

## PREDICTION OF BANKRUPTCY IN INDONESIA ISLAMIC CAPITAL MARKET

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### ABSTRACT

*This paper aims to see the performance and prediction of bankruptcy experienced by companies listed on Islamic Capital Market Indonesia Stock Exchange due to the strength of competition and the level of efficiency of the company. We used sample of 12 companies that experienced a decline in total sales and 10 samples of the best manufacturing companies listed on the Jakarta Islamic Index to see a comparison of the years 2007 to 2011, a total of observations is 110. By using descriptive analysis and multiple regression analysis, we found that there are some manufacturing companies are experiencing financial difficulties in the Islamic capital market, while companies listed in the Jakarta Islamic Index proved to have a good performance and high Z-score. We also found that there is a positive and significant impact of the company's efficiency level to the profitability, as well as impact of the profitability to bankruptcy prediction by using Altman Z-score.*

Key words: Efficiency, Strength Competition, Profitability, Bankruptcy Prediction

### Introduction

Free trade agreements in the ASEAN plus China is being started in early January 2010, it had a huge impact on domestic firms, where many companies are converted into a warehouse for distribution of imported goods. Not a few entrepreneurs who switched professions as distributors, because they are not able to compete with the invasion of imported products that are relatively inexpensive. Their inability to compete could be caused by various things, could be due to a lack of internal efficiency of the company, or even strategies in business functions lacking in synergy with each other, so that not a few companies that are experiencing financial distress and impact more broadly to the bankruptcy.

Globalization of the economy can be likened to a double-edged sword, on the one side will open up opportunities in the domestic market of the products to the international market, the opposite is an opportunity flood of imported products in the domestic market, which, if not addressed properly, will be able to destabilize the economy. Economic globalization led many large companies that invest in developing countries, by setting up industrial units outside their home country. This leads to foreign direct investment increased, which can assist in promoting economic growth in the host country. But like a double-edged sword, the real benefit is highly dependent on the expertise of using the sword, therefore it is needed seriousness and hard work to transform the economic globalization becomes leverage factor for economic growth acceleration. By continuing to raise awareness of the negative impact of the globalization of economics, especially in the trade sector which resulted in the inflow of foreign trade is increasingly heavy, imported products which if not controlled can lead to national trade deficit (Bappenas: 2013). Here is the data that shows the development of Indonesia's trade balance Year 2004-2013:

Table 1. Balance of Payment Indonesia 2004 – 2013  
(Million USD)

YEAR	EXPORT	IMPORT	DEFISIT/SURPLUS
2004	70.767	50.615	20.152
2005	86.995	69.462	17.534
2006	103.528	73.868	29.660
2007	118.014	85.260	32.754
2008	139.606	116.690	22.916
2009	119.646	88.714	30.932
2010	158.074	127.447	30.627
2011	200.788	166.005	34.783
2012	188.496	179.878	8.618
2013	183.548	177.399	6.149

Source: BOP Bank of Indonesia, 2014

Based on the above trade balance, Indonesian exports continued to decline in 2011, 2012 and 2013, and there was a very significant increase in imports in 2010, 2011, 2012. The trade balance continues to decline in significant numbers in 2010 through 2013. With increasing competition among companies both regionally and globally region, management must be able to determine a strategy in order to organize the company's operations more efficiently. Their inability to compete could be caused

by various things, could be due to a lack of internal efficiency of the company, or even strategies in business functions lacking in synergy with each other, so that not a few companies that are experiencing financial distress and impact more broadly to the bankruptcy.

Beaver (1966) which presents the approach of a single variable (univariate) from discriminant analysis which was later expanded to approach multiple variables (multivariate) by Altman (1968). For nearly two decades, discriminant analysis has become the main method in predicting financial distress / bankruptcy of the company, until late 1980s emerged the use of new methods in the prediction that the use logarithmic regression started emphasized for prediction of financial distress or bankruptcy.

Altman (1968), Berhnhardsen (2001) Ilya Avianti (2000) Leano et al. (2004) Tirok (2002) examines the relationship between efficiency and financial corporate performance. Corporate performance measured by ROA. Tirok (2002) found that there is a positive correlation between the efficiency and the ROA. If efficiency is not achieved, the company will experience financial distress due to the cost of good sold increased, a decrease in profit and cash flow problems. Ravenscraft 1983 in Schawlbach: 1991 supports the positive effect of market share with profitability. Ravenscraft found that a 10% increase in market share will increase the returns on sales of 1.4%.

