabahah* in the composition of funding has become a big question in Indonesian Islamic banking because actually *akad mudharabah* and *musyarakah* should be dominant as the manifestation of profit sharing principles. Besides, the blueprint of Indonesian syariah banking has clearly mentioned the vision and mission that will be achieved in the next ten years. It aims to realize competitive, efficient, and prudent syariah banking system and to support profit sharing and real transaction for creating justice, helping each other, and heading to goodness for the benefits of society (Indonesian Bankers Association, 2014:14). To accomplish the vision, some solution is required to make profit sharing funding become the main funding distributed by syariah banking.

This paper aims to identify the barriers in the implementation of profit sharing principles especially in Indonesian syariah banking and to offer solution that will foster the domination of profit sharing as main option for funding product to support the attainment of vision as stated in the blueprint of Indonesian syariah banking development.

II. LITERATURE REVIEW

2.1. Overview about Syariah Bank

Banking Act Number 21 Year 2008 stated that syariah bank is bank that operates its business activity based on the principles of syariah and refers to the fatwa of authoritative institution, in this case National Board of Syariah (Dewan Syariah Nasional/DSN) under MUI. In its operation, syariah bank has differences with conventional bank, in which of them is the concept of profit sharing for syariah bank, and interest for conventional bank (Karim, 2011). By using syariah principles, the transaction in syariah bank is free from uncertainty, gambling, and interest (Israhadi, 2014).

2.2. Principles of Profit Sharing in Funding

The implementation of profit sharing for funding in syariah bank is done through *akad mudharabah* and *musyarakah*. *Mudharabah* is cooperation between two parties or more in which the capital owner trust and allow the fund manager to manage the funding in a mutual agreement. In *akad mudharabah*, the capital owner, in this case the bank provides 100% funding while the customer provides skills. The loss that might happen in the cooperation used *akad mudharabah*, which will be covered by the capital owner, unless if the loss is caused by the carelessness or dishonesty of fund manager. Meanwhile, *musyarakah* is cooperation where each party will contribute some funds. The profit and risk in *akad musyarakah* will be collective responsibility based on initial agreement (Karim, 2011).

Similar definition is stated by Antonio (2001) that *musyarakah* is *akad* of cooperation based on collective agreement to share profit and loss in running a business. The profit obtained will be shared based on previously agreed ratio while the loss will be the responsibility of each party based on each capital contribution. Whereas, in *mudharabah* funding, the profit will be distributed to each party based on previously agreed ratio and if loss happens, the fund owner (*shahibul maal*), in this case the bank will cover the loss.

Another explanation about *mudharabah* is formulated in the Article 19 verse (1) point c, in the Act Number 21 Year 2008 stating that *mudharabah* is:

“*Akad* or agreement of cooperation between first party (*malik, shahibul maal* or syariah bank) that provides the whole capital and second party (*'amil, mudharib*, or customer) who acts as fund manager by sharing the business profit based on the agreement written in *akad*. While the loss will be fully covered by syariah bank unless the second party conduct intentional mistake, careless, or breaking the rules of agreement”.

Whereas, *musyarakah* is:

“*Akad* or agreement of cooperation between two or more parties for a certain business in which each party provides funding with the condition that there will be profit sharing based on agreement and loss will be covered based on each portion of funding”.

III. DISCUSSION

Syariah bank acts as intermediary institution or mediator between fund owner and fund receiver. As the third party, the bank plays two different roles. When dealing with the owner of funds (gyro, saving, deposits), bank will be the party to manage the funds. In this part, the bank is called as *mudharib* (fund manager) and the customer that owns the fund is called as *shahibul maal* while the customer who need and use the funds is called as *mudharib*. The customer who owns the funds and hands the money to the bank in form of gyro, saving, and deposits, by using *mudharabah* principle will get monthly profit sharing. The profit sharing is determined based on the income of the bank from the funding distribution. The increase of bank income will result on increasing quantity of profit sharing. Consequently, when the bank income decreases, the profit shared to the fund owner will also decrease.

