

# **Entrepreneurial Management**

# Value Creation Analysis on Indonesian Furniture Manufacturers: A Case Study of PT. Furniture Indonesia

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## Abstract

*PT. Furniture Jerman (“PTFJ”) is a German furniture wholesaler that has operated in the furniture industry for about twenty years. In mid-2006, PTFJ decided to build PT. Furniture Indonesia (“PTFI”), as an exclusive supporting unit in Semarang, Indonesia, PTFI acts as the sole furniture manufacturer for PTFJ.*

*Taking on the perspective of theory of the firm, including its later development, and taking into account the importance of factors of productions for firms, this paper attempts to analyze the value creation of PTFI, and investigate ways to enhance the existing value and competitiveness in international market.*

*Qualitative and quantitative methods are incorporated in the study to learn detailed activities of PTFI, which include; interview sessions, observations, and secondary data gathering from the organization’s financial records, will also be integrated in this paper to learn the underlying production process in PTFI. These analyses cover the period from early opening production activities of PTFI up to the year of 2008. Few selected strategic management measurements are included to show comparisons of figures on the most likely value creation of the firm. Low cost labors and manufacturing overheads appear to become the basic reason to set up PTFI.*

*Keywords: value creation, furniture, low cost production*

## 1. Introduction

Furniture is regarded as a term for the movable objects that support human body (such as seating), and may provide storage compartment, and/or shelving. Furniture can be made of numerous materials, such as; teak, wood, plastic, iron, glass, stainless steel, aluminum, rattan, stones, water hyacinth, metal, and other materials.

Generally, the term “furniture” is divided into three categories; outdoor furniture, indoor furniture, and accessories. Basic materials to made up the furniture, particularly wood, can be classified into two types; hardwood (from oak and broad-leaves trees), and softwood (from pine). Besides making the furniture, producers of furniture often engage also in upholstery, to provide furniture with seat’s

pads, springs, webbing, fabric, or leather covers.

Outdoor furniture, or commonly known as “garden furniture”, is typically made of water-resistant, and/or weather-resistant materials, to have ability to adapt to different climates. The most frequently used raw materials for garden furniture is teak. Teak naturally contains silica that makes it resistant to fungal decay, effects of water, chemical, fire, acid, and weather (adverse effects of being outside). Other raw materials,

which are often used for outdoor furniture, are aluminum, rattan and plastic. Aluminum is typically robust and long lasting. Plastic is typically waterproof to leave-out year round. Rattan is also another good material for outdoor furniture because it is lightweight, durable, and flexible (Abonyi, 2006; Tambunan, 2006).

### 1.1 Furniture Demand

Worldwide demand for furniture increases over time. This furniture industry offers attractive growth opportunities for multinational players to enter the market. According to ASMINDO (2006), or otherwise known as “Asosiasi Industri Permebelan dan Kerajinan Indonesia”, world furniture production is estimated to be about US\$ 352 billion. This market is primarily driven by demand from the United States, Japan and Europe, particularly in the sub-market of home furniture, which comprises about 65% of all furniture sales (Yudha, 2009). This portrays a considerable justification to transform the home furniture market into a competitive sector, with the presence of global brands, emergence of large players, and the resultant consolidation.

In terms of the European market for home furniture, Germany represents the largest demand for furniture. German’s market for

furniture is about 22% of the total furniture market in Europe. The total approximate purchases were €17,036 million in 2005, and half of those purchases were imported from foreign countries. Germany's total import value by 2005 is about €6,375 million, or 2,251,000 tons (ASMINDO, 2006).

### 1.2 Indonesian Furniture Products

There are two types of teakwood producers in Java; producers on state forests, or producers outside state forests. Perum Perhutani<sup>1</sup>, a state enterprise, is the major producer of teakwood. It manages about 1 million hectares of teak plantations, of which 0.6 million hectares is under production forests. Since the world's teak plantation is only about 2.7 million hectares, the Indonesia's Perum Perhutani's 1 million hectares, represents the largest teakwood plantation in the world (Roda, 2007).

Teakwood has been known and important for centuries in the island of Java. The city of Jepara, in the northern coastal area of the island of Java, is an industrial district devoted to the production of various wood furniture and wood carving. The city groups about 14,000 small workshops, and over 1,000 medium and large enterprises (Yudha, 2009). Most of the furniture made in Jepara uses teakwood as the raw material. To this day, Jepara is popular for its mass production of teakwood furniture and wood carving products.

In Jepara, a total of 15,271 units of production have been identified, which employ approximately 170,000 workers. Such wood furniture and wood carving production are able to bring considerable revenue of up to Rp. 12.3 trillion per year of added value, or about €1 billion per year. This revenue is equivalent to the use of around 9m<sup>3</sup> of round wood, which is able to sustain 1 fulltime employee per year (Roda, 2007).

Besides teak and wood, rattan is also another Indonesia's precious natural resources. The Indonesia's islands of Kalimantan, Sulawesi, dan Sumbawa are the house for 70% of the world's rattan population (Abonyi, 2006; Tambunan, 2006; Roda, 2007; Yudha, 2009; <http://www.encyclopedia.com>, accessed in April 2009).

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<sup>1</sup>This is referred to as the Indonesia's state owned enterprise, Perusahaan Umum Perkebunan, Perhutanan, dan Pertanian, which is responsible to manage the Indonesian various types of plantations, forests, and agricultures.

### 1.3 The Growth of Indonesia Furniture Export

Furniture is one of the ten main products, which have been driven heavily to increase the total export in non-oil and gas sector. The Indonesian government is very committed to engage in trade liberalization by increasing furniture products besides shrimp, coffee bean, crude palm oil, cacao, textile, electronics, automotive parts, rubber and sandals.

Furniture exports, particularly from Jepara, have increased substantially since 1998. This created a boom of the teak industry, which is mainly based on cheap wood and labor. As any other products from any countries in the world, teak furniture prices may seem to have been dictated to Indonesian by the international demands. A single teak chair, which may be sold for only less than US\$ 10 in Jepara, could be priced much higher in foreign countries (Roda, 2007).

Indonesia's furniture exports are constantly expanding. Exports grew from US\$ 1.58 billion in 2004 to US\$ 1.65 billion in 2005 (Yudha, 2009). An estimated of 7% increase is possible for the coming years (Roda, 2007).

### 1.4 The Growth of Germany Furniture Import

World consumption rate of wooden furniture is around US\$ 32.1 billion in 2001. United States is the biggest market, with a total import of around US\$ 11 billion alone in 2001. European market and Japan represent the other two major markets for wooden furniture (Roda, 2007; Schiller and Martin-Schiller, 1997; Yudha, 2009).

With 22% of all imports of wooden furniture, Germany has the largest portion on furniture market in Europe. Germany is a good market for various furniture products since kitchen furniture is often regarded as a focal point for Germans, and many live in the countryside with a relatively large garden. This pushes up demand for outdoor furniture, especially during the summer months (Roda, 2007; Schiller and Martin-Schiller, 1997; Yudha, 2009).

## 2. Research Objectives

This paper attempts to analyze the value creation of PTFI, and investigate ways to enhance the existing value and competitiveness in international market.

## 2.1 Problem Identification

There are issues in relation to the manufacturing of goods in Indonesia. It has become a public knowledge about the minimum quality of Indonesian products, which may basically pertinent to internal problems, such as; ineffectiveness and inefficiencies of production process, quality control, as well as distribution.

Quality of Indonesian raw materials may have been deteriorated due to illegal logging. In addition, Indonesian labors may not be perceived as having the necessary qualifications in accordance with the international labor standard. Indonesia may also be seen inefficient due to minimal infrastructure. This influences the efficiency and effectiveness of distribution.

## 2.2 Research Limitation

This paper contains the following limitations;

1. The analysis on value creation is limited to PTFI, as the subsidiary of PTFJ.
2. The analysis covers only the period of 2006-2008, where the actual financial statements of PTFI are available for the purpose of this research.
3. The analysis focuses on the shareholders' perspective only of PTFI.

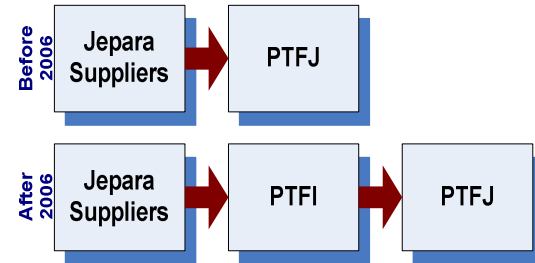
## 2.3 Research Object

PTFJ is a German-based company that runs a business in furniture trading. As a wholesaler, PTFJ distributes furniture to retailers in Germany and surrounding countries. The furniture products are all manufactured in PTFI, the subsidiary of PTFJ, which is located in Semarang, Indonesia. PTFJ has set up PTFI in Semarang as a supporting unit to focus on the quality control for the goods manufactured by Jepara suppliers. PTFI is categorized as a monopsony, since PTFI manufactures and sells products only to PTFJ. All operation and production process are under close supervision of PTFJ.

Prior to 2006, Jepara artists and suppliers ship the furniture directly to PTFJ. Nevertheless, since PTFJ experiences relatively high rejection rates from the European customers, due to the minimal quality control, PTFJ decided to open-up PTFI, a subsidiary office in Indonesia. The main focus for PTFI is to handle the issues on quality control, including working on adding more values to the products so those furniture are acceptable in the

European market. This is to say that PTFI merely acts as the cost center for quality control for PTFJ.

## 2.4 Framework of Thinking



Source: PTFI (2009).

Figure 1. Distribution of PTFJ & PTFI

This study uses the following framework of thinking in order to build up sufficient arguments against the value creation of PTFI to PTFJ. Theory of the firm, particularly the resource-based theory of the firm, is used as the foundation theory to build hypothetical investigation toward firm's factors of production, analysis on firm's resources and capabilities, which may affect organizational value creation.

## 2.5 Questions & Hypothesis



Figure 2: Framework of Thinking

Based on the above explanation, one major question is proposed to guide the research process in trying to find out the value creation of PTFI, including investigation on ways to enhance the existing value and competitiveness in international market. That is, are there any evidences to support the value creation of PTFI to enhance product value for PTFJ in Germany? Concerning this question, it is hypothesized that financial records of PTFI support the value creation of PTFI in enhancing product value for PTFJ in Germany. Hence,

$H_0$  : PTFI's financial records **SHOW** the value creation of PTFI in enhancing product value for PTFJ in Germany.

H<sub>1</sub> : PTFI's financial records **DO NOT SHOW** the value creation of PTFI in enhancing product value for PTFJ in Germany.

### 3. Literature Review

#### 3.1 Theory of the Firm

Theory of the firm is a microeconomic concept, which describes the nature of the company, including its existence, behavior and its relationship with the market. The company interacts with the market to determine pricing and demand, then allocates resources that can maximize net profits (Anantadjaya, 2009; 2008; 2007; Rasmussen, 2007).

Theory of the firm attempts to respond to the basic questions on why do companies produce, what do they do, and what motivates their choices in allocating capital and labor. The neoclassical theory of the firm views firms' production processes and activities as a black box. This established the principal of profit maximization, in which the marginal revenue is equal to marginal cost. This theory described various issues, such as; strategic pricing and barriers to entry (Anantadjaya, 2009; 2008; 2007; Kantarelis, 2007). Four main issues are addressed by the modern theory of the firm (Yudha, 2009), which are concerning to the boundaries of the firm, the internal organization of the firm, the formation, growth, and diversification of the firm, and the role of entrepreneurs<sup>2</sup>.

The business of the firm is to generate income that is to be distributed to owners, employees, suppliers and public goods recipients. The activities of the firm create a value for organization and customers. This is also known as value-based management theory. Firms need resources<sup>3</sup> and capabilities<sup>4</sup> to create a strategic value that is superior to competitors (Kantarelis, 2007).

The resource-based theory of the firm

<sup>2</sup>An entrepreneurial theory of the firm covers major issues on the nature of the firm. The creation of entrepreneur's skills is closely linked to the core competencies of the firm (Rasmussen, 2007).

<sup>3</sup>The term "resources" can be defined into 2 categories; tangible and intangible assets. Tangible assets are referred to physical assets that are easily to identify, such as; land, building, plant, equipment and financial resources. Intangible assets are referred to assets with no physical formation, which make them difficult to quantify, such as; copyrights, patents, skills, competence, and many others (Anantadjaya, 2009; 2008; 2007; Hubbard, 2004).

<sup>4</sup>The term "capabilities" is referred to the process, systems or organizational routines which the organization used to coordinate its resources for productive use (Kantarelis, 2007).

proclaimed four necessary conditions underlying the ability of an organization to create a sustained competitive advantage from its capabilities. The conditions are (Hubbard, 2004); organizations are heterogeneous and can remain so for long periods, some of the capabilities they have are rare and valuable, these capabilities are difficult to imitate, these capabilities are not easily traded. In 1991, Conner makes a strong case for resource-based strategy as a general theory of the firm. It expresses that the resource-based model fits with transaction cost economies, which are the basis for internationalization models for foreign direct investment. It focuses on both protecting unique resources and applying core competencies in order to gain strategic competitive advantage (Yudha, 2009).

#### 3.2 The Value Chain and Competitive Advantage

Referring to the previous explanation, firms must strive to secure unique resources to gain strategic competitive advantage. The idea on value creation that integrates and optimizes the value chain is certainly appropriate in this case. Effective management of the movement of materials, information, and cash along the demand and supply chains is critical to the firm's competitive advantage (Yudha, 2009).



Source: Yudha (2009).

Figure 3. The Resource-based Model of International Strategy

Value creation analysis looks at how each participant adding value to firms. Value creation analysis is usually an expanded version of cost and benefit analysis. Though asset utilization attempts to determine the firm's leverage on asset purchases and usages, asset utilization may prove to support the idea on value creation. Undoubtedly, the notion on value creation and the management proficiency in handling the value chain may boost the firm's competitive advantage. The better the usage rate on firm's assets, the better chance the firm has to encounter competition in marketplaces (Yudha, 2009). Considering the generic types of strategy, at the very least, firms can choose to

play with few alternatives, which are; cost advantage<sup>5</sup> (narrow or broad) and/or differentiation<sup>6</sup> (narrow or broad). In order to successfully manage the strategy toward cost advantage and differentiation, firms must reconfigure the value chain via improvements on linkages, both internal and external linkages. Such linkages must be managed in such a way to connect primary activities and supporting activities. One way to ensure such improvements on various linkages is through outsourcing activities (Yudha, 2009).

International trade is critical for any countries around the world since it boosts economic growth by providing more marketplaces, and access to required resources. Companies can expand their business, seek growth opportunities in another nations, and make their production and distribution systems more efficient. It also reduces the reliance of the economies of their home nations (James, 2000; Yudha, 2009).

The company's decision to operate the business abroad is dependent on the factors, such as; availability, price, quality of labor, natural resources, capital, and entrepreneurship in the foreign country, also regarded as one of the factors of production. Since few countries can produce all goods and services, which are needed by their residents, international trade becomes the solution to meet the country's demands. If a country can focus on what things that they can produce very well, so it can export surplus domestic output and buy foreign products that it lacks efficiently produce. Hence, the term "comparative advantage", or may also referred to as "opportunity cost", where a particular country has an advantage in supplying certain goods to other countries, becomes essential in this context (Ebert and Griffin, 2005; Yudha, 2009).

### 3.3 Measurements

In this study, measurements used to evaluate firm's value creation are mainly based

on financial figures from PTFI, to come up with particular dimensions on firm's productivity, efficiency, effectiveness, cost and benefit analysis, shareholder's value model, and economic value added (Allee, 2006; Amit and Zott, 2004; Anantadjaya, 2009; Hubbard, 2004; O'Byrne and Young, 2000; Stein, et al, 2001, Yudha, 2009).

#### 3.3.1 Productivity

Global competitiveness requires a company to work efficiently at producing goods. The several inputs that categorized as a factor of production will be used for maximizing the profit by producing a greater output. Since productivity refers to the relationship between output and input, productivity is often used as a measure of firm's efficiency. The concept of total factor productivity is measuring the overall performance of a factory in transforming a variety of inputs into products. It includes transforms labor, material, capital and energy into a single product has increased or decreased. Based on the previous study by Anantadjaya (2009), the level of productivity can be measured by calculating several ratios, such as; debt-to-asset ("DAR"), debt-to-equity ("DER"), return on equity ("ROE"), return on investment ("ROI"), return on assets ("ROA"), return on capital employed ("ROCE"), return on sales ("ROS"), and inventory turnover ("ITO").