Based on the above-mentioned phenomenon, the authors are interested in analyzing the impact of the strength of competition and efficiency. The condition was further assessed its effect on the profitability of the company, and in the end will be assessed impact on the risk of bankruptcy in companies listed in the Islamic capital market and included in the Jakarta Islamic Index.

The rest of this paper is structured as follows. In Section 2, we describe literature, including a discussion of our board-based measure of Bankruptcy and an overview of the events we study. Section 3 presents our research method and data, section 4 presents our event study results, and Section 5 concludes.

## Literature

Financial distress is a stage of decline in the financial condition experienced by the company prior to the bankruptcy or liquidation. This means that financial distress can be used as a signal or a sign that the company is threatened with bankruptcy which of course would be very detrimental to the company that is experienced. Therefore, warning system models to anticipate their financial distress need to be developed, because it can be used as a tool to identify even improve the condition of the company prior to the crisis or bankruptcy (Platt and Platt, 2002).

Beaver (1966) conducted a study of the financial ratios as predictors of failure. Beaver grouped financial ratios into six groups, namely: cash flow ratios, net income ratios, debt to total assets ratios, liquid assets to current debt ratio, turnover ratio, and liquid asset to total assets ratio. From the six above-mentioned ratio, Beaver (1966) found that there are five financial ratios which has an error rate below 24%, namely: cash flow / total debt, net assets / total assets, total debt / total assets, working capital / total assets and current ratio. The ratio of cash flow to the total liabilities (total debt) is the best predictor for determining the level of a company's financial difficulties. But the weakness of the study is the use of Beaver univariate analysis that cannot to create a simultaneous model that can be used to predict the failure of the company.

To overcome these weaknesses, Altman (1968) pioneered the use of multivariate statistical techniques through linear discriminant analysis. In his research, multivariate statistical technique combines the effects of several variables in the model that classifies the company bankrupt and non-bankrupt company. Altman used a sample of 66 sample companies consisting of 33 samples of bankrupt companies and 33 companies that are not bankrupt within a period of 20 years (1946 to 1965). The results showed that the ratios established by the model have given contribution that can be used to predict bankruptcy using financial ratios. These ratios are Working Capital / Total Assets (WC / TA), Retained Earnings / Total Assets (RE / TA), Earnings Before Interest and Taxes / Total Assets (EBIT / TA), Market Value of Equity / Book Value Of Total Debt (MVE / BVD) and Sales / Total Assets (S / N). The result model formed known as Altman's Bankruptcy Prediction Model (Z-Score), is:

$$Z=1,2X_1 + 1,4X_2 + 3,3X_3 + 0,6X_4 + 1X_5$$

Andrade and Kaplan (1998), stating that although the company generate positive earnings, but because it has a high leverage then he experienced financial distress.

Altman (1968), Berhnhardsen (2001) Ilya Avianti (2000) Leano et al (2004) Tirok (2002) examines the relationship between efficiency and corporate financial performance. Corporate performance measured by ROA. Tirok (2002) found that there is a positive correlation between the efficiency and the ROA. If efficiency is not achieved, the company will experience financial distress due to the cost of good sold increased, a decrease in profit and cash flow problems.

Based on theory and previous studies, the authors can formulate the first hypothesis as follows:

H1: There is a positive and significant impact of the company's efficiency to the profitability.

Ravenscraft 1983 in Schawlbach: 1991 supports the positive effect of market share with profitability. Ravenscraft found that a 10% increase in market share will increase the returns on sales of 1.4%. Companies with high-strength competition has the ability to generate large profits because it has a large market share. The strength of the company competition could also be achieved through the ability of the company creates a low cost advantage (Porter, 1985). Sukana (2008) examine the effect of market share to profitability and the results are positive and significant impact of the market share to the profitability. Based on theory and previous studies, the authors can formulate a second hypothesis as follows:

H2: There is a positive and significant impact of the company competitive strength to the profitability.

Altman (1968), Berhnhardsen (2001) Ilya Avianti (2000) Leano et al. (2004) examined the relationship between the efficiency associated with bankruptcy. These studies using ratios that describe the occurrence of inefficiency through profitability and net working capital as an indicator to predict the occurrence of bankruptcy (Sukana, 2008). Based on theory and previous studies, the authors are able to formulate a third hypothesis as follows:

H3: There is a significant impact of the level of company's efficiency to the bankruptcy prediction.