Gyro, saving, and deposits, which are usually called as Third Party Funds (TPF), are closely related to the funding realization in syariah bank. The higher the number of funding collected by the bank from third party, the higher the realization of funding that could be done by syariah banking (Dhendawijaya, 2007). The increasing funding realization means increasing income of the bank and in the end the profit sharing for the customer will also increase. Considering TPF as the main source of bank funding, then it is important for the bank to maintain and improve the growth of TPF. One of the efforts that can be done is by providing competitive profit sharing to the customer. To be able to provide it, syariah bank should manage and distribute the funds professionally and implement prudence principle at the same time.

The loss caused by distribution of funds or financing will influence the profit sharing that should be received by the customers who own the funds in giro, saving, and deposits that use *akad mudharabah*. The loss will cause problems to bank considering that Indonesian society recently are not ready to cover the risks of loss while making saving or deposits in syariah bank (Hadi, 2011).

In its practice, syariah bank is faced with the possibility of customers who may transfer their funds. When conventional banks offer high interest rate, the customer may probably move the money from syariah bank. This tendency will increase the risk for syariah bank (Darmawan, 2014). According to Muhammad (2005), the main principle that should be developed by syariah bank in fund management is the bank should be able to provide profit sharing to the fund savers at least as big as or bigger than the interest rate of conventional bank. It should also draw profit sharing from debtor lower than the interest rate in conventional bank. The connection between fund collection and financing is one of the reasons why the profit sharing funding is lower than non profit sharing funding, especially *murabahah*.

Another factor that contributes to the slow development of profit sharing is the complexity of funding analysis process in comparison to non profit sharing funding. Uncertainty about the result of monthly funded business demands syariah bank to conduct detail and in-depth analysis. Bank should make analysis to reduce the risks that might emerge especially when the income of the bank decreases. Syariah bank is also demanded to be able to distribute the funding prudently to the customers who needs the funding according to the banking regulation. Some aspects that need to be observed when conducting comprehensive analysis are characters, capacity of the customers, capital, business sustainability, and the guarantee.

In addition, when conducting analysis process, banks should also carefully examine the estimation of income made by the customer in the beginning of funding proposal making for the business that will be financed by the bank. This projection becomes crucial considering the regulation related to funding health level and performance of the customer for profit sharing funding, which is determined by punctuality of repayment based on the estimation made in the initial process of funding. The customers can be categorized as smooth payment if they can pay back monthly based on the estimation that has been made. This will certainly become contradictory regarding to the uncertainty aspect in funding cooperation with profit sharing principle. Consequently, the monthly income may fluctuate and even the customer may suffer from loss, which will not meet the previously made estimation.

The regulation is made not without some reasons. This rule is part of the attempts to prevent moral hazard such as side streaming or the usage of funding for customers who are not properly stated in the *akad* contract, carelessness of customer, and profit concealment caused by customer's dishonesty (Prasetyanti, 2011). Moral hazard becomes one of the reasons why the bank prefers to have non profit sharing funding (Khalil, Fattah, Rickwood, and Muride, 2000). Customer's recklessness may potentially result on loss in the business and damage the business of syariah bank especially if the profit sharing funding used the *akad* of *mudharabah* (capital inclusion) in which the bank will cover the loss.

Another factor that makes profit sharing funding is less preferable is agency contractual in *mudharabah* funding. Agency contractual occurs when clash of needs between *mudharib* and *shahibul maal* happens. *Mudharib* tends to ignore the contractual relation and does not act based on the interest of *shahibul maal* or the agreement made initially. In *mudharabah* funding, the customer (*mudharib*) may possibly conceal some information for his or her personal interest. The information concealment will result on asymmetric information that might cause loss for the bank. This is in accordance with the research from Warde (1999) who stated that one of the barriers in the funding contract of syariah bank is asymmetric information in the form of adverse selection and moral hazard.