#### 3.3.2 Efficiency

As stated previously, measurements toward productivity are often used also to gauge the level of efficiency. According to Anantadjaya (2009), as human resources become more efficient<sup>7</sup>, it is expected that there will be a higher rate on DAR, DER, and ROCE. This is simply due to the minimal human errors during tasks performance, which likely to boost utilization rate on assets, equity, and capital employed. The study also noted that the type of industry<sup>8</sup> provides clue as to which industries are considered more efficient in utilizing their

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<sup>5</sup> The term "cost advantage" refers to better understanding on the firm's cost structures, and try to compress those variations of costs out of the value creation activities. Reducing costs can be done by introducing new production processes, distribution channels, or a different sales approach (Yudha, 2009).

<sup>6</sup> The term "differentiation" refers to the management focus on activities that have become the firm's core competencies and capabilities in order to perform better than competitors (Yudha, 2009).

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<sup>7</sup> In this study, "efficiency" is defined as "doing things right" (Anantadjaya, 2009).

<sup>8</sup> According to Anantadjaya (2009), particular industries, such as; laundry/dry cleaning, delivery/courier, computer/internet rentals (*warnet*), cellular phone vouchers, garment, and textile, are making the most of their human resources to create higher organizational value than other industries, such as; bakery/cakes, hair-dressers/barbershops, copy centers, and tutorial centers for computer and language training (*kursus/bimbel*).

human resources.

### 3.3.3 Effectiveness

Effectiveness relates the inputs and the output to the final objectives. Though it may be relatively similar to efficiency, the measurements on effectiveness are related to the objective rather than technical quality of output (Yudha, 2009). Previous study has confirmed that as human resources become more effective<sup>9</sup>, it is expected that there will be a faster turnover in the organizational inventory. This brings about a normal phenomenon on organizational growth. Such an organizational growth is translated into higher ROS, ROE, ROI, and ROA.

### 3.3.4 Cost and Benefit Analysis

Cost and benefit analysis is a comparative method that can help to improve correction-related decision. Cost and benefit analysis can be measured in several ways, such as;

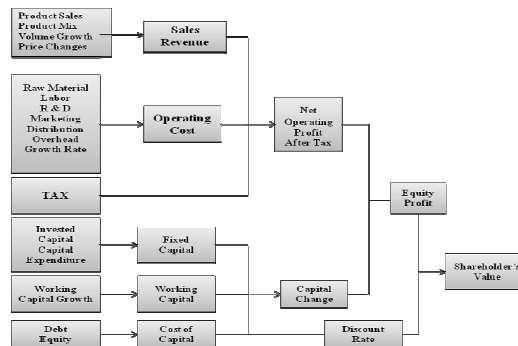
1. The net differences between costs and benefits.
2. The benefit-cost ratio, as the total benefit divided by the total costs.

If it produces a positive net difference, and if the total benefit-cost ratio is greater than 1, it means that the company is cost-beneficial. On the contrary, if it results a negative net difference, and if the total benefit-cost ratio is less than 1, it means that the company's costs exceed the company's benefit (Yudha, 2009).

### 3.3.5 Shareholder's Value Model

The shareholder value approach leads to a concentration on measuring returns to shareholders. It also known as the shareholder value or value based management. This approach is based on the original work by Rappaport (Hubbard, 2004; Yudha, 2009), who identified the concept of value drivers which led to the financial outcomes. The example of value drivers are sales growth rate, margin, working capital, fixed capital, cost of capital, tax rate and debt equity ratio. By analyzing these financial drivers above, it will find the increases or decreases of the shareholder value. The purpose of a company is to maximize the shareholder value, within what is legally permissible. The

profits are not only the result, but also a source of competitive health and wealth. It can be measured by the shares price, dividends and economic profit (Hubbard, 2004).



Source: Hubbard (2004).

Figure 4. Shareholder Value Model

### 3.3.6 Economic Value Added

Economic Value Added, or EVA, is a registered trademark by Stern Stewart & Co, which is a variant of shareholder value management. In corporate finance, it estimates a true economic profit after making corrective adjustment to the accounting standard. It can be measured as Net Operating Profit after Taxes less the money cost of capital (Hubbard, 2004; O'Byrne and Young, 2000; Stein, et al, 2001; Yudha, 2009).

## 4. Research Methodology

The objective of this section is to describe how the data was gathered, and which methods were chosen, as with the reasons for using the methods.

### 4.1 Research Method

The research method that will be used in this thesis is both of quantitative and qualitative method. The data is obtained primarily by direct observation and interviews with the employees of PTFI in Semarang. Other data are also gathered from internet.

### 4.2 Place of Research

The research of this study is conducted mainly in the office of PTFI in Semarang, Indonesia.

### 4.3 Systematical Planning of Research

#### 4.3.1 Problem Definition and Analysis

The initial and notable problem concerns with the general issues on the minimum of

<sup>9</sup>In this study, "effectiveness" is defined as "doing the right things" (Anantadajaya, 2009).

quality of the Indonesian production, which is regarded to be ineffective in terms of production and distribution. Moreover, the study also defined some risks that might be hindered in running the business in Indonesia. Afterward, analyzing the problem with some data gathered and followed by some solution to solve the problems. By collecting the internal data from the company and other external sources, then this study attempts to find out what factors and reasons behind these problems.

#### **4.3.2 Setting Objectives**

As discussed earlier, there are two main objectives in this research. The primary objective is to analyze what value and benefits that are created by manufacturing in Indonesia for a German's furniture company. The secondary purpose is to enhance the existing value and competitiveness of PTFI in international market competition.

#### **4.3.3 Research Design**

Research design is designed around the framework of thinking, which used as a guide to collect and analyze data. This framework of thinking is the blueprint that is followed to complete a study.

Descriptive study is undertaken in order to ascertain and describe the characteristics of the variable in this situation (Sekaran, 2003). Besides describing specific characteristic, it also used when making specific prediction and estimating the proportion in a certain way. These descriptive studies are expected to describe the value creation by manufacturing the furniture in Indonesia, based on the qualitative data gathered during the data collection method. It is particularly concerned with the determination on the frequency of something occurs or the relationship between two variables.

#### **4.3.4 Data Collection**

Data collections were conducted from March 2008 until July 2008. To answer the main research questions on what the result of value creation in manufacturing the furniture in Indonesia, both of secondary and primary data sources were explored.

Primary data was collected to get qualitative and quantitative data and information (Sekaran, 2003). Primary data in this study was conducted via (1) direct observation in the premises of PTFI in Semarang, (2) informal interview with

the management of PTFI in Semarang, mainly, the Quality Control Manager, Production Manager, Commercial Manager, Finance Manager, Head of Labor, some suppliers from Jepara, and other employees who related to the research topic area, and (3) survey via questionnaires. Questions raised to the management of PTFI include queries on human resources, raw materials, production, distribution, and quality control.

In addition to the primary data, secondary data sources were also helpful in getting a deeper understanding about value creation that resulted from manufacturing the furniture in Indonesia. The secondary data sources were journals, reports in the internet, including previous research studies on related topics, proposals, publications, and also the data provided from PTFI in Semarang and some data from PTFJ in Germany. The internal sales data was used to analyze the company's productivity, the company's cost and benefits, the company's ways of manufacturing, and distribution which may address the concerns on value creation for PTFJ.

### **4.4 Research Object**

The research object in this study is PTFI. However, to have the better grasp on PTFI, it is necessary to also understand PTFJ.

#### **4.4.1 PTFJ**

Mr. Harald, as a founder, discovered teak garden furniture for the first time at his acquaintance's house in the 1990s. It was considered rare garden furniture in Germany then. He traveled to Indonesia to find about the origins and the production of this furniture. During the mid-1990s, demand for teak garden furniture became much higher than expected. Such a substantial jump in demand of garden furniture in Germany has forced Mr. Harald to move his production into its current and bigger workshop of about 16,000 m<sup>2</sup> in Germany. Today, PTFJ has become the leading supplier of high quality garden furniture. PTFJ supplies the products from Indonesia and distribute them to retailers across Europe. The European retailers are located around Germany, including Austria, the Czech Republic, Denmark, Netherlands, and Switzerland (PTFI and PTFJ, 2009).

PTFJ specializes in innovative indoor and outdoor teak furniture along with the responsibility to environmental and social awareness. In spring 2005, for instance, PTFJ



has raised over €300,000 from its stock clearance sale to help the tsunami victims, and rebuilt the city of Banda Aceh in Indonesia (PTFI and PTFJ, 2009).

#### 4.4.2 PTFI

In the beginning, PTFJ was set up to directly received finished goods from various producers in Jepara. With this arrangement, PTFJ faces problems and issues concerning the international standards on quality control. Many producers in Jepara cannot afford the actual certification processes to obtain the international standard on quality. This situation forced PTFJ to consider setting up a supporting office in Indonesia to focus on the quality control prior to distribution to the European market.

Today, PTFI manufactures and trades teak furniture and accessories. It is located in Semarang, Indonesia. PTFI operates under the umbrella of PTFJ and directly managed by German representatives. Over 200 employees work in production and quality control. PTFJ's investment in setting the operation in PTFI represented the biggest foreign direct investment in Indonesia during 2005-2006.

The official opening was in July 2006, on a 3 hectares lot, which comprises of office, showroom, and workshop areas. PTFI's main focus is controlling the quality from Jepara suppliers. It includes checking the quality of the products, re-assembling the products when necessary, and adding some more "values" to the products prior to shipment to Germany. Such additional "values" include; PTFI's logo, packaging, and a forest certification.

#### 4.4.3 Production

The major raw material that has been used so far is teak. In order to reduce the consumption of teakwood due to the scarcity of natural resources, PTFI uses other raw materials, such as; rattan and other hardwood. In order to differentiate, PTFI adds other components to mix with teakwood, including; stainless steel, aluminum, water hyacinth, iron, plastic, stones, and mosaic.

In general, the workflow of the production processes at PTFI are as follows; cutting, drying, production, assembling, sanding, spraying, packing, and storing into the warehouses.

Some of the product lines of PTFI include; tables (small/large rectangle tables, round tables, and oval folding tables), chairs (high

chairs, benches, long benches, and sofa sets), and accessories (flowers, figurines, and terrace statues).

#### 4.4.4 Quality Assurances

The products are stable, durable, weather-proof, easy to move around, and easy maintenance. The quality assurance is directly overseen by German representatives in PTFI, who conducts regular checks on every item prior to the actual loading. The high quality materials and components, besides the raw materials that used from massive and solid woods, including screws and hinges, form the basis for high quality furniture products.

In order to produce better goods, the company uses teakwood that has been popular and had a great vogue to Europe market. Some advantages of teakwood are; hard-wearing and efficient, weather-proof, and able to adapt to large temperature fluctuations.

### 5. Data Analysis

#### 5.1 Productivity

In order to calculate the level of productivity, various inputs and outputs are considered. The following table shows the comparisons of the productivity improvement in PTFI.

*Table 1. Level of Output and Input in PTFI (Calculation on Productivity Measurements)*

In Rp. thousands	2006	2007
Output (Rp)	343,580	3,481,169
Input (Rp)	3,643,834	974,410
<b>Productivity</b>	<b>0.09</b>	<b>3.57</b>

Source: PTFI (2009).

The figures in the above table are calculated from various inputs, such as; human resources (permanent/temporary labor, skilled/unskilled labor, amount of wages), price of raw materials, selling price, and price of machinery.

#### 5.2 Efficiency

As stated previously, efficiency is simply defined as "*doing things right*". It was also suggested that the level of efficiency can be measured by DAR, DER, and ROCE; that the

higher these ratios means the company uses its resources more efficiently (Anantadjaya, 2009). Using the internal data of PTFI, the following figures can be gathered.

Table 2. Selected Financial Figures of PTFI (Calculations on Efficiency Measurements)

In Rp. thousands	2006	2007
Total Debt (Rp)	4,805,094	12,805,463
Total Assets (Rp)	6,544,303	13,978,628
Total Equity (Rp)	1,661,000	1,173,165
EBIT (Rp)	78,208	-84,144
<b>DAR</b>	<b>0.73</b>	<b>0.92</b>
<b>DER</b>	<b>2.89</b>	<b>10.92</b>
<b>ROCE</b>	<b>0.04</b>	<b>-0.19</b>

Source: PTFI (2009).

The above table indicates that PTFI's liabilities and assets increased rapidly in 2007, with a sharp decline in EBIT. Perhaps, this was due to the combination of marginal sales and relatively high costs of production in the beginning stage of production as a newly set-up firm.

### 5.3 Effectiveness

The level of effectiveness of human resources and raw materials as resources is measured by ROS, ROE, ROI, ROA, and ITO. As human resources become more effective, there will be a faster turnover in inventory, which results in higher level of returns (Anantadjaya, 2009).

Table 3. Selected Financial Figures of PTFI (Calculations on Effectiveness Measurements)

In Rp. thousands	2006	2007
Net Income (Rp)	61,708	-93,413
Total Sales (Rp)	9,905,156	35,864,926
Total Equity (Rp)	1,661,000	1,173,165
Total Investment (Rp)	1,218,765	1,583,970
Total Assets (Rp)	6,544,303	13,978,628
COGS (Rp)	8,333,333	30,675,867
Average Inventory (Rp)	332,284	371,298
<b>ROS</b>	<b>0.62%</b>	<b>-0.26%</b>
<b>ROE</b>	<b>3.72%</b>	<b>-7.69%</b>
<b>ROI</b>	<b>5%</b>	<b>-5.9%</b>
<b>ROA</b>	<b>0.94%</b>	<b>-0.67%</b>
<b>ITO</b>	<b>25.07</b>	<b>82.61</b>

Source: PTFI (2009).

Referring to the above calculations, it appears that PTFI have failed to bring about improvement on effectiveness as it experienced decline on its returns. One plausible explanation

to this situation is that employees may still build up their learning curve in adapting to the new work processes, as required by PTFI via its German representative in Indonesia. In terms of ITO, however, PTFI was able to improve its ITO to about 83 times in 2007. It may mean that PTFI financed the production costs for a shorter period of time. Since fewer funds are tied up in inventory, funds can be put to work elsewhere to earn greater returns. The higher turnover may indicate the efficiency of operating procedures, efficient in inventory management and sales management (Yudha, 2009).

### 5.4 Value Creation Analysis

The value creation analysis measures shareholders' value and economic value added.

#### 5.4.1 Shareholders' Value Model

In trying to maximize the shareholders' value, several drivers are noted; revenue, operating margin, cash tax rate, incremental capital expenditure, investment in working capital, cost of capital, and competitive advantage period (Yudha, 2009).

Table 4. Selected Financial Figures of PTFI (Shareholders' Value Calculations)

In Rp. thousands	2006	2007
Net Operating Profit (Rp)	78,208	-218,313
Capital Charge (Rp)	6,466,094	1,173,164
Equity Profit (Rp)	-6,387,885	-1,391,477
Discount Rate	0	0
<b>Shareholder Value (Rp)</b>	<b>-6,387,885</b>	<b>-1,391,477</b>

Source: PTFI (2009).

#### 5.4.2 Economic Value Added

As mentioned earlier, EVA attempts to evaluate the overall performance of an organization. From the perspective of corporate finance, EVA is regarded as more appropriate than ROS since it considers both income and the level investment. It is to say that EVA estimates a true economic profit after making corrective adjustment to the accounting standard (Yudha, 2009).

In Rp thousands	2006	2007
Net Operating Profit (Rp)	78,208	-218,313
WACC * Capital Employed (Rp)	5,696,719	988,406,758
<b>EVA (Rp)</b>	<b>-5,619,511</b>	<b>988,625,072</b>

Source: PTFI (2009).

Table 5. Selected Financial Figures of PTFI (EVA Calculations)

From the above table, it is apparent that PTFI's net operating profit in 2007 declined drastically. It may indicate a large capital expenditure in setting up the initial operational activities in PTFI.

## 5.5 Cost and Benefit Analysis

### 5.5.1 Cost Analysis

The following table shows the cost figures in PTFI (Yudha, 2009).

Table 6. Selected Financial Figures of PTFI (Total Cost Calculations)

In Rp thousands	2006	2007
Direct Material (Rp)	1,510,114	5,282,472
Direct Labor Cost (Rp)	521,367	1,953,174
Manufacturing Overhead Cost (Rp)	655,244	892,773
<b>Total Cost (Rp)</b>	<b>2,686,725</b>	<b>8,128,419</b>

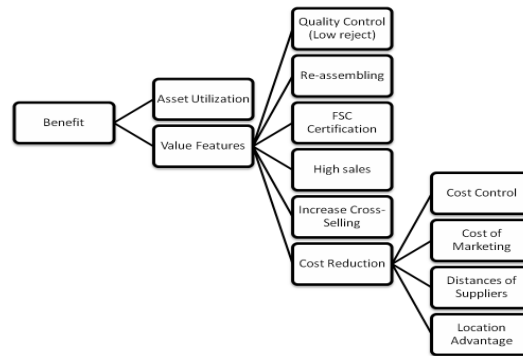
Source: PTFI (2009).