Market share reflects the competitive position of the company acquired in the market. If the company does not have a competitive position will affect the sale of products produced by the company, resulting in declining profits and if it has

continued, this condition will affect the financial difficulties experienced by the company. Based on theory and previous studies, the authors can formulate four hypotheses as follows:

H4: There is a significant impact of the company's competitive strength to the bankruptcy prediction.

According to Luciana (2003), a company categorized experiencing financial distress if the company is experiencing a negative operating profit for two consecutive years. Companies that experiencing operating profit for more than a year shows there has been a decline phase of a company's financial condition. If no corrective actions taken by the company's management, the company may face bankruptcy. Based on theory and previous studies, the authors can formulate the fifth hypothesis as follows:

H5: There is a significant impact of the profitability of the company to the bankruptcy prediction.

**Research Methods And Data Analysis**

This study used secondary data from the period 2007- 2011 financial statements are published. Financial statement data obtained from published financial reports IDX and ICMD. The study population was all publicly traded manufacturing company registered in Islamic Capital Markets. Meanwhile, the sample used is a manufacturing company that is listed on the Jakarta Islamic Index for the period January 1, 2007 - 31 December 2011 as many as 10 companies and manufacturing companies that are not listed in the Jakarta Islamic Index as many as 12 companies, the total sample is 110. The manufacturing sector is chosen because the sector has relatively large contribution to the economy by contributing highest value of Indonesian exports, as well as having a strong level of competition and vulnerable to fraud cases.

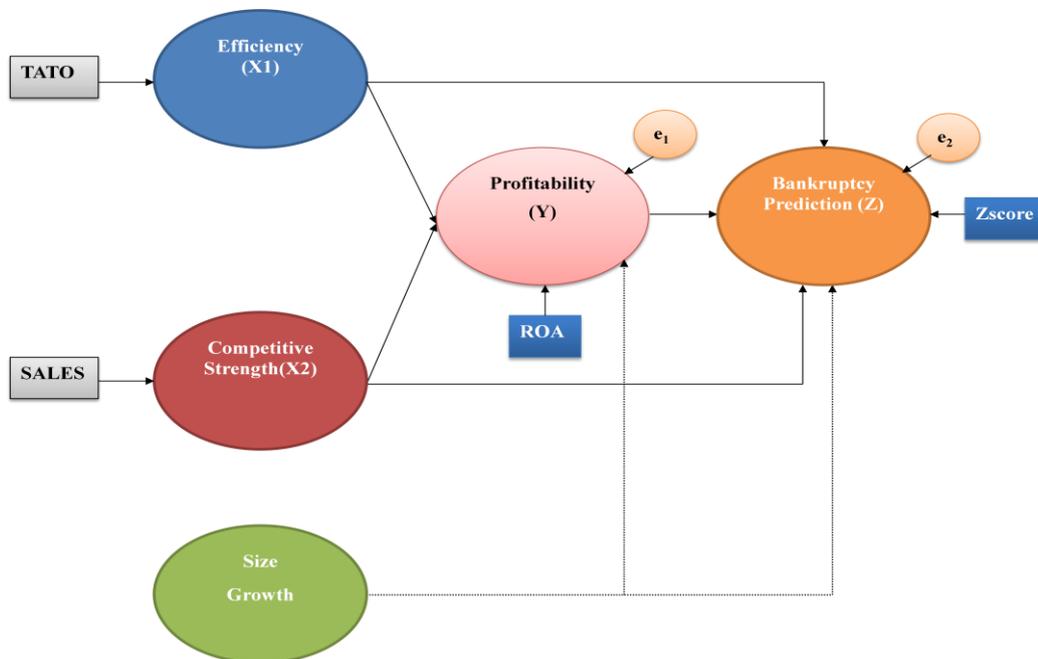
Based on the data obtained and analyzed, the number of manufacturing enterprises in Islamic Capital Market there were 93 companies. And the sample is all manufacturing companies once listed in the Jakarta Islamic Index totaling 10 companies of the year observations from 2007 to 2011, so that the total observation in this study was 50.