In the end, syariah bank should be extra prudent in conducting analysis process so that the bank is required to have competent human resources. Experiences from some Islamic countries proved that the success of profit sharing funding (*mudharabah* and *musyarakah*) is highly determined by banking parties who really understand the business that will be funded. Bank that is successful in distributing its profit sharing based funding is bank that initially started its business as syariah business in which the bankers have considerable experience (Prasetyo, 2013).

The average of Indonesian syariah banking growth in the last five year around 26% (Bank Indonesia, 2015) has consequently increased the number of human resources working in the sector. The growth of employee number is dominated by new player who are commonly new to the business and has limited experience in conducting analysis for profit sharing funding. This becomes another cause of why the bank prefers to have non profit sharing funding. In *murabahah* funding, the analysis is designed to ensure the security and easiness because the margin has been decided in the beginning so that the bank will earn profit equal to profit of other bank or competitors that is based on interest rate (Muhammad, 2005).

To reduce the risks discussed above and to increase the realization of profit sharing-based funding, according to Adiwirman Karim (2011, syariah bank may implement some particular limitation while distributing funds to customer (*mudharib*). It aims to ‘push’ *mudharib* to systematically behave to maximize profits for both parties (*mudharib* and the bank as *shahibul maal*). Some of the regulations are the determination of guarantee such as fixed asset and guarantor institution. Guarantor institution required by certain bank will make the customers become more prudent. Besides, guarantor institution highly determine the ability of syariah bank in mobilizing real sector through funding allocation to the rural area and small or medium enterprises. With *mudharabah* scheme, the institution will investigate the behavior of the partner so that the partner will be more reliable in managing the fund and partner will have more capability in the business.

Another effort that can be done is by deciding the maximum ratio of operational cost toward operation income. This is intended to make *mudharib* (customer) run the business efficiently. When the ratio reaches 100%, it is proven that *mudharib* does not obtain operational profit. This situation certainly will not attract the capital owner to invest because there will be no profit to be shared. When the ratio reaches 80%, there will be 20% of operational profit that can be shared with the capital owner. Moral hazard that may happen when doing funding process could be reduced with this mechanism.

Optimization of profit sharing funding can also be supported by sustainability and information transparency about the business. This can be carried out through actual, detail, and factual database, which is adjusted to the form and climate of business run by the customer (Imaduddin, 2015).

Improving portfolio of profit sharing funding in syariah bank is not only the duty and responsibility of the bank but also the whole elements or stakeholders. Bank Indonesia as regulator should support this through the implementation of laws that protect and support the implementation of profit sharing principles. Syariah bank is also demanded to increase the realization of profit sharing funding by reducing risks that may happen or risks that can be caused by moral hazard by improving the quality of human resources. In the other side, the customers as the related party should fully understand their roles to help managing funds properly and reliably.

Syariah bank as the bank that implements profit sharing should increase the portion of its profit sharing. Profit sharing funding (*mudharabah* and *musyarakah*) can mobilize real sector

because this funding has productive feature that can be distributed for investment and working capital. Investment in real sector will certainly increase working opportunity and the reduce unemployment and in the same time improve the society's income (Beik, 2006).

IV. CONCLUSION AND RECOMMENDATION

Syariah bank as the bank that implements profit sharing mechanism should have portfolio with dominant profit sharing funding in its activities. However, this idealism has not happened in Indonesia. Recently, the funding in Indonesian syariah bank is still dominated by non-profit sharing funding especially funding that uses *akad murabahah*. This situation is caused by following factors:

- 1) The bank plays the role as intermediary institution. In one side bank should provide profit sharing for savers or depositors while in the other side bank should provide funding for society who needs financial assistance. The unpreparedness of the saving and deposit owners to cover loss consequently make the bank prefer to choose *murabahah* funding with certain payback rather than profit sharing which has potential of loss that may influence the decision of saving and deposit owners.
- 2) The regulation of Bank Indonesia has not fully support the implementation of profit sharing in which the customers are expected always to gain profit or good performance to be categorized as customers with smooth funding.
- 3) Analysis process of profit sharing funding has higher level of difficulty because there is level of uncertainty of the business. This requires the human resource in finance and banking to be able to conduct funding process prudently. The limited competence of human resource has been one of the considerations of syariah bank to prioritize realization of funding with non profit sharing principle.
- 4) Asymmetric information can cause agency contractual that cause difficulty for bank to ensure that the business operation meets the initial agreement.