### 5.5.2 Benefits Analysis

Based on the interview and observation directly in PTFI, the following diagram attempts to provide a much clearer illustration on the approach on this benefit analysis at PTFI.

#### 5.5.2.1 Asset Utilization

The company also has additional benefit when they produce woods. If the woods are acceptable to the standard of quality control, PTFI is able to produce better tables and chairs. On the other hand, if the quality wood is not fully acceptable to produce tables and chairs, PTFI is able to produce other products, particularly accessories. In this sense, PTFI attempts to utilize the available raw materials rather efficiently. PTFI is also able to increase its cross-selling among various products and accessories.



Source: based on interview and observation in PTFI (2009).

Figure 5. Benefits Analysis

#### 5.5.2.2 Value Features

##### • Quality Control (Low Reject)

The major benefit from opening PTFI as a supporting unit for PTFJ is on the quality control.

Table 7. Selected Financial Figures of PTFI (Value of Defective Products)

In Rp thousands	2006	2007
<b>Value of Defective Products (Rp)</b>	<b>6,000,000</b>	<b>144,906</b>

Source: PTFI (2009).

From the data above, it is shown that PTFI is able to produce a better quality of products. Prior to 2006, PTFJ had experienced many product rejections, approximately above 50% from the total product distributed from Jepara suppliers, and had experienced losses which amounted to Rp 6 billion. This figure represents the cost of those rejected products from customers, including cost for shipping back to Jepara to get a new product with better quality. Following the establishment of PTFI, product rejections declined substantially. Between 2006 to 2008, the product rejection rate are merely about 3 – 5% in every shipment to PTFJ.

Based on the informal interview with the quality and production manager, PTFI attempts to standardize the criteria of quality control of the finished goods supplied from Jepara artists. Usually from 100 pieces supplied, only about 25% is acceptable for direct shipment to Germany. Another 50% is also acceptable with minor reassembling works necessary to produce better quality of products. About 20 25% is rejected due to unconformity to the international standards. Those products might have a fatal error or damage and could not be repaired by

PTFI's labors. Sometimes, rather than returning the rejected products to Jepara artists, PTFI offers those products at a very low price (Yudha, 2009). The quality control is performed by the Production and Quality Manager, who is also the German representative from PTFJ. Generally, the Manager will conduct re-check after the first quality control is performed by the Head of Production and Quality in PTFI.

- **Re-assembling**

PTFI provides additional benefits in producing the greater output. PTFI often re-assembles the products, especially for the products that are not adjusted to international standard. PTFI purchases the finished goods in low price, perform the necessary repair and put additional components in order to conform to international market standards. The cost of re-assembling one piece of furniture is about 10% of the cost of purchasing the products from Jepara suppliers.

- **Forest Stewardship Council Certification**

PTFI is adding more value by providing a Forest Stewardship Council Certification<sup>10</sup> in every product. Products from FSC certified forests have the tendency to create more business value than products from non-FSC certified forests. PTFI puts FSC label on each product they produced in order to protect the brand name and reputation of the company, for both PTFI and PTFJ.

This FSC Certification creates more benefits for the market of PTFJ in Europe. Mostly, the European customers are fond to buy products with FSC label. This label shows that PTFI and PTFJ is concerned of the consumption of forest products that well-managed to meet social, economical and ecological needs of present and future generations.

- **Higher Sales**

Aside from low rejection in products, other value that PTFJ has experienced is the higher number of sales. Although there is no detail of the actual PTFJ's sales, the information could

be derived from sales of PTFI. Since PTFI is the sole supplier for PTFJ, the higher sales of PTFI means sales of PTFJ are also increased.

*Table 8. Selected Financial Figures of PTFI (Total Sales)*

In Rp thousands	2006	2007
<b>Total Sales (Rp)</b>	<b>9,905,156</b>	<b>35,864,926</b>

Source: PTFI (2009).

The above table shows a drastic increase in PTFI's sales. This may indicate that sales of PTFJ are also escalating. Because of the effective and efficient used in performing the manufacturing process, PTFI can reduce the base pricing for PTFJ. With the quality check and re-assembling works, PTFI is able to increase the overall value of about Rp. 26,000 for every piece of furniture that it sells to PTFJ. The approximate margin between PTFI and PTFJ is averaged Rp. 500,000 for every piece of furniture that PTFJ sells in the European market. This shows the boost in profit margin on selling price in the European market.

- **Increase Cross-Selling**

At the first time, 70% of order from PTFJ is chair, and only about 30% is table. When PTFI was established, it had increased the percentage of table sold to 40%, and accessories have increased to 10% of total sales.

*Table 9. Selected Financial Figures of PTFI (Cross Selling Between Products)*

	Chair	Table	Accessories
% of Total Sales in 2006	70%	30%	0%
% of Total Sales in 2007	50%	40%	10%

Source: PTFI (2009).

- **Cost Reduction**

Based on Porter's generic strategy (Yudha, 2009), low cost is one avenue to concentrate on low cost strategy that aims to have a lower cost structure than competitors. By doing the production in PTFI, it attempts to develop a lower cost structure via the following issues;

- **Cost Control**

It includes improving controls on raw materials, direct labor, factory overheads, and administrative overhead. By setting up PTFI Indonesia, PTFJ is able to reduce the cost of production. PTFJ can reduce the labor costs by

<sup>10</sup> Forest Stewardship Council is an international non-profit organization that responsible to forest stewardship by providing benefits to firms, such as; principles for responsible forest stewardship, no barrier to trade under World Trade Organization, monitor compliance with standards, powerful product labeling systems to recognize policies, systems, performance, and demands for FSC's certified products and services (<http://www.fsc.org>)

taking advantage of the lower rate on Indonesia's workforce. PTFI can also take advantage of the strong currency rate of Euro relative to Rupiah. Moreover, the abundance of resources in Jepara, is also beneficial in improving the overall efficiency in PTFI.

- Cost of Marketing  
Since PTFI manufactures and produces solely to PTFJ, PTFI incurs no marketing costs, in terms of advertising and promotion.
- Distances of Suppliers  
Another benefit for PTFJ in setting up PTFI is being closer to all suppliers. The time required to ship the goods from Jepara becomes more rapidly. This improves the quicker turnover of inventory.
- Location Advantage  
For both PTFI and PTFJ, distribution is considered as an important factor. By locating PTFI in free-trade location (*kawasan berikat*), it reduces costs of distribution to Germany. This is coupled with relatively cheap labors to support the overall low-cost strategy.

## 6. Conclusion and Recommendation

### 6.1 Conclusion

Based on the analysis above, it becomes apparent that the establishment of PTFI was indeed enhancing the product value for PTFJ in Germany. Some selected evidences are;

- Productivity of PTFI has increased from 0.09 in 2006, to 3.57 in 2007.
- Except for ROCE, the other level of efficiency ratios has improved. DAR increases to 0.92 in 2007, and DER jumps to 10.92 in 2007.
- Although the level of effectiveness ratios has failed to show improvement, nonetheless, the result of ITO shows a drastic leap from 25.07 times in 2006, to 82.61 times in 2007.
- The calculations on shareholders' value have also shown a significant accomplishment from a negative value of Rp. 6.4 billion in 2006 to reach a staggering Rp. 1.4 billion in 2007.
- The calculations on PTFI's EVA shows a strong recovery from a negative EVA of

about Rp. 5.6 billion in 2006 to about Rp. 988 billion in 2007.

- The information on defective products is also indicating an unbelievable perfection in PTFI's quality control; from Rp. 6 billion in 2006, to only a mere of Rp. 145 million.

Hence, referring to the initial hypothesis in the beginning of the study, it is safe to conclude that PTFI's financial records are able to show the value creation of PTFI in enhancing product value for PTFJ in Germany.

## 6.2 Recommendations

### 6.2.1 Business Growth

In order to be more effective and more efficient in using the low-cost labor in Indonesia, it is recommend that PTFI expands its destination, not only to PTFJ. Because the season that appropriate to sell the outdoor furniture is only in summer, which impacts the productive month for the labor is only eight months, PTFI could distribute to another countries that has the opposite seasons with the European market.

### 6.2.2 Product Expansion

Since the products are mainly outdoor furniture, PTFI could expand into the indoor furniture market, which can be sold in all seasons. PTFI may also want to engage in updating information on the demand of furniture from the European market, including; tastes, design, color, or current trend.

### 6.2.3 Quality Control Improvement

PTFI needs to maintain its best of quality control by selecting the most appropriate artists from Jepara, which can be monitored to produce a high quality product.

### 6.2.4 Cost Budgeting

Though PTFI's sales are rapidly increasing, but they are insufficient to generate revenue. It is apparent that PTFI need to pay a closer attention to cost structure and capital budgeting. It is expected that the combination of cost structure and capital budgeting is able to produce higher in return on investment..

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Internal data from PTFI and PTFJ.



# Household-level Entrepreneurship and Entrepreneurial Human Capital in Indonesia

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## *Abstract*

*In this paper I provide new empirical evidence on household-level entrepreneurship in Indonesia, with a particular focus on the concept of entrepreneurial human capital. Much of the literature on constraints to entrepreneurship amongst micro and small enterprises focuses on credit or other institutional constraints. In this paper I present summary statistics and correlational evidence on a channel that has largely not been quantified in prior work: the specialized skills and knowledge necessary to run an enterprise, which I call entrepreneurial human capital (EHC). While EHC is difficult to measure in general not directly measured in the data I employ, I hypothesize that EHC can be increased through three observable channels: learning-by-doing, learning in the family, and prior employment in relevant enterprises. I analyze these channels and show they matter both for the decision to start an enterprise and enterprise returns, using the most recent two rounds of the Indonesia Family Life Survey. The analysis provides novel evidence on the sources of heterogeneous outcomes seen amongst micro and small entrepreneurs. I show that measures of EHC have a statistically significant effect on enterprise activity, and that it is important to parse enterprise experience by relevant levels of enterprise complexity.*

*Keywords: household entrepreneurship, entrepreneurial human capital*

## **1. Introduction**

An important consideration for economic growth is the role of entrepreneurs who start and develop micro and small enterprises,<sup>1</sup> which are owned at the household level, and might develop into medium and large enterprises. There has been a significant amount of literature that looks at the question of what constrains the emergence of such enterprises, particularly in developing economies. Primarily, researchers have focused on credit constraints, and institutional constraints more broadly. For example, a significant amount of literature has focused on credit constraints, asserting that if this constraint could be overcome we would observe widespread entrepreneurial activity. Yet recent rigorous evaluations of programs providing small-scale finance to microentrepreneurs suggest that there must be an explanation beyond credit that rationalizes heterogeneity in entrepreneurial outcomes (see, e.g., Banerjee et al. (2010), while other works suggests that most individuals tend to have the characteristics of wage workers, and fewer have the characteristics of successful

entrepreneurs (de Mel et al., 2008). In addition, much existing literature finds that such micro and small enterprises have relatively low productivity.

Such findings lead us to seek new explanations for the heterogeneity in self-employment performance. The literature on credit access (and indirectly, then, access to investment funds for physical or other productive capital) implicitly assumes that the self-employed have fairly homogenous entrepreneurial potential, so that physical and institutional inputs could be the only constraint. Recently development economists have begun to consider alternative explanations, in particular heterogeneity in entrepreneurial knowledge and skill. For example, Bruhn et al. (2010), after reviewing the relatively small existing literature in economics on constraints to enterprise activity, suggest the concept of heterogeneity in “managerial capital” (which they argue is distinct from traditional human capital, such as through formal education) as a possible explanation for heterogeneity in enterprise outcomes.

In this paper I provide new empirical evidence on household-level entrepreneurship in Indonesia, with a particular focus on the concept of what I call “entrepreneurial human capital” (EHC). This concept goes beyond

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<sup>1</sup>In this paper I use the following definition of enterprise size categories, following the country-level data I use: microenterprise (1-4 workers), small enterprise (5-19 workers), medium enterprise (20-99 workers) large enterprise (100+ workers), though the World Bank data uses 11-49 workers for small and 50-299 workers for medium.



managerial capital as coined by Bruhn et al.—it is build on the idea that successful entrepreneurs are required to acquire a significant and unique bundle of skills in order to successfully run an enterprise, which can manifest themselves in a number of capacities—the judgment of risks, the skill to identify a product market and exploit it, knowledge about how to identify and manage employees, and skill in negotiation with customers and suppliers. While EHC is difficult to measure in general not directly measured in the data I employ, I hypothesize that EHC can be increased through three observable channels: learning-by-doing (see work summarized in Parker, 2004), learning in the family (see, e.g., Dunn, and Holtz-Eakin, 2000), and prior employment in relevant enterprises (see, e.g., Fairlie and Robb, 2007). I am then able to use observable measures of EHC acquisition to study the effect of EHC on observable outcomes.

I apply the concept of EHC to two key aspects of enterprise activity: the (discrete) decision to start an enterprise, and the returns (profits) to existing enterprises. In general, greater EHC should increase one's likelihood to start an enterprise and should increase enterprise profits. Furthermore, I hypothesize that EHC matters differentially across different enterprise categories. For example, EHC relevant to running a microenterprise with two household employees is quite different from a small enterprise with ten employees, including outside wage workers.

Hence, EHC is essentially hypothesized to be a function of one's own enterprise experience, and exposure to enterprise activity acquired through observing one's family members (e.g., parents) in running an enterprise, and through exposure to enterprise activity through working in a relevant enterprise as an employee. While fairly common in the literature in labor economics, experience measures can be difficult to compute in most datasets. It is common to use a person's age (or their age minus the age at which they entered the workforce) as a proxy for experience, though this can obviously be misleading depending on whether the person transitions in and out of employment. Based on the data I have access to, I am able to construct much more precise experience measures. As Parker (2004, pg. 72) notes, such direct experience measures are relatively novel

in the data, as he can only cite four papers (all based on US data), which directly follow this approach (one example is Evans and Leighton, 1989).

I present summary statistics and correlational evidence that gives evidence for the role of EHC in enterprise outcomes. For this purpose I employ the Indonesia Family Life Survey (IFLS), a large-scale, household-level panel survey dataset. The dataset provides me with ideal measures of entrepreneurial experience.

There seem to be good reasons to hold doubts about credit constraints as the critical constraint for most potential entrepreneurs. Beyond the low returns observed in most micro and small enterprises (which would imply that such entrepreneurs would not be the best borrowers), we also observe that even in a more financially advanced economy such as the United States it is well-documented that nascent entrepreneurs face significant challenges in obtaining credit, often depending on self-financing or borrowing through local social networks. Besides, what may appear to be credit constraints may actually be interpreted as EHC. Ikhwan and Johnson (2009) cite evidence of a significant lack of understanding about credit access and availability amongst rural entrepreneurs in Indonesia, and that individuals significantly underestimate their actual access to credit. There is also literature pointing out that small entrepreneurs might choose not to take on credit due to the risk of losing crucial assets through posting collateral.

The remainder of the paper proceeds as follows. In Section 2, I provide more information about the theoretical background of the study, including the conceptualization of the channels behind the formation of EHC, and describe the dataset, including some summary statistics. In Section 3, I outline the empirical strategy, including the probit and returns functions employed. In Section 4, I present the results of the empirical analysis, and in Section 5 I conclude.

## **2. Theoretical Background, Data**

### **2.1 Theoretical Background: The Channels of Entrepreneurial Human Capital Formation**

It is well-known in the literature on labor economics that ability, skill and knowledge matter for individuals' earnings and

occupational behavior. Since at least the economist Gary Becker, there has been a significant interest in economics in explaining heterogeneity in economic outcomes based on heterogeneity in human capital. Much of this work has focused on human capital relevant to waged employment, where the primary channel for the formation of such human capital is through formal education. There is significant literature in macroeconomics studying the relationship between measures of human capital based on formal education, and variation in levels and growth in GDP across countries.