The variables used in this research is the level of efficiency of the company that measured by total asset turnover. Competitive strength is calculated based on the market share of which is the total actual sales of each company divided by the total actual sales of all companies that are in the same sub-group of the industry. Profitability is measured by Return on Investment or Return on Assets. Bankruptcy prediction was measured using the Z-score.

To ensure that the model used to test the hypotheses as mentioned in the previous paragraph applies to all kinds of size manufacturing companies included in the Islamic capital market, then used Variable Size and variable Growth of the company as a control variable.

In this research, Bankruptcy Prediction used Altman Z-score, and Altman Z-score is used by dependent variable too, to analyze the effect of efficiency, competitive strength and profitability to bankruptcy prediction. The model of this research as follows:

**Figure 1. Research Model**



The analysis in this study using Partial Least Square analysis, and the model as follows:

$$\text{Profitability} = b_1 \text{ Efficiency} + b_2 \text{ Competition} + b_3 \text{ Size} + b_4 \text{ Growth} + e_1 \dots\dots\dots(I)$$

$$\text{Bankruptcy Prediction} = b_1 \text{ Efficiency} + b_2 \text{ Competition} + b_3 \text{ Size} + b_4 \text{ Growth} + b_5 \text{ Profitability} + e_2 \dots\dots\dots(II)$$

**Result Analysis And Discussion**

**Descriptive Statistics Analysis**

Here is an overview of research data in 2007 - 2011 in Table 2 as follows:

**Table 2. Research Data Recapitulation 2007-2011**

Variable	Variable & Proxy	Code	Average					Average 5 Years
			Year					
			2007	2008	2009	2010	2011	
Level of Corporate Efficiency	Total Asset Turn Over	X1	1,5	1,52	1,36	1,26	1,07	1,342
Strenght of Competition	Sales in Company/ Sales in Industry	X2	0,03	0,03	0,03	0,03	0,03	0,03
Size of company	Log Assets	Size	6,28	6,33	6,31	6,34	6,42	6,336
Growth	Growth of company	Growth	0,57	0,14	-0,03	0,09	0,22	0,198
Profitability	Return on Asset	Y	5,08	5,08	9,05	8,17	5,09	6,494
Bangkruptcy Prediction	Z-Score	Z	15,27	10,21	16,49	22,32	18,73	16,604

Source: Processed data as attached

Efficiency is a saving on resources owned by the company to produce a product or service. Efficiency in this study is proxied by Total Asset Turn Over. In Table 2 it can be seen that during the observation period 2007 to 2011 the level of efficiency of manufacturing firms in Islamic Capital Markets decreased from year to year from 2008 to 2009 until 2011, the value of the highest efficiency in 2007 is 1.52 and the lowest in 2007 is 1.19. The average efficiency of manufacturing firms in the Islamic capital market for five years amounted to 1.342.

The size of a company's competitive strengths can be seen from its market share. If a company has a high competitive power of the company's market share will increase as a result of its ability to beat competitors. On the other side of the market share controlled by only a few companies have demonstrated the level of industry concentration is high enough (Pepall, 2002). If seen from Table 2, the average strength of competing manufacturing company in Jakarta Islamic Index fairly stagnant in the value of 0.03. Market share in the manufacturing industry in the Islamic capital market, is concentrated on PT Astra International average by 30%, and Indofood average of 12%, this phenomenon shows that the level of industrial concentration in the Islamic capital market is quite high.

The size of the company in Table 2 shows the growing is less aggressive, in the period 2007 to 2011 showed the lowest of 6.28 in 2007 and the highest of 6.42% in 2011 while the average for 5 years at 6.33. It means that total assets have increased and during the period of observation showed that larger size of manufacturing companies that go public in the Islamic capital market Indonesia Stock Exchange.

The growth of the company's assets in a manufacturing company in the Islamic capital market Indonesia Stock Exchange is fluctuated, a sharp decline from the year 2007-2009, the effect of this decline can be indicated because of the global crisis has reduced the value of companies in the countries in the world. In 2010 the growth of the companies began to increase. The average growth of manufacturing companies in Indonesia Islamic capital market for five years amounted to 0.198 or 19.8%.

Profitability is the net result of a series of policies and decisions. Profitability ratios also show the combined effects of liquidity, asset management and debt management on the results of its operations. Based on Table 2 it can be seen that the profitability of manufacturing firms in the Islamic capital market continues to fluctuate; the value of the average highest profitability earned in 2009 amounted to 9.05 whereas the lowest profitability amounted to 5.08 in 2007 and 2008. The average profitability of manufacturing firms in Islamic capital market during the 5 years amounted to 6.49%.