Thus, synergy from various stakeholders is needed to support syariah bank to run its role as profit sharing bank. In the end, this may contribute to mobilize real sector and improve the public quality of life. Syariah bank should improve its human resource competence to minimize the risks that may emerge in funding, such as by reducing asymmetric information.

The government as regulator should also support with accurate regulation to increase the profit sharing funding. Government may also conduct continuous socialization about syariah

bank especially profit sharing funding to provide more knowledge about the concept for the society and to prevent damage in business such as side streaming. The customers should be educated to clearly understand about funding with profit sharing principles to increase the utilization of profit sharing funding (*mudharabah* and *musyarakah*).

REFERENCES

- Antonio, Syafii. (2001). *Islamic Banking: Bank Syariah dari Teori ke Praktek*. Yogyakarta: Gema Insani.
- Bank Indonesia. (1998). *Undang-Undang Nomor 10 Tahun 1998 Tentang Perbankan Syariah*. Jakarta: (<http://www.bi.go.id>, accessed on 27 February 2015).
- Bank Indonesia. (2008). *Undang-Undang Nomor 21 Tahun 2008 Tentang Perbankan Syariah*. Jakarta: (<http://www.bi.go.id>, accessed on 27 February 2015).
- Bank Indonesia. (2015). *Statistik Perbankan Syariah*. Jakarta: (<http://www.bi.go.id>, accessed on 27 February 2015).
- Beik Irfan Syauki. (2006). *Bank Syariah dan Pengembangan Sektor Riil*. Accessed from www.pesantrenvirtual.com on 03 April 2015.
- Dhendawijaya, Lukman. (2007). *Bank dan Lembaga Keuangan Perbankan*. Yogyakarta: Gramedia Pustaka.
- Darmawan. (2014). *Bank Syariah Harus Perbesar Cadangan*. *Compliance News*. No.44, Quarter II. Jakarta.
- Hadi, Chairul. (2011). *Problematika Pembiayaan Mudharabah di Perbankan Syariah Indonesia*. *Jurnal Masalah*, Vol.2, No. 1.
- Imaduddin, Muhammad. (2005). *Mudharabah dan Optimalisasi Sektor Riil*. Accessed from www.republika.co.id on 03 April 2015.
- Indonesia, Ikatan Bankir. (2014). *Memahami Bisnis Bank Syariah. Modul Sertifikasi Tingkat I General Banking Syariah*. Jakarta: Kompas Gramedia.
- Israhadi, Evita. (2014). *Investasi Bagi Hasil dalam Pembiayaan Akad Mudharabah Bank Syariah*. *Jurnal Lex Publica*, Volume 1, January.
- Karim, Adiwarmam. (2011). *Bank Islam: Analisia Fiqh dan Keuangan*. Jakarta: Rajawali Pers.
- Khalil, Abdel-Fattah A.A., Colin Rickwood, and 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.
- Muhammad. (2005). *Manajemen Bank Syari'ah*. Edisi Revisi. Yogyakarta: UII Press
- Prasetyo. (2013). *Identifikasi Faktor yang Mempengaruhi Rendahnya Pembiayaan Bagi Hasil Perbankan Syariah: Studi Kasus PT. BRI Syariah Kantor Cabang Malang*. *Jurnal Ilmiah*, Fakultas Ekonomi dan Bisnis Universitas Brawijaya Malang.
- Prasetyanti. (2011). *Pelaksanaan dan Sistem Bagi Hasil Pembiayaan al Mudharabah pada Bank Syariah*. *Jurnal keuangan dan Perbankan*, Volume 15(3): 466-478.

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



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