EHC is the specialization of broad human capital to entrepreneurial activity. While formal education (perhaps augmented by workplace experience) is taken to be the key channel for the formation on human capital in the broader literature, it seems that the most relevant activity for enterprise success is direct enterprise experience, or other exposure to enterprise activity. While EHC is difficult to measure directly, the empirical work is built on the theoretical hypothesis that EHC is formed through the channels of own enterprise experience (i.e., learning-by-doing in running an enterprise), and exposure to enterprise activity acquired through observing one's family members (e.g., parents) in running an enterprise, and through exposure to enterprise activity through working in a relevant enterprise as an employee.

In addition, I hypothesize that such experience can be more or less relevant for enterprise outcomes depending on how close a given activity is to one's experience. For example, while an entrepreneur may have a tremendous amount of experience running a small food stand, this might not be so relevant for running a large restaurant with 15 employees. And vice versa, a successful manager running a large restaurant may know little about what it takes to succeed in the micro-scale food industry.

Based on this logic, I use information in the data to stratify enterprises by levels of complexity—I differentiate experience running an enterprise with no employees (i.e., one in which the individual entrepreneur is the only worker in the business), with only household/unpaid family workers, and enterprises which actually hire outside workers that is paid a wage.

Along these same lines, I also theorize that the relevance of one's enterprise experience for a new enterprise will depend on whether that experience is in a relevant sector. For example, to return to the previous simple example, if an entrepreneur has experience running a microenterprise in the food sector, that experience might not transfer over to a microenterprise in the transport sector, and vice versa. Hence I also stratify enterprise experience by sector, based on the available data.

Finally, I hypothesize that the marginal effect of entrepreneurial experience diminishes over time—while an entrepreneur sees large increases in performance due to learning early on in their enterprise experience, the increase in performance diminishes over time. This is the idea of 'decreasing marginal returns' in economics. This idea is fitting with evidence in the broader literature on human capital, and in the specific study of entrepreneurship (see, e.g., Parker, 2004).

The idea is that enterprise experience is complementary to baseline levels of human capital (i.e., formal education, and human capital acquired during childhood) in allowing for entrepreneurial success (see, e.g., La Porta and Shleifer, 2008; and the reasoning applied in Keane and Wolpin, 1997). The average or absolute level of enterprise productivity should be primarily determined by the baseline level of human capital in a country, subject to variation in entrepreneurship-specific culture, ability and affinity. EHC provides a basis for understanding the *heterogeneity* in entrepreneurial outcomes. For example, even if overall human capital levels are relatively low (or high), why is it that certain entrepreneurs succeed in growing their enterprises, while others stagnate? EHC provides a potential source of stratification amongst enterprises—those entrepreneurs who move up the 'entrepreneurial ladder' do so by taking a significant amount of risk and putting in a significant investment in building enterprise-appropriate EHC, and this can be a key driver of variation in enterprise outcomes.

## 2.2 Overview of Dataset

I employ the Indonesia Family Life Survey, a large-scale household-level panel

dataset, for the analysis.<sup>2</sup> The data were collected over four rounds from 1993 to 2008 (with recall data covering intervening years), tracking a sample of 7,200 households and their splits (over 60,000 individuals appear across the data rounds) with remarkably low attrition. For the analysis in this paper I only make use of the last two rounds of the survey, in 2000-01 and 2007-08. Representative of 86% of the Indonesian population, the data were collected across 13 provinces (North Sumatra, West Sumatra, South Sumatra, Lampung, Jakarta, West Java, Central Java, Yogyakarta, East Java, Bali, West Nusa Tenggara, South Kalimantan, and South Sulawesi), on 4 major islands, and exhibit tremendous economic, social and ethnic variation. Most uniquely relative to existing studies, the sample is large enough that the subset of households running what could be considered “push” or “opportunity” enterprises number in the hundreds. For example, in IFLS4 (2008) there are 6188 total enterprises, of which 451 (7.3%) have 5 or more employees, 88 (1.4%) have at least 10 employees, and 37 (0.6%) have 15 or more employees. The largest observed enterprise has 201 employees, though this is truncated from the sample due to being an outlier. Looking at capital stock, 1914 enterprises (31%) have at least 5 million Rph. (about \$500 USD) in total enterprise-specific capital stock, while 661 (11%) have at least 25 million Rph. (about \$2500) in total capital stock. The data contain further rich information at the community, household, individual and enterprise level.

There is significant stratification in the data in terms of which provinces the enterprises are located in (I focus only on non-farm enterprises, though the IFLS also contains considerable information on agricultural enterprises). This is useful, because the results might be less interesting were it to be the case that all of the enterprises were concentrated in Jakarta, for example. The two provinces with the most enterprises in IFLS4 are West Java with 882 (14.2%) and East Java with 892 (14.4%). The fewest are found in Lampung with 155 (2.5%) and South Sumatra with 235 (3.8%), yet a significant part

of the variance is due to sampling according to population proportions.

There are a number of reasons why the IFLS is promising as a data source to look at entrepreneurial activity in particular, as opposed to other data sources that one might consider. First, there is often a selection problem in looking at firm-level data (particularly selection favoring successful firms, and selection favoring formal-sector firms when the informal sector may be an important part of the economy). Oftentimes firm-level datasets do not collect information on enterprises as of some cutoff point, for example on firms with less than 10-20 employees (this is true, for example, of the Survei Industri in Indonesia). The IFLS does not have this problem—it collects data on all enterprises run, from a random sample of households. Second, it is difficult or impossible to look at entry choice with firm-level data, especially if one desires to have information on the individual entrepreneur such as demographic characteristics (especially characteristics prior to entry). Finally, as Parker (2004, pg. 71) points out, “age and experience are not synonymous...[and] to separate cohort effects from genuine experience effects, either longitudinal (panel) data or accurate measures of actual work experience are required, [yet]...most econometric investigations have explored the effects of age on self-employment using cross-section data. Most of these studies have found a significantly positive relationship between these two variables...” Hence the study at hand promises to make a genuine contribution in applied methodology, by employing rich panel data and contains rich measures of actual enterprise experience.

### 2.3 Summary Statistics

In this section, I report a number of additional summary statistics of interest on enterprises in IFLS4.

95% of enterprises are owned by a single household. Average net profit is 11,257,000 Rph., with a standard deviation of 32,484,100 Rph. Average land assets in the enterprises are 5,242,700 Rph, with less than 10% of the sample reporting owning land assets. Average building assets are 4,882,000 Rph., with less than 10% of the sample of enterprises reporting owning building assets. [further

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<sup>2</sup>For more information on the IFLS, see Strauss et al. (2004) and Indonesia Family Life Survey (2009).

summary data on enterprise assets to be reported].

The average number of unpaid workers per enterprise is 0.7, with a standard deviation of 1.01. The maximum in the sample is 20, while the minimum is of course zero. The 75<sup>th</sup> percentile of the distribution is at 1 paid employee; the 90<sup>th</sup> percentile is at 2 paid employees and the 99<sup>th</sup> percentile is at 4 paid employees. As for paid workers, the maximum in the sample is 200, while the as of the 75<sup>th</sup> percentile there are still no paid employees. The 90<sup>th</sup> percentile is at 2 paid employees, the 95<sup>th</sup> percentile is at 3 paid employees, and the 99<sup>th</sup> percentile is at 10 paid employees. Hence, taking totals, the average number of employees is 2.36 (now including the individual entrepreneur running the enterprise), with a standard deviation of 4.21. 50% of enterprises have at least one employee other than the entrepreneur.

The person most often responsible for running the enterprise is the head of household or their spouse, in 69% of cases. Next in frequency is child or child-in-law, parents, or parents-in-law. The largest source of startup capital is household savings alone (45%), then within family alone (34%), and finally very small amounts for loans from the bank, or other owners/partners. Perhaps surprisingly, the proportions for sources of starting capital do not change significantly if we focus on enterprises with 5+ employees, or greater than 10,000,000 Rph. in assets. In terms of participation in the formal sector, 9.4% percent have some kind of formal business permit.

## 2.4 Construction of Variables

In this section I specifically describe how I construct the variables that measure enterprise experience.

(1) Own experience. I have data on the number of years (and months) that an entrepreneur has been working as the person primarily responsible for an enterprise they are currently running. Since I have data on the primary and secondary occupation of all workers, I know years of experience in running an additional enterprise. These variables can be crossed with the sector of the enterprise (8 broad sectoral categories).

I construct additional measures of EHC through prior enterprise experience. The IFLS provides quite detailed year-by-year

retrospective data on employment history. I know if their prior experience was in (i) an enterprise with no employees, (ii) an enterprise with only household/unpaid employees or (iii) an enterprise with paid employees. So I can again count years of experience in each enterprise category, and also cross that with the sector of the enterprise. There is also a separate section of the survey that asks about the person's first job. Hence in principle there is no truncation on recall about prior enterprise activity. While the data on first job is a little more crude, I can still construct a dummy variable for whether someone's first job was in the same (i), (ii), (iii) categories of enterprise type as in the more recent yearly recall data.

(2) Learning from others.

(i) Learning within the family unit. Given that households report owning up to seven enterprises, I can use various characteristics of the household's other enterprises in studying effects on the decision to startup and the returns to a given enterprise. For example, I can use the number of other enterprises in the household, or the number or existence of enterprises in the same industry or the same size category (number and type of employees). I can also take all of the measures from (1) and (2)(ii) from one's fellow household members and project them onto an individual in the same household. For example, what is the enterprise experience of one's parents? Are there members of the household with significant enterprise experience?

(ii) Experience in the same industry as an employee. The idea here is that a person can make good use of their previous exposure to an industry or enterprise type as an employee, when they later run their own enterprise. This is related to the idea of enterprise "spin-offs", where individuals working in a business start up a new enterprise that is similar in size, industry, product, etc. While the data don't allow me to specifically identify spinoffs, I can certainly look at prior enterprise experience. Just as with the measures of direct entrepreneurship-related work experience as described above, I can count years of experience in current primary and secondary jobs, crossed with industry. I have year-on-year retrospective information on work experience, and information on one's first job. I have additional information on firings from government or paid employment jobs. I have

data on the sector and size of the enterprise one works or worked in.

### 3. Empirical Strategy

My empirical strategy primarily builds on the work of Evans and Leighton (1989) and Paulson and Townsend (2004), who estimate discrete-choice enterprise formation models and estimate enterprise returns. While Evans and Leighton (1989) is a seminal paper in the empirical analysis of entrepreneurship, partly for the fact that it provides evidence on the role of entrepreneurship-specific experience in entrepreneurial outcomes, Paulson and Townsend (2004) focuses particularly on the role of credit constraints to entrepreneurial activity in rural Thailand. The discrete-choice firm formation decision is modeled in a probit framework, while the role of EHC in enterprise returns is modeled through a simple, reduced-form enterprise returns function. I describe each of the empirical specifications in the following two subsections.

#### 3.1 Probit Model

A simple introduction to the probit framework is provided in Parker (2004), though it is presented in much more detail in almost every modern textbook on econometrics. Consider a cross section of data on  $n$  households, indexed by  $i=1, \dots, n$ . The household faces the choice between starting a new enterprise,  $S$ , or not doing so,  $N$ . Each household, or the individual entrepreneur in the household who is responsible for running the enterprise, has a vector of observed characteristics  $W_i$  (which includes the measures of EHC) and derives  $U_{ij} = U(W_i, j) + u_{ij}$  if they choose  $j = S$  or  $N$ , where  $U$  represents observable utility and  $u_{ij}$  represents idiosyncratic unobserved utility. We define the latent variable  $z_i^*$  as follows, which represents the relative advantage of activity  $S$ ,

$$z_i^* = U(W_i, S) - U(W_i, N) - u_{iN} + u_{iS} \quad [1]$$

We take  $U$  to have a linear functional form, taking the form  $U(W_i, j) = \beta_j' W_i$ , where  $\beta_j$  are vectors of coefficients specific to each activity, so the parameter vector of interest captures the difference in choice attributed to each explanatory variable. As is standard, the assumed function forms can then be inserted into (1). We then assume that a household chooses to form an enterprise if  $z_i^* \geq 0$ .

Of course,  $z_i^*$  is unobservable. What we observe is  $z_i$  – whether or not the household actually forms an enterprise. This is coded as a 0-1 variable (0 if no enterprise is formed, or 1 if one is formed). This generates a probability that an individual with (observable) characteristic vector  $W_i$  chooses to set up an enterprise:

$$\Pr(z_i = 1) = \Pr(z_i^* \geq 0) \quad [2]$$

The probit model assumes that the distribution of the random disturbance term, representing unobservable factors affecting choice, follows a normal distribution. This leads to an estimable likelihood function, which is usually implemented by maximum likelihood estimation, and efficiently estimates the parameters  $\beta$ .

#### 3.2 Enterprise Returns

To look at the role of EHC in enterprise returns I employ a very simple estimation strategy. Employing the same notation as above, though now note that the individual unit of observation is an enterprise and not a household (in practice, there are households which own more than one enterprise). As above, let  $W_i$  denote observable characteristics of the household or primary entrepreneur responsible for the enterprise (including EHC), and  $\beta$  the parameter vector of interest. In addition, since we are now considering enterprise (net) profits as the dependent variable, let  $\pi_i$  denote enterprise profits, and  $\varepsilon_i$  capture other unobservable factors. Then I estimate the following returns equation by employing ordinary least squares (OLS) estimation:

$$\pi_i = \beta' W_i + \varepsilon_i \quad [3]$$

### 4. Results

Note that Table 1 presents the monetary variables in 2008 US dollars terms.<sup>3</sup>

#### 4.1 Enterprise formation

Here I present the results of an enterprise formation regression. I present absolute (not marginal) effects, so only the sign and

<sup>3</sup>I will convert the values to Indonesian Rupiah before the final draft is submitted. For now, it is easiest to convert values by multiplying each numerical value by about 10,000.

statistical significance of the coefficient estimates can be interpreted. The data is constructed so that we look at the choice of a household to start up an enterprise between the years 2001 and 2007-08, conditional on characteristics of the household in 2000. This setup is important for purging endogenous effects of certain variables (i.e., wealth may be correlated with enterprise success).

The key variable of interest is Num\_ent, which represents the number of enterprises that the household owns in the year 2000. This could be interpreted as a measure of household-level EHC – it proxies for the amassed enterprise experience of the household in enterprise activity as of 2000. I also display coefficients for the age of the household head, and availability of labor in the household: male adult labor, female adult labor and child labor. Also included were measures of household wealth (and drawing doubt on the role of household wealth in enterprise formation), and access to direct financial sources, though these are omitted since they are not statistically significant.

Table 1. EHC Enterprise Formation Regression 1 (Dependent Variable: Net Profit)

Variable	Coefficient	Std. Error
Constant	-1.127621	0.0717331***
Num_ent	0.1216243	0.0304727***
Age_head	0.0193063	0.0085228**
Age_head^2	-0.0002231	0.0000843***
Adult_m	0.0306943	0.0155467**
Adult_f	0.0013196	0.0148685
Children	0.0649665	0.0136851***

N = 6053, P-seudo R-squared = 0.0145, LR Chi-sq. = 100.92\*\*\*.

Notes: \*\*\* indicates significance at 1% level, \*\*indicates significance at the 5% level, \* indicates significance at the 10% level.

These results provide initial evidence for the role of EHC in enterprise formation. We find that Num\_ent is statistically significant at the 1% level, with a large coefficient (though these are not marginal effects). In addition, the age of the household head has the typical influence that is found in most studies of enterprise activity (see Parker, 2004); this can again be interpreted as a crude measure of experience. Adult male and child labor also seem to be important determinants of the decision to start up an enterprise, which is natural if male household members and

children are typically the enterprise employees.

## 4.2 Enterprise Returns

First, I present results on enterprise returns for a simple specification in which I run direct experience in the enterprise at hand (measured in years) as the only explanatory variable for enterprise profits. I truncate the table to only display the first three orders of a polynomial expansion of the enterprise experience variable (i.e., I use (# years), (# years)^2, and (# years)^3) as the explanatory variables, where the regression used a 10<sup>th</sup>-order polynomial.

Table 2. EHC Return Regression 1 (Dependent Variable: Net Profit)

Variable	Coefficient	Std. Error
Constant	634.4354	92.83614***
(# years)	323.0539	164.4676**
(# years)^2	101.6821	86.4249
(# years)^3	15.62995	19.14948

N = 5190, R-squared = 0.0053, F = 2.76\*\*\*.

Notes: \*\*\* indicates significance at 1% level, \*\*indicates significance at the 5% level, \* indicates significance at the 10% level.

While only the first-order term is significant at the 5% level, it is still suggestive of a significant role for EHC. We see that the coefficient on number of years of enterprise experience is \$323.05, implying that an additional year of experience in the enterprise increases net profits by the same amount. Although they are not significant, if we consider the second and third-order terms, the implication is that an additional year of enterprise experience increases profits by about \$166.