Z-Score is measured by the formula  $Z = 1.2 \text{ Working Capital} / \text{Total Assets} + 1.4 \text{ Retained Earnings} / \text{Total Assets} + 3.3 \text{ EBIT} / \text{Total Assets} + 0.6 \text{ Market Value of Equity} / \text{Book Value of Total Liabilities} + 1, 0 \text{ Sales} / \text{Total Assets}$  (Altman, 1989). Based on Table 5.3 below, the value of the Z-Score in manufacturing company in Jakarta Islamic Index has value above 3, it means that the companies listed on the Jakarta Islamic Index are in the safe zone and proved none who experienced financial difficulty, a rigorous selection of Jakarta Islamic Index to display the best company performance proven in the absence of companies experiencing financial difficulties. This explanation is merely descriptive analysis.

Z-Score Value in manufacturing company in the Islamic capital market and not listed in the Jakarta Islamic Index extant which has a value of less than 3, especially PT Argo Pantes Tbk (ARGO) which has a value below the 3 of all the observations period in 2007-2011, even in 2008 its Z-score is negative. It means that the company is in unsafe zone where the company experienced financial difficulty conditions that could affect the company's bankruptcy. Other companies that have a Z-score below 3, namely, Jakarta Kyoei Steel Works Tbk (JKSW) in 2011, Indal Aluminium Industry Tbk (henna) in 2011, Siwani Makmur Tbk (SIMA) in 2010 and 2011, as well as Tirta Mahakam Resources Tbk (TIRT) in 2010 and 2011.

**Table 3. Bankruptcy Prediction of manufacturing company in Indonesia Islamic Capital Market**

Company's Name	2007	2008	2009	2010	2011
<b>MANUFACTURING COMPANY OF JAKARTA ISLAMIC INDEX</b>					
UNVR	67,0139	60,4263	76,3994	91,5332	71,7726
SMGR	63,2155	35,9308	58,5992	56,0134	46,18827
BRPT	12,45949	2,9967	5,17523	4,44315	2,57801
JAPFA	3,68253	2,70857	4,7618	8,57728	7,67395
SMCB	10,46065	4,22913	11,3431	16,4192	16,8836
KLBF	40,0385	12,1304	28,0964	89,0464	67,2675
CPIN	4,64571	3,39166	13,2032	52,11035	46,6773
INDF	4,79478	1,85856	4,33267	7,72056	7,55467
ASII	12,9212	4,9356	13,0008	14,9295	14,1349
INTP	33,08328	21,6516	66,4389	88,2061	87,7458
<b>MANUFACTURING COMPANY NON JAKARTA ISLAMIC INDEX</b>					
ALKA	7,533	7,136697	6,320406	5,6343121	3,0601
ARGO	0,0336	-0,26775	0,831257	1,11760	1,06488
JKSW	4,3839	3,575266	3,656715	3,5536	2,41081
BTON	10,7577	15,21348	32,57873	12,9106	8,50123
IKAI	11,0712	12,38418	9,308916	4,06185	3,05493
INAF	8,7473	5,899721	5,504469	5,35008	5,60878
INAI	6,2940	5,212334	3,515846	3,97632	2,83069
INRU	5,9708	3,601812	3,72605	5,12836	5,35594
PBRX	6,6492	5,218267	3,680665	8,8495	3,63292
SIMA	7,1080	4,884317	3,411938	2,95861	2,05623
SSTM	7,8649	6,357862	4,946728	4,87116	3,46188
TIRT	7,2707	5,251599	3,955824	3,67818	2,6263

Source: Processed data as attached

**Goodness of Fit Equations Model**

Evaluation of the goodness of fit equation model was measured using predictive value-relevance ( $Q^2$ ). Predictive value-relevance ( $Q^2$ ) is calculated using the following formula:

$$Q^2 = 1 - (1 - R^2_1)(1 - R^2_2) \dots n$$

$$Q^2 = 1 - (1-.39)(1-.48) = 0.68$$

$R^2$  is the coefficient of determination, which is part of the total variation in the dependent variable that is explained by the variation in the independent variable. The following table describes the results of the analysis of the coefficient of determination of the variables of the study:

**Tabel 4 : R Square**

Variabel	R Square
Profitability	0,39
Bankruptcy Prediction	0,48
Predictive-Relevance ( $Q^2$ )	0,68

Source: Processed data as attached.