One might think that, in addition to the direct enterprise experience of the entrepreneur responsible for the enterprise, also important would be the total age of the enterprise, since much information about the enterprise may be passed down through family members about ways to successfully run the enterprise. When I insert enterprise age (and the squared version of this variable) into the above specification, I find that enterprise age is indeed statistically significant at the 5% level (both terms). I do not report these results in a table. An additional year of enterprise age adds about \$11 to net profits. Meanwhile, direct enterprise experience of the entrepreneur in the enterprise loses some

significance, though it is still significant at the 10% level, and it's economic significance is still large.

One potential criticism of the above specifications is that while direct enterprise experience (and enterprise age) seem to be highly correlated with net profits, the effect is not really causal—it could be that there is some unobservable factor which causes both enterprises to survive for longer and to be more profitable. Hence the correlation between direct experience and age and profits may not completely capture a pure causal channel from these experience measures into profits. One way to purge some of this endogeneity is to follow the following argument: if EHC really matters, then prior experience running enterprises (but not the current one) should matter for enterprise returns. Although measures are still subject to criticisms in causal interpretations by the most stringent critics, they certainly go further in purging some endogeneity.

In the following table I present results from a returns regression in which only *prior* enterprise experience is considered. Number of years of experience in an enterprise with no employees (ne), number of years of experience in an enterprise with only family/unpaid labor (f), and number of years of experience in an enterprise with waged employees (w) are included, and then dummy variables for each of these categories, regarding one's first job.

Table 3. EHC Return Regression 2 (Dependent Variable: Net Profit)

Variable	Coefficient	Std. Error
Constant	940.9155	407.0496***
(# years)_ne	-41.52993	25.87484
(# years)_f	79.55741	33.94177**
(# years)_w	407.0496	83.99753***
first_ne	234.4331	197.7944
first_f	240.6405	326.7737
first_w	2062.686	811.6475**

N = 5190, R-squared = 0.0078, F = 6.76\*\*\*.  
 Notes: \*\*\* indicates significance at 1% level, \*\*indicates significance at the 5% level, \* indicates significance at the 10% level.

These results once again the key role of entrepreneurial experience. We see that experience in an enterprise with employees has statistically significant, positive effects on enterprise returns, particularly for experience in enterprises with waged employees. This is strongly magnified for entrepreneurs for whom

the first enterprise experience is in running an enterprise with paid employees, implying additional income of over \$2000.

## 5. Conclusion

This paper provides evidence on enterprise experience, as a proxy for the formation of EHC, as having a significant effect on the economic performance of micro and small enterprises. I outline a simple theory of EHC formation and the hypotheses that follow.

Using a rich household-level dataset from Indonesia (the IFLS) I demonstrate that enterprise experience is an important factor in explaining heterogeneity in enterprise outcomes. Even in regressions which do not control for other sources of variation in the data (for example, regional controls), I find a statistically (and economically) significant effect of EHC on enterprise outcomes. I show that amassed enterprise knowledge in the household is an important factor in enterprise formation, even when controlling for household wealth. I also find that, since firm age is a significant predictor of firms outcomes (which dampens the role of a certain EHC measure), the accumulated knowledge about running an enterprise within a family may also be an important factor in explaining the heterogeneity in enterprise outcomes.

There are a number of improvements and extensions to this analysis that I would like to carry out before I submit a final version for the Conference:

- I will present the full results on enterprise formation that was omitted, and present marginal effects in addition to absolute effects.
- There are additional literature references that I would like to provide.
- I will make a number of improvements to the empirical analysis, in terms of accounting for selection (hence employing the 'structural probit' model described in Parker (2004)).
- I will report more summary statistics about enterprise activity in the IFLS.
- I will add additional controls in the regression analysis, which should lead to greater precision of the estimates (and increase the R-squared values from the regressions).

- I will convert the values in the empirical analysis into Rupiah terms, from US dollars.
- I also have additional semiparametric evidence, which improves on the methodology of Paulson and Townsend (2004), which I can also present.

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# The Role of Sharia Banking Retailer and the Implication on Intermediary Efficiency: A Case Study on PT. Bank Muamalat Indonesia, Malang Office Branch

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## Abstract

*Bank Muamalat Indonesia (BMI) was the first of sharia bank in Indonesia, as an icon for sharia system that focus on riel sector and small and medium enterprises (SMEs). BMI wider their markets either direct or indirect method. This research has aimed on indirect method and to know: (1) the role of retailer on banking financial transfer, (2) the implication of retailer for intermediation efficiency. Using qualitative research with phenomenology approach, the results are: (1) retailer has major role on financial operation when the lag of intermediation caused by over liquidity, (2) financing use a retailer has implication on intermediary process such as a solution of over liquidity, widening the market share of the bank and real sector can easy to get the fund. This paper concludes that retailer will help the bank for intermediation process and implicitly will reduce the cost and time.*

*Keywords: syariah banking, retailer, intermediation efficiency*

## 1. Introduction

At the time the world economy experiencing shocks, Islamic banking began to attend the alternative solutions to the world of banking. The attraction of the present *sharia* system is the absence of interest system which is a fixed expense that must be borne by customers. Islamic banking is expected to encourage the development of real sector.

Bank Muamalat Indonesia (BMI) is a bank that provides financing, such as *sharia* banks generally. But in this case, the presence of BMI as the first Islamic bank in Indonesia was expected to give a new symbol *sharia* system to prioritize the real sector and small and medium enterprises (SMEs) development. BMI expand market share through two ways of financing, namely the transfer of funds directly and indirectly through retailers. Financing (funds transfer) directly if the customer has provided sufficient collateral as a key condition of doing borrowing, while for indirect financing mechanisms implemented through the transfer of funds, through the retailers who cooperate with BMI Malang branch.

This is very interesting to discuss because in carrying out their financing BMI Malang Branch has two ways of financing that is through direct funds transfer methods that require substantial collateral and the method of transfer of funds indirectly through retailers that do not require collateral in the financing. So that required retailers as intermediaries between BMI Malang branch with customers

(entrepreneurs) who have no collateral in making financing. Thus the researchers wanted to explore in depth about the role of retailers in Islamic banking and its implications for the efficiency of intermediation.

## 2. Literature Review

Bank as intermediary in its operation depends on the people who entrust their funds to be managed. While in business activities, banks face various risks; credit risk, market risk, operational risk and reputational risk. Therefore many of the provisions that regulate the banking sector in order to protect community interests, including provisions governing the obligation to meet minimum capital in accordance with the conditions of each bank, making the banking sector as a sector that "highly regulated" (Zamir and Mirakhor, 2008).

As regulated in banking regulation in the Law No. 7 In 1992, about the Banking Law no. 10 of 1998 regarding amendment of laws with the provisions of Islamic Banking, article 1.13, which referred to the Banking is anything that concerns about the bank, covering institutional, business activities, as well as the manner and process in conducting their business activities. Intermediations in Islamic banking institutions have an important role in improving the financing of the products on sale. Intermediation in Islamic banking is allowed by the rules, and knowing *Sarekat* Islamic financing operations offered by Islamic banking expected to see the

level of efficiency and intermediation in Islamic banking on BMI Malang branch as a case study.

Most of the producers, market participants, or financial institutions in order to sell products are always trying to reach the place closest to the consumer; one of them is through retailers who have a close relationship with final consumer.

Retailing is all the activities that have the purpose of selling goods and services to end consumers for personal users and not for business according to Kotler (2006:215). While the definition of retailers by Mursid (2003:93) is the institution that retailers engage in business to sell goods at the final consumer for personal use (non-business). From the above explanation can be seen that the retailer is selling goods or services directly to end consumers who are used for individuals or institutions that have the purpose sold products offered by these institutions.

From the above two definitions can be seen that the retailing is sales activities of goods or services directly to end consumers who are used for individuals or for their household needs and not for business purposes.

In fulfilling the need to expand the scope and range of financial services and products offered by Islamic banks of Indonesia, the Islamic financial institutions are required to be able to serve various types of customer and clients from individual entrepreneurs to institutions, for investment expansion needs have been established, nor to the needs of initiated efforts. Based on *sharia* principles, the retailer is an institution which acts to channel financing from banks to customers covering all financial services as well as serving various customer types with various specific purposes. Along with the increasingly complex financial system, to introduce Islamic banking products owned by the intermediary institutions need to help the bank service in increasing market share (Zamir and Mirakhor, 2008).

Intermediation is one of the supporters of the efficiency of Islamic banking, if the Input Output in Banking Sector by Freixas and Rochet (1997) proposed three approaches to define the input output relationships in the behavior of financial institutions, as follows: (1) production approach, (2) intermediation approach, and (3) modern approach. Intermediation is one indicator of efficiency in terms of the maximum distribution of financing from the bank to the customer in accordance with the agreement that

has been done by both parties concerned. In the intermediary said to be efficient if the retailer is able to broker with a low cost.

### **3. Research Design and Model**

This paper will discuss the role of retailers on Islamic banking and its implications for the efficiency of intermediation. The method is suitable for this research is a qualitative method. As described by Aziz (2003) explains that qualitative research is not very detailed, unusual to define a concept gives the possibility for changes when the facts found more interesting, meaningful and unique in the field.

This study used phenomenology approach, which can be viewed as a way or style of thinking. The description of phenomenology is burdened by the discovery of meaning. Part of this description include the portrait subjects, reconstruction of dialogue, description of the physical state of the place and other things around him, as well as records about the existence of retailers.

This study uses the unit of analysis that focuses on issues that do not prioritize the research. In the assessment, informants are needed are:

#### ***Key Informants***

BMI Malang branch employees: Officer or Account Manager who clearly know and provide financing to the retailer.

#### ***Informants' Supporters***

Supporting informants in this research is the customers, clients or customers of the bank where the retailer can provide additional information as needed. In addition, information from banks and customers can be used for the validity of data concerning the presence of retailers on the development of *sharia* banks.

This study tried to reveal the role of Islamic banking retailers and their implications for the efficiency of intermediation and therefore, used non-probability sampling with a purposive sampling method. According Sugiyono (2007), non-probability sampling is a technique of taking the informants who did not give equal opportunities for every element to be elected as informants. Purposive sampling method is a technique in collecting informant data source with a certain consideration. This particular consideration, for example, the person deemed most knowledgeable about what is expected, or maybe the person is a ruler that will allow

researchers to explore objects/social situation being studied.

In this study, primary data obtained directly through interviews aimed to investigate further the mechanism implemented by the Bank Muamalat directly or indirectly through retailers. Secondary data is data that has been collected from the Central Bureau of Statistics, magazines, particulars or other publications. In this study, despite using both types of case studies but the data is still needed. Primary data was collected by conducting direct research into the BMI Malang branch to find more information relating to the material covered and used as proof of the validity of the triangulation used by the researchers. While secondary data obtained from the legislation of *sharia* banking at Central Bank of Indonesia, regulation, or fatwa related to materials, literature, and journals that can support the preparation of this paper.

Data collection techniques used for this research is the collection of records and reports, interviews and observation. To increase the degree of confidence in the data obtained, we need a technique to test the validity of data. Moleong (2008) revealed that the validity of the data is any condition which must satisfy:

1. Demonstrate the true value.
2. Provide the basis for it can be applied.
3. Allow the outside decision that can be made about the consistency of the procedure and neutrality of the findings and decisions.

In this study, the validity of the data will be done by triangulation. Triangulation is an examination technique that utilizes the use of sources, methods, investigators and theories. Therefore, the authors conducted a study to see triangulated by source of data validity can be reached by:

1. Comparing the observed data with data from interviews.
2. Comparing what others are saying in public what he said personally.
3. Compare what people say about the situation of research with what is said at all times.
4. Comparing the situation and the perspective of someone with different views of people such as income and ordinary citizens, and people with secondary education or higher.
5. Comparing the results of interviews with a documentary-related content.

Accordingly, the validity of the data will be done by comparing the observed data with interviews of BMI Malang branch staff. With each other and supporting the informant was able to answer and provide information that will be able to bring the fact behind the phenomena that occur on a retailer that partners BMI Malang branch.

Data analysis can be defined as a process of review, the sorting and grouping data in order to formulate working hypotheses and conclusions or theories appointed as the research findings. According Moleong (2004), "Data analysis is the process of organizing and sorting the data into patterns, categories and basic outline of the unit so it can be found themes and working hypotheses can be formulated as suggested by data."

Data in this qualitative research will go through stages of reading, searching and reflection data that describes the units and the possibility of certain relations. Then the data is filtered to obtain relevant data for the purpose of research.

## **4. Result**

### **4.1 Impact of Direct Financing by BMI Malang branch**

Financing potential loss is always going to appear in any financing done by banks, either by the conventional banking and BMI Malang branch, which is one part of Islamic banking. Then the data is filtered to obtain relevant data for the purpose of research. The potential loss caused by a number of risks that might be caused, in accordance with the exposure presented by Howells and Bain (2007) that if funds are made directly, surplus spending units will bear the substantial risk of the deficit spending units, and therefore to cover the existing risk, surplus spending units request a reward/return/profit sharing as a compensation from the risk of deficit spending units.

Of the high for the results reflect the conditions imposed inefficient in these mechanisms. The most important action is how to minimize the impact that arises from the existence of such problematic financing so as not to cause systemic risk. The risk of becoming a polemic by conventional banks can be overcome by the existence of Islamic banking. Through the *sharia* system implemented by the BMI Malang branch, financing disbursed to have less risk because the system was used for the results and is not a fixed expense to

customers. As described by Ms. Riva is an employee in charge of bank financing:

*"Thank God today was not a big problem that never appeared, because we are very careful in doing the financing. Perhaps, one or two people that still breaking the law. However, it can be resolved by way of kinship. Financing we do also still in the small scope, ie the most distant region of Probolinggo, Lumajang, Banyuwangi, Blitar. In those city we can still be surveyed directly."*

Bad credit risks by using the profit sharing scheme run by BMI Malang branch smaller when compared with the risk of bad loans by state banks faced with determining the scheme of interest. Reputation BMI Malang branch performance in disbursing credit to the real sector financing is better than that done in other economic sectors. Besides the risk of bad loans from the application sharing system is smaller than conventional systems at state banks. The ratio of failed pay of BMI can be explained by Table 1.

*Table 1. Failure to Pay BMI the Malang Branch Ratio and Corporation Bank*

Period (Year and Month)	Muamalat Bank (%)	Corporation Bank (%)
2003 December	2,34	7,31
2004 December	2,37	5,88
2005 December	2,82	14,75
2006 December	4,75	10,70
2007	July	6,58
	August	6,63
	December	4,05
2008	May	4,94
	June	4,23
	July	4,17

Source: 2008 Annual Report BMI

At the beginning of the BMI Malang branch with limited financial resources to focus on the financing directly. The strategy of the direct financing was used when the source of funds was limited to achieve maximum results. This was proven when the margin earned by the bank increased to a high. In accordance with the explanation submitted by the field of marketing BMI Malang branch Ms. Inez:

*"Bank Muamalat this before there are no funds for financing operations that focus with a consumer financing directly. Well*

*done fairly direct financing is also has results."*

Inhibition of direct intermediation arises because in year 2004 funding BMI experienced over liquid cause banks must issue a new strategy in financing. Banks must pay the cost savings large enough, so that banks find out an alternative solution to financing through retailers.

#### **4.2 Retailer Support for Expanding Market Share**

The discussion this time referring to the various perceptions that occurred in BMI in the Malang branch of financing mechanisms is to be distributed at the retailer partners in the distribution of funds owned by banks. Indicators of confidence (trust) must have been owned by the retailer in conducting cooperation with the aim to expand the market share held by banks, and affordable financing to the real sector.

According to Kotler (2006) that with the retailers will be able to help the sales of consumer products at the end so it can expand to the consumer market until the end of the needy. In accordance with the decision in 2004, BMI Malang branch of pursuing a strategy for financing the distribution of small amounts given in the alliance or retailers who wish to cooperate with the bank. Partnerships with retailers by BMI Malang branch aims to support the activities of small entrepreneurs to develop micro-enterprises. This agreement also gives the positive impact of the widespread coverage of the market share of BMI and the real sector to all levels of society.

So far, cooperation between retailers with a BMI Malang branch has been going well. Retailers as partners BMI Malang branch have been doing a good conduct financing activities. No problem so that retailers must decide the working relationship with BMI. Retailers have an important role in the development of bank financing. Although retailers are few, but it able to assist the bank in increasing market share as desired.