Based on the coefficient of determination in the above table, the value of  $R^2$  for bankruptcy prediction variables is 0.39, it indicates that the variation of profitability can be explained by the company's efficiency and the strength of competition variable by 39% while the remaining 61% is influenced by other variables not included in the research model.

$R^2$  value for bankruptcy prediction variable is 0.48, which means that the bankruptcy prediction variables can be explained by the efficiency of the company variable, the strength of competition and profitability is 48% while the remaining 52% is influenced by other variables that are not included in the research model. Inner evaluation model for first and second in explaining the profitability variable and bankruptcy prediction variable is good enough.

Predictive value-relevance of the structural model in this study is 0.68 or 68% means that the model is able to explain the phenomenon of company bankruptcy prediction by 68%, while the remaining 32% is explained by other variables that are not included in this research model.

**Hypothesis Testing Results**

To test this hypotheses, we used  $t_{\text{statistic}}$  in each path direct impacted partially. Here is a table that describes the path for testing hypotheses:

Tabel 5. Research Model

Equation Model	Company's Efficiency (X <sub>1</sub> )	Strength of Competition (X <sub>2</sub> )	Firm Size (X <sub>3</sub> )	Growth (X <sub>4</sub> )	Profitability (Y)
Model 1: Profitability (Y)	0,386 56,694**	-0,184 13,22**	0,692 36,34**	-0,047 3,728**	
Model 2: Bankruptcy Prediction (Z)	-0,09 27,0416**	-0,165 13,085**	0,693 36,34**	0,108 5,784**	0,687 35,87**

Source: Processed data as attached

\*\* Significant level of 5%, \* Significant level of 10%

The model regressions of research are as follows:

$$\text{Profitability} = 0,386 X_1 - 0,184 X_2 + 0,692 X_3 - 0,047 X_4 + e1 \dots\dots\dots (I)$$

$$\text{Bankruptcy Prediction} = -0,09 X_1 - 0,165 X_2 + 0,693 X_3 + 0,108 X_4 + 0,687Y + e2 \dots\dots\dots (II)$$

In equation one, with profitability endogenous variables (Y), the greatest influence variable is a variable degree of efficiency (X<sub>1</sub>) is the regression coefficient (beta) of 0.386 when compared with other variables. This means that if the level of efficiency of the company increased by 1, the profitability will increase by 0.386, and vice versa if the level of efficiency of the company decreased by 1, the profitability will decrease by 0.386.

In equation two, with bankruptcy prediction variables (Z), the biggest influence variable is the profitability with regression coefficient is 0.687, it means that if the profitability of the company increased 1 then bankruptcy prediction value will be increased by 0,687, and vice versa if the profitability of the company decrease 1 then the value prediction of corporate bankruptcy would decrease by 0,687. Variable that has smallest effect is levels of companies efficiency (X<sub>2</sub>) with the regression coefficient (beta) is -0.09 compared with other variables. The implications of this study suggest that in Indonesia Islamic capital market, the strength of the competition is quite tough, because a large market share controlled by a fraction conglomerate (group), such as Astra group and Salim group. Output results in Table 5 above can be used to answer the hypothesis in this study:

**The Effect of the Company Efficiency to the Company profitability**

Coefficient regression obtained from impact of company efficiency variable to profitability amounting to 0.386 with  $t_{\text{statistic}}$  value 56.694 > 1.98 at significance level  $\alpha = 0.05$  (5%) which states that there is positive and significant impact between the company efficiency variable to profitability. The results of this analysis support the hypothesis of the first study in which there is an impact of company's efficiency to the profitability. Coefficient parameter shows value 0.386, it means that higher level of efficiency, the company will acquire the company's profitability increases. On the contrary, decreased levels of efficiency, the company will acquired the company's profitability is getting smaller. The results of this study support previous studies, which the company's efficiency impacted to the company's financial performance as measured by Return on Assets (Altman, 1968; Berhnhardsen, 2001; Ilya Avianti, 2000, Leano et al., 2004; Tirok, 2002).