Good cooperation with retailers is expected to increase the credibility and public confidence to the retailer or BMI Malang branch. With the cooperation between the BMI and retailers, is expected to be able to increase market share during this desirable. According to research done by researchers to customers BMI Malang branch, they are expecting the *Baitul Maal*

Wattamwil (BMT). Network expanded to areas throughout the city with the aim of expanding and improving the service product that can accommodate the needs of small communities in financing. In accordance with the exposure presented by the BMT coordinator who came to the BMI Malang branch of Mrs. Assa'adah:

*"Yes, it would be happy if there was BMT in villages, and BMT can be managed by the PKK in the village for entrepreneurship activities."*

From the above explanation can be given that the BMT as a partner with BMI Malang branch is basically expected attendance by small communities in rural areas to help provide funding to develop their business. Expansion of market share that has been pioneered by BMI since 2002 gives a good result. These results are proven by the existence of cooperation between BMI with retailers in the year 2004 turned out to have a positive impact to the Islamic banks which have recently emerged as a major pioneering example of carrying out financing programs through retailers. The existence of retailers who are partners BMI is helpful in expanding market share. Obstacles that had appeared less capable BMI to touch the real sector is currently able to be handled by the retailers' role as intermediary institutions that assist banks in achieving the vision-mission that has been used as jargon in BMI throughout the life of the homeland.

#### **4.2.1 Expanding Market Share through Bureaucracy Simplifying Retailer**

Reality is developed in connection with financing the distribution of BMI by BMT as a retailer, it turns out these strategies positively impact the widespread coverage of the market share held by the bank. But generally people do not know and did not even care that when they got financing from the BMT, the actual source of financing comes from the BMI. It was revealed from Mr. Yunan statement follows:

*"I feel excited to get a loan from BMT Ahmad Yani, because with or without collateral essentially no negotiation can quickly get the funds. I do not care about that fund came from where, that I care I was given a loan or not."*

The above facts actually implicitly indicate unexplored the potential market. When people

know that the BMT has established cooperation with a BMI that in fact is a larger entity (having a more powerful resource), it would increase people's confidence to use the services of the BMT. Confidence level is a strong motivation for the community in selecting a financial institution that meets their needs. Thus, information about the position of BMT as a retailer of BMI can increase market share for products BMT primarily financing products.

Algoud and Lewis (2003) suggested that the principal terms of the financing contract, investors cannot demand any collateral from *mudharib* to return capital in addition to the capital especially, because the relationship between investors and *mudharib* is the fiduciary relationship (trust) and is a party that deserves *mudharib* trusted. Therefore, banks cannot get a warranty of any kind, such as in the form of securities or collateral from the entrepreneur if the entrepreneur as collateral loss. Data shows that in the midst of pressure on macroeconomic stability in general and banking in particular, the fact remains BMI Malang branch performance showed improvement. This shows that many people who want to conduct financial transactions with the profit-sharing exist in Islamic banking.

Despite having a relatively high cost of margin financing mechanism through retailer's process is not so complicated in the rules of financing. Even from this research, financing done through a high-cost retailers are not so influential on customers who want to borrow funds at the BMT. It appeared from interviews that the researchers did to Mr. Suripto which states:

*"I borrowed this money in from BMT longtime ago; the person is nice, based on the sharia and not too long and quickly gets the funds."*

From interviews conducted, Mr. Suripto explained that he like to ask for a loan in BMT because the employee friendliness. However, if we see his presentation "the important fast-funded" looks like the main motive is not the *sharia* of the BMT, but the mechanism of the loan process much easier than financing undertaken by other BMT. Search about Suripto still continues, the researchers wanted to know the extent of financing done by the Bank. The Bank had financed based on the precautionary principle but does not burden the customers who

want to do the financing. BMT parties will conduct site surveys to the customers, then funding is usually done based on kinship or acquaintances among employees with the customer.

#### 4.2.2 Retailer Expanding Ability to Reach Real Sector

Retailers are the new products disseminated by the BMI in Indonesia, including BMI Malang branch that supports government programs to develop small and medium business sector. Retailers through alliances that have the function of providing financing to customers is a financing product that is designed to provide easy access to micro and small entrepreneurs obtain financing Islamic products with the ceiling of 500 thousands up to 10 million rupiah. This financing is more directed to productive purposes either for additional working capital or business expansion for small and medium entrepreneurs. Therefore, these financing schemes are kept simple so that customers or prospective customers can be facilitated with the requirement that the process easier and faster without sacrificing the principle of prudence based on the assessment of customer financing characters, namely business feasibility and survey strictly.

#### 4.2.3 Retailers Solve the Over Liquid Problem

Bank as a financial intermediary, on the source of funds (liabilities) are dominated by third-party funds (the public). On the assets, the agency is required to be able to allocate the asset-producing assets (profit). These benefits must be 'sufficient' expected return of fund owners (third party customers) in addition to provide benefits for the owner. BMI as a relatively new business entity as well as other Islamic banks, tend to over liquid conditions while the business scale is still limited. Innovation of retailing activity which appears on the relationship between the BMT (as retailers) with a BMI proved mutually beneficial to both parties. For BMI retailer's presence can help improve the distribution of funds, so that problems can be overcome over liquid encourage an increasing number of productive assets. Proved up to the end of December the year 2008 total assets of BMI in general has reached 10 trillion rupiah based on data from the annual report of BMI, is a staggering number considering the global financial crisis

when it occurs, and many of the conventional banking assets decreased. Increasing the asset is enough to prove that retailing activity successfully overcome the problems of over liquid on BMI.

#### 4.2.4 Retailers Are Able to Assist the Bank Creates Intermediation Function

Besides financing, other banking functions equally important is the function of intermediation. In conventional systems, the intermediation activities are often hampered when conditions increased information asymmetry between the depositors with the bank or banks with the debtor. Whereas the Islamic system that uses a system of revenue sharing, information asymmetry can be minimized. During the year 2008, BMI Malang branch to provide more financing to the principle of *musharaka*, although in the *Sharia* banking in general is more dominant *murabaha* financing. Distribution of funding from the business world with BMT at the micro scale, such as: street vendors, meatballs seller, vegetable sellers, and so forth. It is very interesting in terms of procurement of collateral. Malang branch of BMI in practice still requires the collateral in the financing, while the micro sector customers such as those mentioned above could not provide collateral. In order to bridge the two parties, the role of BMT as a retailer to become the intermediary between BMI and the customer micro business sector.

Table 2. Qualifications Indicator BMI Retailers in Malang Branch

No.	Indicator	Explanation
1.	Status	As a retailer who received recognition from the BMI Malang branch and responsibilities under the Bank Muamalat Indonesia
2.	Amanah (Trust)	Knowing that funds have been distributed can be submitted to the customer who need it (through a survey conducted by the employee).
3.	Family Principle	Hospitality a strong relationship between the retailer with the bank

Source: Arini, 2009.

The main objectives of the creation of intermediary retailers are connecting the financial institution (BMI) to the real sector efficiently. Retailers are helping to develop Islamic banking operations by eliminating requirements for collateral so that it can be

accessed by the business sector capital is minimal. Islamic banking BMI Malang branch as a case to financing without the use of collateral through the retailers who cooperate with the bank. This fact be the answer early on the ability of Islamic banking in protecting small businesses and reduce poverty because of its ability in providing micro financing.

With the retailer offered product development BMI Malang branch progressing rapidly. This is evident in the Financing to Deposit Ratio (FDR) BMI Malang branch from March to September 2008 period over 100%. This means that all third party funds collected can be channeled optimally.

Financing of retailers was conducted by the qualification with some indicators to help banks maintain that the role of retailers in accordance with *sharia* elements. Indicators can be seen through table 2. From retailers qualification indicators can be explained that the retailer who is a partner bank is able to provide a positive symbol in its activities to develop market share. Fulfillment of these indicators is the capital to jointly sounding the role of Islamic banking and helping small society that need funding.

#### **4.3 Implications of Role Based Retailer Financial Cost**

As an intermediary institution that channel funds from customers who have excess funds to customers that lack of funding, the financial cost is an important point that must be considered. Cost is one consideration for the public to choose the financing products and deposit products that suit their needs. Increased public trust against BMI Malang branch last few years, causing the development of third party funds that have been collected BMI.

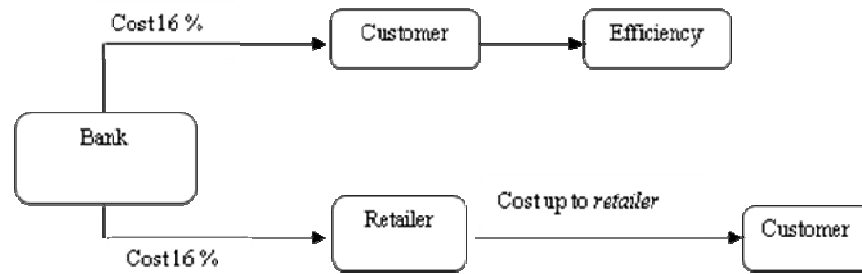
When the increase in third party funds not matched with the increase in the financing will cause over liquid problems. These conditions are inspired BMI to create alternative financing mechanisms other than direct financing. Those alternatives are indirectly financing mechanism through the role of retailers. Financing

mechanisms such differences would also impact on the financial cost. This is explained by one of Mr. Reza BMI Account Manager Malang branch:

*"The differences in the cost of direct and indirect mechanisms are basically not too different. We will still provide the same margin, the margin by which the effective value of around 16%. The Bank does not distinguish between bank partners with customers who do direct consumer financing to the bank because they are borrowing on average almost the same."*

From the explanation of Mr. Reza may imply that cost is an important factor in the bank's operations in order to run optimally. Costs incurred by banks on direct financing mechanism similar to the cost of indirect financing mechanisms. On the mechanism of direct financing, bank specified cost to customers whose position is designated as the final consumer. While the cost of financing for indirect mechanisms, aimed at retailers, which means these funds through a chain longer to get into the hands of final consumers. Funds that have been held by retailers certainly need a more in operational costs retailers, so the cost will be twice more expensive than financing undertaken in the financing mechanism that do directly. Financial costs that must be spent on direct mechanisms and costs incurred in the indirect mechanism can be depicted through Fig. 1.

From Fig. 1 can be explained that from the second financing applied by banks, is more efficient use of financing mechanisms directly because the cost charged on a borrower financing cheaper. Even if through a financing mechanism through retailers, the cost is charged to customers become more expensive, but there are non-cost factors that come into consideration that some people prefer financing through retailers.



Source: Amini, 2009

Figure 1. Financial Cost Implication

The fact that, the increase in the channeling of funds through the retailer to proven that the financial cost is not the only factor considered by the customers to get financing.

#### 4.4 Implications of Role Retailer Based on Time

Time is one indicator is decisive in determining whether a more efficient financing held directly or indirectly. There are two things that causes retailing mechanisms require more time than other financing mechanisms. First, profit-sharing system requires intense communication between the bank and the customer order information asymmetry can be minimized. Second, the absence of collateral consequences banks must prioritize the prudence principle at all stages of financing.

While efficiency measures only the time variable, then the financing of the BMI distribution through BMT (retailers) could be considered inefficient. But when the data indicate that BMT improved financial performance, expand market share, and small economic sector affected, the inefficiency of time can be closed with these advantages.

#### 5. Conclusion

The existence of retailers has been able to assist banks in improving its market share. Retailer helps consumer product sales at the end so it can expand its market share up to end consumers who need it. Partnerships with retailers are able to support the activities of small entrepreneurs to develop, which then will positively impact the spread of market coverage. Retailers as true partners to become a financial intermediary channeling funds to the real sector which is more specific for the SMEs that this could not be reached directly by the bank. Retailers also have a role in overcoming over liquid bank funds experienced over the years, so that facilitate the movement of bank operational.

Implications retailer as a partner bank affect the financial costs and time required. Implications of cost and time can offset the performance of retailers who are implicitly giving advance for helping to increase market share, overcoming over liquid and touched the real sector on small business.

From these conclusions it can be recommended: adding a retailer with a presence in different regions in order to expand market share can be affordable to all areas in Malang area. Disbursement of the SMEs sector to be more specific on not only given to customers who have long effort but it is expected the filing of financing for individuals who have a new business need to be considered by the new rules set by retailers. Implications of financial costs and time for this can be covered are expected to be maintained as well as other costs that are considered influential accounted for more details to make it look right is implicitly gain the cooperation with retailers so there is no doubt in multiply retailers in small areas of the region.

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# Enhance the Small Scale Agriculture Business by Organic SRI (System of Rice Intensification)

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## Abstract

*Farmer, who run the small scale agriculture's business, dependence on external inputs of artificial plants, such as inorganic fertilizers, pesticide and modern agricultural technology economically impact on weakness of the current economic level of farmers. This is caused by the issued capital of the farmers is not comparable with the low food products trading value. Application of this method also cause environmental damage, reduce and eliminate the socio-cultural institutions of local communities such as social responsibility in the provision of employment, collective management of natural resources (eg, rice barns, compost banks, water regulation), "gotong royong" tradition, as well as technology and local wisdom.*

*Organic SRI (System Of Rice Intensification) as one of organic rice farming method that uses the local resources and implementing by the local wisdom can solve these problems. Farmers were introduced and trained to process the potential of existing local resources in the surrounding to make fertilizer, micro organism local media (to control the pest by biological control technic), and agricultural technology. SRI Organic need one fith of seed. Those are meant that Organic SRI method could reduce the cost of rice agriculture. Despite low cost agriculture, Organic SRI could increase the harvest production above the national average. Thus, Organic SRI could increase the profit of the small scale agriculture business by reducing cultivation cost and increasing production amount.*

*Organic SRI could awaken the agricultural micro-businesses in which farmers play a role as a cultivator and farm managers who are independent and responsible to utilize all the assets owned and the potential of local resources in the surrounding.*

*Keywords: small business agriculture, organic SRI, the potential of local resources, farm manager, cultivator*

## 1. Introduction

To raise food production, particularly rice, in the 1960s government adopted green revolution policy from the west. The green revolution can be interpreted as a pattern of intensive farming with modern technology characterized by a high use of external inputs as inorganic fertilizers, chemical pesticides, and hybrid seeds; utilization of supporting infrastructure like irrigation systems and large capital (credit) scale, as well as farm mechanization in land preparation and post-harvest handling (Gudon SJ and Daniel, 1998). That policy continues until today with the form of inorganic fertilizer subsidy to the fertilizer factory so the price can be reached by the farmers. Based on the data, the allocation of national budget for fertilizer subsidy in 2009 to reach 18 trillion rupiah and for seed to reach 94 billion rupiah.

The implementation of green revolution technology, have led to social and economic problems, especially for farmers. Dependence of farmers on external inputs of artificial plants, such as chemical fertilizers (inorganic), pesticides and other synthetic materials

equipped with a trading value of food products low, economically weak impact on the economic level of farmers today. The green revolution also reduce and eliminate the local community socio-cultural institutions such as: social responsibility in the provision of employment, collective management of natural resources (eg, rice barns, compost banks, water regulation), the tradition of mutual assistance (gotong royong), as well as local technology and knowledge. Uncontrollable use of chemical fertilizers (inorganic) and pesticides also cause lowered levels of soil fertility and environmental pollution, pests or diseases attack, and produced methane gas which is the biggest cause of global warming.

Responding to these problems, it is necessary explored a new agricultural cultivation method that may lead to insights the farmers that farming is no longer simply as a way of life, but as business which can generate as much profit.

## 2. The Theories under Layer

Character development and farmers' cultivation methods are influenced by the

surrounding social system. Because of lack of functioning of one or several components of social systems, the farmers often deficient. Farmers tend to only be able to function as the cultivator is responsible for the life of cultivated plants and livestock. While the function of the farmer as farm manager who is responsible for utilizing all the assets and resources in order to obtain a gain of perhaps still less developed.

In social systems theory, explained that one of the five main components of social systems of society that can influence and shape the character of farmers is non-formal education both formal and informal. Education serves to give enlightenment to the community that will foster empowerment. Through this education the community will get various information that will shape the knowledge, through training and skills-training form, and through social interaction and other experiences will form a mental attitude.

Therefore, to change the paradigm that farming not only as a way of life, but as the business of farmers should be given basic education to build a small business. Farmers should be taught the steps to build a small business agriculture and serves as a farm manager with the following steps.

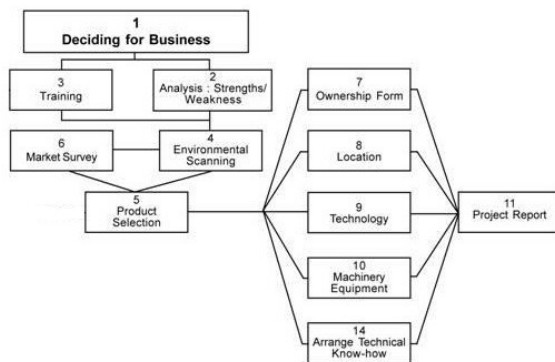


Figure 1. Steps for Setting Up a Micro/Small Enterprise

Through education, farmers is expected to become a technopreneur. Technopreneur is an entrepreneur who has technology savvy, creative, innovative and dynamic (Shakya, 2007). As a technopreneur, farmer dares to be different and take the unexplored path, and very passionate about their work. They take challenges and strive to lead their life with greater success. They don't fear to fail. They take failure as a learning experience, a

stimulator to look things differently and stride for next challenge.

### 3. Implementation

Paper will review the role of the process of implementing Organic SRI in the Suka Makmur Village BTS Ulu District Musi Rawas Regency South Sumatera Province which indirectly managed to build small scale agriculture business. Thus, in detailed implementation process of organic SRI program in Suka Makmur Village consists of the phases as follows:

- Problem identification and village potential probing

Performance of problem identification using multi-stakeholder engagement approach is in cooperation with Sriwijaya University. The approach is the effort of problem identification and probing potency of an area through efforts of information gathering about area situation, villagers condition, main living jobs, public figures and certainly growing public issues with direct public engagement. The approach also functioned as communication means among stakeholders so that stakeholders may comprehend their roles and functions in planning and implementing community development program. Thus, each stakeholder will actively participate, own sense of belonging and co-responsible in program implementation. Based upon the result of potential and problem identification around operation area of PT Medco E&P Indonesia – South Sumatera Extension Block is registered public issues related with rice field agricultural problem in 3 villages within BTS Ulu District.

- Identification of problem and potency of rice field agricultural development

To strengthen formulation of community development program to be provided, PT Medco E&P Indonesia in cooperation with Aliksa Organic SRI Consultant (AOSC) conducted survey to seek root problem and local potency able to be made use to resolve the problem of agricultural land productivity in Suka Makmur Village. The survey involved this farmers group to introduce and build farmers' awareness about their condition of natural resources and agricultural land. Farmers were invited to discuss about land condition, plant,

processing and culture method, and experiences of agricultural business already performed to date. The public engagement process indirectly awakens farmers' awareness that the current arising problem due to their habit and behavior in preparing agriocultural land and culture which is not environment friendly. Besides that it also grew the awareness that available environment and resources around them should be protected and made use in its best that the benefit can survive to the next generation.

Information obtained from the survey being made use and formulated as socialization material to villagers and local administration in order that they know about the latest condition or progress of their environment mainly their agricultural land and simultaneously broadening their horizon about future consequences in case there is no action against the issues. Further, the information also being made use to formulate empowerment process of farmers group together with villagers so that agricultural land productivity and people's income may improve.

- Organic SRI program socialization and the selection of program implementation location

Socialization process started with the meeting between PT Medco E&P Indonesia and AOSC with three village heads and agricultural group within the area of BTS Ulu District. The socialization of Organic SRI program held in the village head's house by inviting prospective assistance program participants. It is facilitated by the village head as the village apparatus. Result of social mapping and survey of potency and problem in agricultural development summarized in visual information presentation of illustration picture, photograph, video and slide film seems very effective within people's awareness process about the importance of conducting environment friendly agricultural land management. It is the first phase from the plan of PT Medco E&P Indonesia to strengthen people's awareness about their environment condition and offering Organic SRI program as the solution of the problem. After identifying his environment condition and the benefit of the program

implementation for his people, Head of Suka Makmur Village directly gave positive response and committed to support the Organic SRI program. Under his commitment, the village head facilitated the program and motivated the villagers to be committed supporting the activity. It is indirectly established and implanted principles of public participation (community-based principles). Thus, the village being chosen as the area of program implementation though there were several farmers from other villages involved within learning process of the program.

- Learning process of Organic SRI

It is commenced by building local social capital through the establishment of agricultural group. Assistance program started with elucidation activity for five days in Suka Makmur Hall. It was attended by farmers from Suka Makmur Village already being registered upon program socialization and farmers from other villages namely Trimukti and Mulyo Harjo villages. The elucidation applied andragogy education method (POD) by inviting participants to participate within problem identification process. It attempted to deconstruct mind obstinacy, build conception idea about sustainable environment friendly ecosystem management, and prove and give comprehension about the function and role of organic material in ecology within ecosystem. The process conducted through discussion and soil test practices, MOL (Local Micro-Organism) making, composting and planting method.

By using simple technology, with the presence of organic SRI program, farmers utilize natural resources around them and yet not utilized to date to improve their agricultural productivity. The potencies are inter alia as follows:

- Compost Potency

Prior to the application of Organic SRI agricultural pattern in Suka Makmur Village, cow and goat wastes are ignored by farmers. Sometimes the compost just being heaped behind villagers' cattle stables. Currently, there are no farmers especially Organic SRI program participants in that village who abandoned their cattle wastes without being made use of. Besides

reducing expenses for purchasing fertilizer, it is also beneficial for maintaining cleanliness and environment quality.

- **BO (Organic Material) Potency**  
Organic materials as basic material for making MOL (Local Micro-Organism) in fact are widely available and in abundance. Starting from required organic material for plant growth, such as bamboo shoot and banana hump. Then, for plant pesticide, such as maja fruit, pace fruit and so forth. For MOL (Local Micro-Organism), the fruits function during plant primordial period. All local potencies are able to substitute fertilizer and chemical pesticide made by factory. The result is that profit obtained by farmers will be higher, and further ecosystem destruction potency may also be depressed.
- **Mutual Cooperation (gotong royong)**  
Mutual cooperation (gotong royong) is the potency already long buried in Suka Makmur Village, since villagers' activities in agricultural sector. Mutual cooperation became a very rare thing. The existence of Organic SRI Pattern in Suka Makmur Village turned Suka Makmur villagers re-found their identity. Mutual cooperation conducted either in rice field activity, resolving common problem and developing their village.

Farmers willing to take challenges and risks of applying new farming methods that is very different from the conventional method. For example by planting one seed alone will suffice, that the best growth conditions on the ground rice is moist rather than flooded land and others. Besides eliminating the habit of using chemical fertilizer to stimulate growth.

To strengthen the convictions of each month between a group of farmers held a meeting to inform the outcomes of each group and the problems faced to be solved jointly. Indirectly the meeting also strengthened motivation for each group to compete for the best result. To reinforce and evaluate progress of program implementation, there has been workshop among farmers. In this workshop each group representation requested to present problems they faced and the solution methods for being responded by other farmers groups. The activities helped to build self-confidence of farmers to communicate their ideas and

encourage farmers to be independently taking the appropriate decision under togetherness spirit.

Such strong togetherness spirit and fraternity sense among members of farmers group showed during overcoming problem of supplying organic material. For instance, several members of farmers group have limitation of organic material supply in form of animal waste. Facilitated by Village Head and program assistance team, there was established the idea of organic material saving and loan system. Farmers having limitation of organic material supply may borrow to another farmer with surplus stock. Then the organic material being obligated to be returned by the lender in equal form and amount in the next planting period.

#### **4. Result**

Implementation of Organic SRI program has provided a quite good initial impact against the improvement of agricultural land production result in Suka Makmur Village. It is viewed from the change of harvesting product which previously only 0.5-2 tons per hectare in average into 7-8 tons per hectare in average (its increase more than 300%). The success showed that the main objective of program implementation namely to improve land productivity and farmers' income has been realized. Improvement of farmers' income also measurable from reduction of production cost that being disbursed.

The great contribution of women in this program made women have natural competence to maintain the wisdom of traditional agricultural system which is harmonious with nature. The program has returned the rights of female farmers not only concerning its agricultural process but also containing social and cultural values of farmers. The agriculture also guaranteed life quality of the farmers' families themselves. In this program, women occupied about 60% of production process starting from seed selection through harvesting. Women particularly from poor families supported their families by getting a job during harvesting time which contributed a significant income to their households.

The program also played a role to recover local cultural values which currently fading away. One of them is mutual assistance (gotong royong) activity. Previously, it began to be left due to activity of each villagers in agricultural

sector. Upon the existence of Organic SRI Pattern in Suka Makmur Village, the villagers refound their identity. They re-conducted mutual assistance either in field activities, resolving collective problem and building their village. The activity also helped to reduce agricultural production cost mainly related with manpower problem.

## 5. Conclusion

Organic SRI (System Of Rice Intensification) as one of organic rice farming method that uses the local resources and implementing by the local wisdom can solve these problems. Farmers were introduced and trained to process the potential of existing local resources in the surrounding to make fertilizer, micro organism local media (to control the pest by biological technical control), and agricultural technology. SRI Organic need one fifth of seed. Those are meant that SRI Organic method could make farmers independence on external inputs of artificial plants, such as inorganic fertilizers, pesticide and high cost modern agricultural technology and reduce the cost of rice agriculture. Despite low cost agriculture, Organic SRI could increase the harvest production above the national average. Thus, Organic SRI could increase the profit of the small scale agriculture business by reducing

cultivation cost and increasing production amount.

SRI Organic could awaken the agricultural micro-businesses in which farmers play a role as a cultivator and farm managers who are independent and responsible to utilize all the assets owned and the potential of local resources in the surrounding.

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# Management Audit in Small & Medium Enterprises: Balancing a Watchdog and a Strategic Partner Role

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## Abstract

*Small & Medium Enterprises (SME) always confronts with limited resources, so that the effectiveness, efficiency and economy issues become really important to study. Management Audit function will help management to manage those issues by identifying business risks, developing internal control system and monitoring transactions. The focus of management audit, as literature suggest, now has evolving from becoming a watchdog toward a strategic partner. This paper, therefore, will study the management audit roles in real situation. We conducted case study over three SME's, which outsource management audit function, in period of June 2009 to March 2010. The Companies are Company A, a start up Company with annual sales of Rp5 billion, Company B, 5 years old company with annual sales of Rp30 billion, and Company C, 20 years old company with annual sales of Rp50 billion. We collected the data by conducting interviews, direct observation and reviewing financial statements. The findings confirmed the management audit roles in identifying internal control weaknesses and developing internal control systems. Management audit also successfully initiate some major changes. We suggest that the management audit function keeps balance of watchdog role and strategic partner role, and maintain full support from owner and senior management.*

*Keywords: small and medium enterprises, management audit, strategic role, key success factors*

## 1. Introduction

Small and Medium Enterprises (SME) in Indonesia contribute significantly to Indonesian Economy. By 2008, the total SME in Indonesia is amounted to 51.26 millions units and represents 99.99% of business unit in Indonesia. Its contribution to Indonesia GDP in 2003 was 56.7% and employ 99.6% of Indonesia workforce (Brata, 2003). Hence, the SME roles in employment and national economic growth are substantial.

Berry et al, 2001 outlined three reasons why developing countries should pay attention to SME, (1) SME's performance is better on creating productive labor, (2) the productivity increase through investment and changing technology (3) SME's has more flexibility than big companies. Similarly, Kuncoro suggested that SME in Indonesia plays important roles in absorbing employment, increasing unit of business and supporting family income (2000).

However, there are still some problems that limit the potential of SME in Indonesia to grow. Those problems are lack of financial resources, lack of competent employee, lack of channel and distributions, lack of raw material supply, lack of technology, lack of access to banking system, lack of quality system and many more (Rahmana, 2008).

Therefore, this paper will explain how management audit can help the SME's management in achieving the Company's goal. The discussions then will be divided into three main issues:

1. What is the need and expectation of SME in using management audit?
2. What is the role of management audit in SME day to day business?
3. What are the key success factors of management audit in SME?

The remainder of this paper will be arranged as follow, the second section will discuss the literature reviews and previous studies on management audit, third section will discuss the methodology, the fourth section will discuss our data collection and analysis and the last section will discuss the conclusion of this study.

## 2. Literature Reviews and Previous Studies

Management audit can be defined as a systematic process to evaluate management and the organization's functioning and performance with respect to economy, efficiency, effectiveness of operating areas, activities and results (Burrows and Perrson, 2000). Sawyer gives similar definition as the comprehensive review of unit activities,

systems and controls within an enterprise to reach economic, efficiency, effectiveness or other objectives (2001). Kumar & Sharma added that management audit is the periodic assessment of company's managerial planning, organizing, actuating and controlling to norms of successful operation (2006).

Management audit is significantly different with financial audit or general audit performed by an independent accountant. Some of key differences are depicted in Table 1.

Table 1. The Difference between Financial and Management Audit

Financial Audit	Management Audit
1. The objectives is to give opinion on financial statements	1. The objectives is to give opinion on business operations
2. The criteria is Generally Accepted Accounting Principles (GAAP)	2. The criteria are effectiveness, efficiency, economy
3. Criteria used is given by standard setter	Auditor mus design and select criteria by benchmarking, best practices and company target as criteria
3. The analisis basically using quantitative approach	3. The analisis combines quantitative and qualitative approach
4. Must be done by an independent accountaant (public accounting firm)	4. Might be done internally or outsourced.
5. Done annually	5. Done continuously or anytime when necessary
6. The report is mainly for outsider, such as investor,	6. The report is mainly for insider / management investor

The concept of management audit is relatively new and often intertwined with concept of internal audit and operational audit. They do have many similarities but also have some difference. The internal audit is conducted by internal auditor appointed by management to "highlight the weak areas in the organization". Operational audit, "generally reviews the performance of an organization at middle and supervisory levels of management". Management audit, on the other hand, is concerned with examination and evaluation of management process as a whole. (Kumar & Sharma, 2006).

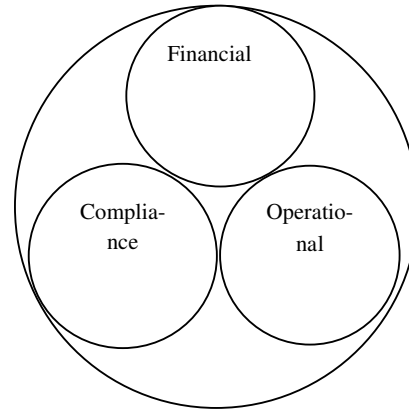


Figure 1. Scope of Internal Audit

Hence, the scope of management audit are ranging from evaluation of effectiveness, efficiency and economy of the Company business process. Some researchers said that the management audit is part of internal audit function (Kumar & Sharma, 2006, Sawyer, 2001)

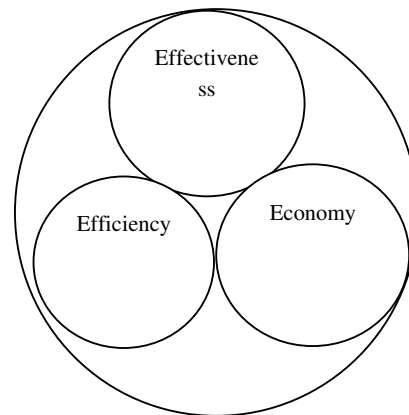


Figure 2. Scope of Management Audit

Effectiveness means that the Company can reach its goals; efficiency means that the Company in reaching its goals using minimum resources and economy means that the company buys the asset in cheapest alternatives available.

Hence, some examples of management audit activities to achieve those goals are (Kumar & Sharma, 2006):

- 1) Appraised the managerial performance at all levels
- 2) Enhance operational profitability
- 3) Improve organizational efficiency



- 4) Spotlight the decisions or activities, which are not in conformity with organizational objectives
- 5) Ascertain that organizational objectives are properly understood at all levels
- 6) Discover weaknesses or irregularities in the internal control system and suggest measures to get best possible results
- 7) Evaluate plans and policies.
- 8) Review the company's organizational structure, i.e assignment of duties and responsibilities and delegation of authority
- 9) Facilitate performance evaluation of different resources

McDafee and Selim (1998) study on internal audit functions suggest that internal audit or management audit focus on risks rather than controls of transactions. The risks are something that obstacles for organizational success. They criticize auditor focus on controls over transactions because it will bury the internal auditor in details of the past, limiting the value of any information derived (1998). The focus on risk is known as a new paradigm of internal audit. The new paradigm has major support from the Institute of Internal (IIA) Audit, which continuously suggests the use of IT and focus on risk to enhance the quality of internal audit. As management audit can be grouped into internal audit services, so that the new paradigm also can be applied in the management audit practices.

### **3. Research Model**

#### **3.1 Case Study Approach**

This study uses case study approach to answer the three questions as outline in first section. Case study is "an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used (Yin, 1984, .23).