**The Effect of the Strength of Competition to Company Profitability**

Coefficient regression obtained from impact of the strength of competition to profitability is -0.184 with  $t_{\text{statistic}}$  value 13.22 > 1.98 at significance level  $\alpha = 0.05$  (5%) which states that there is a significant impact between the strength of competition variable and profitability. The results of this analysis support the hypothesis of a second study, in which there is impact between strength of competition and profitability, but the value of the resulting negative regression coefficient. This phenomenon arises due to the concentrated market share in several group companies in Jakarta Islamic Index, the concentration is more dominant market share controlled by PT Astra International on average by 30%, and Indofood average by 12%. The results of this study differ from previous studies, which Ravenscraft 1983 in Schawlbach: 1991) supports the positive impact of market share with profitability. Ravenscraft found that a 10% increase in market share will increase the returns on sales by 1.4%. Companies with high-strength competition have the ability to generate large profits because it has a large market share. The strength of the company competition could also be achieved through the ability of the company creates a low cost advantage (Porter: 1985).

**The Effect of Company Efficiency to Bankruptcy Prediction**

Coefficient regression obtained from impact of company efficiency variable to bankruptcy prediction amounting to -0.09 with  $t_{\text{statistic}}$  value 13.085 > 1.98 at significance level  $\alpha = 0.05$  (5%) which states that there is a significant impact between company efficiency variable and bankruptcy prediction. The results of this analysis support the hypothesis of a third study in which there is impact of the company efficiency to bankruptcy prediction. Value of the coefficient parameter is -0.09 means that the higher level of company efficiency then impacted to the lower of the bankruptcy prediction, and vice versa, decreases the level of company efficiency then bankruptcy prediction are proxied by the Z-Score will be greater.

#### The Effect of the Strength of Competition to Bankruptcy Prediction

Coefficient regression obtained from the impact of the strength of competition variable to bankruptcy prediction amounting to -0.165 with  $t_{\text{statistic}}$  13.68 value > 1.98 at significance level  $\alpha = 0.05$  (5%) which states that there is a significant impact between the strength of competition with bankruptcy prediction. The results of this analysis support the hypothesis of a fourth study, where there is the impact between strength of competition and bankruptcy prediction. Regression coefficient is -0.165 explained that the higher strength of competition, then the bankruptcy prediction will be declined, conversely the lower strength of competition, then increasing bankruptcy prediction.

Market share reflects the competitive position of the company acquired in the market. If the company does not have a competitive position it will impact the sale of products of the companies, resulting in declining profits and if it has continued, this condition will affect to the survival of the company.

#### The Effect of Profitability to Bankruptcy Prediction

Coefficient regression obtained from the impact of profitability variable to bankruptcy prediction is equal to 0.687 with  $t_{\text{statistic}}$  35.87 value > 1.98 at significance level  $\alpha = 0.05$  (5%) which states that there is a significant impact between the profitability and bankruptcy prediction. The results of this analysis support the hypothesis of fifth study, where there is impact of profitability and bankruptcy prediction. Regression coefficient is 0.687 explained that the higher profitability will impact to bankruptcy prediction are proxied by the Z-Score is getting better, otherwise the lower profitability of the company, bankruptcy prediction as measured by Z-score will be decreased.

### Conclusion

Manufacturing companies listed in Jakarta Islamic Index, proven have a Z-score that is good and quite high above 3, it proves that the manufacturing company in Jakarta Islamic Index has a good performance. But still there is a Z-score below 3 which shows that there are several companies in the Islamic capital market that is experiencing financial difficulty and located in an unsafe zone.

On the causality of this study also produced some mixed findings are: There is a positive and significant impact of level of the company efficiency to company profitability, there is a significant negative impact of the strength of competition to company profitability, there is a significant negative impact of company efficiency to bankruptcy prediction, there is a significant negative impact of the strength of competition to bankruptcy prediction, and there is a significant positive impact of the company profitability to the bankruptcy prediction. This result is consistent with Altman, 1968; Bernhardsen, 2001; Ilya Avianti, 2000, Leano et al., 2004; and Tirok, 2002, that the company's efficiency impacted to the company's financial performance as measured by Return on Assets.

The existence of negative and significant impact of the strength of competition to profitability is suspected by the presence of market share is concentrated in several group companies (conglomerate) in the Islamic capital market, the concentration of market share is more dominant controlled by PT Astra International on average by 30%, and Indofood an average of 12%. The results differ from previous studies, which Ravenscraft 1983 in Schawlbach: 1991 supports the positive impact of market share with profitability.

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