The study of management audit in SME often faces with limited data. The practices of management audit in SME is also limited, therefore the case study approach is suitable approach.

We conducted the study mainly use participant observation method. The Companies below hired us to be their internal audit.

#### **3.2 Sample of Study**

Based on Law No 20/2008 on Micro, Small and Medium Business in Indonesia, the small business criteria are (1) net asset other than land and building is range between Rp50.000.000 to Rp500.000.000, (2) total sales around annually around Rp300.000.000 to Rp2.500.000.000. The medium business criteria are (1) net asset other than land and building between Rp500.000.000 to Rp10.000.000.000, (2) and total annual sales between Rp2.500.000.000 to Rp50.000.000.000.

The sample of this study consist of three companies which represents the characteristics of SME in Indonesia, which are start up companies, small company and middle company. Due to confidentiality matter, hereafter, the companies will be called as Company A, Company B and Company C.

Company A is an IT and printing company which established on 2006. It was founded by two young men with two difference talents, a marketer and a programmer. This company enjoyed a rapid development due to some contracts from major companies to print out their member cards. In the peak of order, the Company can produce and deliver almost 600,000 cards per month. The IT divisions also gain a good reputation among customers. Their services are not only build a website but also doing consultation on how to run internet business for their client. The main problem of this company was lack of support from finance and administration staff.

Company B is a computer hardware trading companies which directly imported some products from Taiwan and sell to local computer dealer. This company started in 2002, and now become one of major player in Yogyakarta. The average sales of this company annual sales of is Rp30 billion with total assets of Rp10 billion. This company considered an efficient company with strong network and distribution channel. The main issue of this company is in inventory.

Company C is a major dealer of Honda in Yogyakarta and Jawa Tengah. With the total revenue almost Rp50billions in 2008 and total asset, other than land and building, of Rp 40 billions, this company might be considered as medium company. The company had expanded very quickly with more than 3 branches. The total employee of this firm is almost 300 people. The rapid development

created many problems, such as low commitment and low motivation of the employee since they believed they are underpaid, less capable person to hold a more complex business, span of control become too broad, so it is hard for management to cope.

Summary of selected company characteristics is shown in Table 2.

Table 2. The Characteristics of Sampled Companies

Characteristics	Company A	Company B	Company C
Net Assets	5 bn	10 bn	40 bn
Annual Revenues	5 bn	30 bn	50 bn
Employees	32	27	150
Branches	-	2	3
Divisions	4 units	1 units	2 units
Age	5 years	7 years	20 years

### 3.3 Data Collections and Analysis

We collected the data through direct observations, interviews and document reviews. The data are mainly qualitative data. We documented the data in working papers and analysis them by sorting, coding categorizing and finding the red line.

We analyzed the data focusing in answering the three questions as outline in the first section. To make easier to answer how management audit can help SME's, we discussed the issues surrounding the management audit process and then use the evidence or finding to answer the three questions.

## 4. Management Audit Process

In order to help management to achieve the company's goals, the management audit team must perform management audit effectively. Effective audit mean the audit will produce the intended result (Ramli, Ramli, Yusof, 2010), which is in the case of management audit are effectiveness, efficiency and economic business process. In order to achieve the intended result various factors must be considered. Audit must have a feasible objective so that it is attainable and everyone understand and accept it. This paper suggest the framework to conduct an effective management audit, based on our observations in the three selected companies, as follow:

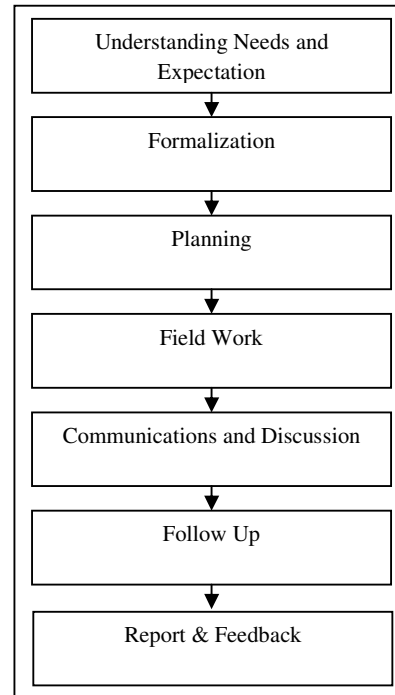


Figure 3. A Model of Management Audit Process

### 4.1 Understanding SME's Needs

To deliver high quality and effective management audit, we need to understand deeply to the needs and expectation of management. It is different with general audit, which the scope and procedures are standardized, in management audit the scope and procedures is designed to meet the needs of expectations of clients. Since the needs and expectations are vary and sometimes subtle, management auditor must have high communication and analytical skills and deep understanding to the industry where the SME's operate.

The best practice to cope with this issue is conducting a kick off meeting in the beginning attended by owner, directors, managers, management audit providers and other important stakeholders, if any. This meeting's objectives are to clarify and confirm the understanding of what SME's needs currently and what SME's expectation of the service s and benefits of management audit.

The companies we selected as samples of our study pose a different needs and expectations. This is partly because they initially came to the decisions to outsource management audit for different reasons. The Company A has a problem of high turnover including in administration and finance staff.

Within the same year before we come, they have twice resignation from finance staff. They thought that this problem might alter their operation and they also worry with the work of previous finance staff, because they admitted that they do not paid much attention and control to her works. The Company B felt that the competition in computer hardware trading become tighter and the company had tremendous growth for the past three years. The management felt that their staff capabilities, especially in finance department, are not enough to cope with the challenge. The management often had difficulties to find data and information to support their decisions. The management also felt that the data on their stock in accurate and out of date. The Company C had a special need. The management felt that there was fraud in one of their business unit.

We had documented the needs and expectations of the client. But we understand that the initial information do not represents the real needs and expectations. However by documented the information, at least, we have a basis to formulate the service offer.

#### **4.2 Formalizations**

The management audit team then discussed the information form the kick off meeting to outline the contracts, terms of reference (TOR) and audit charter. The contracts will specify the scope of services, the deliverables or output, and the management audit fee. For a detail, we attached the terms of reference that outline the responsibilities of both parties, regarding the planning, collections of data, analysis, reporting and recommendations. By presented the management audit team understanding of client needs and expectations in forms of legal document, we expect that the misunderstanding of both parties will be limited.

We found the problem in Company C, it seems that the management does not read carefully or do not fully understand to what written in the Contracts. So there are a lot of things being asked for that outside the scope of works. This cause a complicated situations, because if we agree to what they asked for, it will alter the main jobs, but if we do not agree than they will disappointed and do not cooperate in collecting the data and information. We deal with this problem by

having an intense discussion with the owner and ended by split the task into two projects, management audit and consulting.

Other than contract and TOR, we also proposed to have an audit charter which is the formal documents to explain what is our positions and role in the Organizations. This is important, since we as an outsider but doing internal management audit, work not for project basis, but doing regular activities. So our presence must be known for the entire organizations. The selected Companies have difference approaches. Company A issued a management decree ('Surat Keputusan/SK) mentioned our positions as in charge Finance Manager. Company B do not issued any formal decree, and only mentioned our presence in the general assembly and provide us with a Surat Tugas during if we need to go to branch or perform special examination. Company C officially appointed as audit committee and reported directly to the owner.

We believe that the position and formalization of our position in the Organization have impact on the effectiveness of management audit role. We often have problem on suggesting a recommendation in Company B staff. One of the staff told our staff "who are you, why you told me to do this and that". We brought this issue to the management, and reach the conclusion that the recommendations and evaluation should reported directly to the management and they will do the follow up. This approach created a new problem. Some staff thinks that our role is like a watchdog that monitors and report the mistake to the owner. Although this is true that one of our function is performing monitoring, in some occasions this resulted less respects and cooperation of staffs to us.

#### **4.3 Management Audit Planning**

Management audit Planning is crucial. Lack of management audit planning might resulted audit failure (Ramli, Ramli, Yusof, 2010). Management audit planning is different with general audit planning due to its scope and period of audit. The general audit is one-off audit usually performed in year end, but management audit performed continuously through the year. Therefore, the team should plan the audit carefully. The resource of the team should be allocated wisely.

The management audit team performed preliminary survey to gather some data and

information as basis for audit planning. The steps in the preliminary survey are checking legal & formal documents, observation to Companies' business operations and interview to some key persons.

In the selected Companies, the team use risk based approach to analyze the preliminary survey result to formulize audit plan. The approach required the team to identify and measure the business risks, inherent risks and control risks. The business risks is the risks that hinder the companies to achieve its business goal, the inherent risks is the risks that embedded in the area or accounts and the control risks is the mistake or misstatement due to lack of internal control. The team should focus on the high risk area.

We found that the high risk areas in Company A are the sales and receivables, inventory and cost of good sold in Company B, and loan and payables in Company C. We, therefore, put more resource and time on those areas. Later, we recommend to the management to put more control on those high risk areas.

The result of the planning is audit areas, assignment schedule, staff assignments, deadlines and deliverables and audit program. The formal audit planning is signed by the management audit team leader and the owner or director.

#### **4.4 Field Work**

The field work objective is to collect the evidence to support management audit team opinion and suggestion. Management audit team conducted field work based on the audit program outlined in planning stage. The team focused on looking for findings, which are the discrepancies of the real conditions and agreed criteria. The criteria in management audit are less standardized than in general audit. To determine effectiveness criteria, we derived from the company objectives, targets, benchmark, standard ratios and the industry best practices. For the efficiency criteria we used the standard ratios and target of the company. We also doing routine financial audit for the selected Companies monthly reports to check the accuracy and consistency with the Standard Operating Procedures (SOP). For compliance audit we only compare the company and employee practice with its SOP.

We documented all of our work done and findings in standardized working paper. The working paper will functions as reference, monitoring and coordinating media among of the team.

Our procedures consisted of checking documents (vouching), interviewing, direct observations or inspections, analytical reviews and confirmations.

#### **4.5 Communications and Discussions**

We brought the findings during our field work during our weekly meeting with the management. We presented our findings in the format of background, the criteria, discrepancies, consequences and recommendations.

Often there was tight discussion in the weekly meeting. The management of Company A, B, and C challenged our findings and recommendations. Therefore, it's very important to present the evidence during this session, because the evidence speaks for itself.

We documented the weekly meeting into minutes of meeting (MoM), so we have tools to track the progress and development of the projects. Often our initial understanding is difference with the findings from the fieldwork, resulted the modification or change of scope in the audit.

The management of Company A, B, C valued the weekly meeting, since the can have the up date of the project and the picture of their company. Other than weekly meeting, we conducted quarter meeting that invited larger attendees.

We were not only presented the problems that we had found but also the recommendation on how to solve the problems. The problems that the team successfully identified were lack of coordination and monitoring in all of selected companies, lack of internal control, the absence of SOP in high risk areas, no clear job descriptions and target among employee, some inefficiencies in Company A, errors in handling inventory in Company B, wrong calculation of cost of good sold in Company B, and fraud amounted to Rp1.1 bn in Company C that then successfully recovered.

#### **4.6 Follow Up**

The implementations or follow up of the solution is the management responsibilities.

The management audit in this case will give technical support and monitoring.

In general we have suggested the company to restructure its organization structures, detail job description of each employee, set some SOP's on financial reporting, implement cash centralization, introduced standardized management reports and map the needs of companies of new system.

The management audit's recommendation also had initiated some major changes in the selected Companies. In Company A, the finding of lack coordination among divisions resulted the restructuring of organization structure and legal forms. The management also conducted in house training for its manager, since based on the management audit findings; the managers did not fully understand the role and responsibilities of a manager. Management of Company B, hired two new staff so the segregation of duties follow good internal control standard. Company B also initiated the developments of computerized systems to overcome the problem of its inventory and cost of good sold. Company C also restructure its organization structures and appointed a general managers to oversee all of unit business. Management C also initiated some new SOP's and development of computerized system to one of its business unit.

#### 4.7 Report and Feedback

The management audit report mechanism much affected by the position of management audit team in the organization, as discussed in point 4.2. The direct link to owner or top management helps management audit team to have support and suggestion immediately if they face any problem. The direct link also important to build image that the management audit function is strategic and powerful. The image will help the management audit in collecting the data and information from the staffs.

Other than continuous meeting and communications, the management audit team also published a formal report quarterly to signify the audit process and findings. The report was circulated among senior and top management. This regular meeting is important to support continuous improvement driven by management audit. As pointed out by Barthelemy and Zairi (1994), the audit should evolve from compliance audit to

continual improvement, thriving, ultimate and total audit.

The management audit also asked for feed back from the management regarding the audit process and finding. Surveys of employee satisfaction were circulated among employee to measure the perceptions of employee to several initiatives post management audit project initiated. A majority of employees felt the management audit functions help them to solve the problem they faced. They also can freely give feedback and criticism of the organization and top management to management audit team. They feel that the management audit team can play as a mediator between them and top management. So the employee perceived the management audit team as a partner, rather than 'top management representative'.

The management feedback also important to evaluate whether our audit approach and techniques in management audit is effective. The feedback also can be used to scale down or scale up the scope of management audit so it meets Client need and expectation.

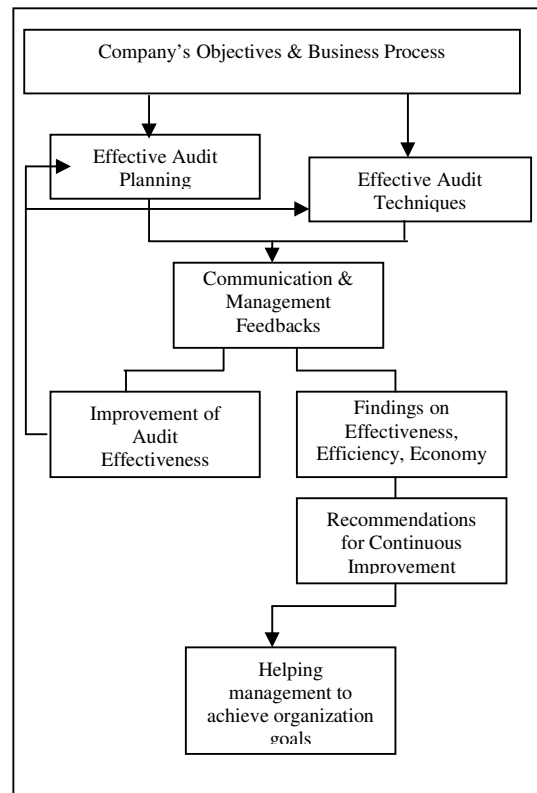


Figure 4. Proposed Effective Management Audit Model

## 5. Conclusion

### 5.1 The Need and Expectation of Management Audit

Based on the above explanations, we can conclude that the need of SME to have management audit are:

- increased complexity of organization and business as company grow
- suspicion or indication of any fraud incident
- the high turn over of staff, especially in finance department
- the need to build a standardized system on management and finance.

The management's expectations toward management audit are:

- better management control, so that top management can spend more time to develop business and think strategic issues
- perform fair and proper performance management
- be a partner of management in identifying and solving problems.

### 5.2 The Roles of Management Audit

The roles of management audit can be grouped into two different approaches, the watchdog approach versus a strategic partner approach. Based on our observation the management audit functions in each approach are as follow:

Watch Dog Roles

- Accounting staff supervisions
- Transaction verification
- Management reports review
- Fraud investigations

Strategic Partner

- Develop SOP's or new systems
- Develop performance measurement system
- Involve in budgeting process
- Give input for strategic planning

Most of SME still in developing phase, so the balance of the two approaches would be suitable in this context. What the literature suggest that Management Auditor should focus to be a strategic partner, does not mean that the management audit.

### 5.3 The Key Success Factors

Based on the observations and interviews, we conclude that some of the factors below are considered key success factors of management audit in SME

- Obtaining Strong and consistent supports from owner and top management
- Drafting a detail contract and term of reference to minimized over expectation of management
- Performing continuous and regular update of findings and progress of audit
- showing tangible result early, small evidence and some quick wins are important to gain the management confidence at the beginning
- Make a balance of monitoring (a watchdog) and developing systems (a strategic partner)

Those findings are consistent with the previous studies, which founded that typical audit problems or failures are due to lack of audit preparation, audit criteria elements or checklist driven, auditor skills and knowledge, commitment from the management, and bureaucratic reporting (Askey & Dale, 1994; Karapetrovic & Willborn, 2002; Barthelemy & Zairi, 1994).

In conclusion, performing management audit in SME will lead to some positive changes but the management auditors have to consider the SME characteristics to deliver the service effectively.

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