Supply Chain Management Impact on Company's Financial Performance: Empirical Evidence from Indonesia

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Abstract- **The company's financial performance is a significant aspect which can be affected by supply chain management. By knowing the supply chain procedure and financial performance of a company, one will be able to know the financial condition, business development, and the cash flow embedded in the company as well as the profit and income from the results of the company's business. The company's financial performance is measured by the profitability ratio of Return on Assets. This study uses supply chain management that is consistently listed in the Jakarta Islamic Index (JII) for 2014-2018 periods and has complete data that can be processed and analyzed. The result of this study shows that Turn Over Inventory and Total Asset Turn Over have a positive and significant effect on Return on Assets, and Debt to Asset Ratio has a negative and significant effect on Return on Assets. But Current Ratio, Cash Turn Over, and Debt to Equity Ratio have no effect on Return on Assets.**

Keywords; *Company's Financial Performance, supply chain management, Return on Assets, Current Ratio, Cash Turn Over, Debt to Asset Ratio, Debt to Equity Ratio, Inventory Turn Over, Total Asset Turn Over.*

1. Introduction

Financial reports are the final result of the accounting recording process that records the economic activities of the company [1-3]. The Financial report is a very important tool for obtaining information related to the financial position and the results that have been achieved by the company concerned. Through financial statements, interested parties can obtain important information needed related to financial position and the results achieved by a company.

Financial statements communicate information related to financial position, performance, and changes in the financial position of a company that can benefit most users of financial statements in the process of economic decision making [4]. Financial statements can be used on to the majority of users of financial statements in providing important information relating to corporate finance. Besides, it can also be used to determine the company's financial performance. Through financial statements, especially profitability provided in the company's income statement, it can reflect the income and profits that have been obtained by the company. Therefore, that it can be an important factor in conducting an analysis of the company's financial performance [5].

Supply chain performance analysis is the process of determining the operating and financial characteristics of a company from accounting and financial statements [6]. Financial performance analysis is related to *review* on financial data, calculating, measuring, interpreting, and providing financial solutions for a certain period. Therefore, to be able to find out the financial performance of a company, an analysis of the company's financial performance must be carried out. The analysis can be done using an analytical tool so that the financial condition of the company can be discovered.

Financial ratio analysis is a technique that shows the relationship between two elements of a financial statement that allows businessman to analyze the position and financial performance of the company [7]. By conducting an analysis of the financial ratios, it can explain or provide an overview to the analyst about the merits of financial position and financial performance of a company.

To measure the company's financial performance, this study using the profitability ratio of *Return on Assets* (ROA). *Return on Assets* (ROA) shows how much the company's ability to generate profits using total assets [8]. This study aims to examine the factors that influence the company's financial performance as measured by using *Return on Assets* (ROA). These factors are *Current Ratio*, *Cash Turn Over*, *Debt to Asset Ratio*, *Debt to Equity Ratio*, *Inventory Turn Over*, and *Total Asset Turn Over*.

This study provides a basic description of financial ratios used to test financial performance in companies listed in the Jakarta Islamic Index. This study is carried out because no one has examined the financial performance of companies listed in the Jakarta Islamic Index. Therefore, this study will analyze the dominant factors in measuring the financial performance of companies listed in the Jakarta Islamic Index.

The companies that have been registered in the Jakarta Islamic Index (JII) are companies that have different characteristics compared to other companies that are not listed on JII; that meet the criteria for selecting companies listed on JII. JII is a stock index for stocks that meet *Sharia* criteria [9]. This shows that the characteristics of the company listed on the JII are issuers whose business activities do not conflict with sharia law, such as gambling business and gambling game or prohibited; business of conventional financial institutions; businesses that produce, distribute and trade unlawful food or beverages; businesses that produce, distribute, and provide goods or services that damage morals (dangerous or harmful

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products). The researcher is interested to study the financial performance of companies that have those special characteristics. Therefore, the selection of company types in this study are *sharia-based companies* that have been registered in JII that have different characteristics compared to other companies that are not listed on JII.

This study uses multiple linear regression analysis. Multiple linear regression analysis in this study was used to test the research hypothesis. Hypothesis testing is done through several classic assumption test stages and statistical tests.

2. Literature Review and Hypotheses Development

2.1. Company's Financial Performance

The supply chain management and operating results (performance) of the company reflected in the company's financial statements are essentially the final results of the accounting activities of the related company. Information about the financial condition and results of the company's operations is very useful for various parties. Information and description of the company's financial development can be obtained by interpreting financial statements; by linking the elements in the financial statements so that there will be many descriptions of the financial condition of a company [10].

The financial condition of a company can be used to measure the company's financial performance. To find out the financial performance of a company, an analysis of the company's financial performance must be carried out; the analysis process can be done using an analytical tool. Based on the technique, financial analysis can be done using financial ratio analysis. To measure the company's financial performance using financial ratios, it can be done with several financial ratios [11]. Each of these financial ratios has a specific purpose, usefulness and significance. Each result of the measured ratio can be interpreted so that it becomes more meaningful for the company's decision making [12].

According to [13], managers often measure a company's financial performance with a ratio of net income to total assets. Therefore, the profitability ratio of *Return on Assets* (ROA) can be used to measure the company's financial performance. The return on assets reflects how much *return* is generated on each Rupiah invested in assets.

As for [14], analysis of *return on assets* can be used to measure a company's ability to generate profits in the past. This analysis can then be projected into the future to see the company's ability to generate profits in the future. Analysis of return on assets can be used to measure a company's ability to generate profits by using the total assets (resources) owned by the company after adjusting for the costs to fund the asset.

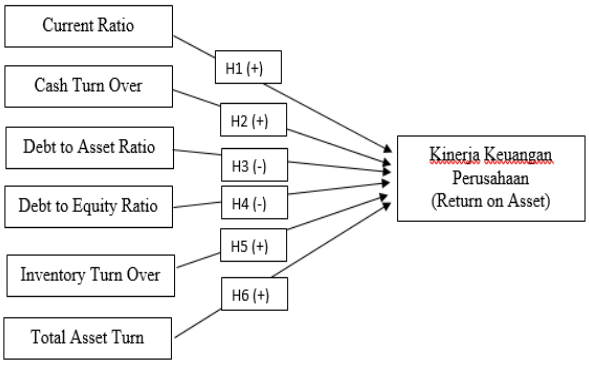

Figure 1. Theoretical Framework

2.2. Relationship between *Current Ratio* to Company's Financial Performance

Current Ratio is a ratio to measure a company's ability to pay short-term liabilities or debts that are immediately due when billed at once. The higher the *current ratio*, shows that the greater the company's ability to pay short-term obligations. If the company's ability to pay short-term obligations is high, it can show that the company has higher assets. If the company well-manage the higher assets, and not only uses these assets to pay short-term liabilities but also for investment and increasing sales, it can increase income and profits for the company. Based on the description, the hypothesis can be formulated as follows:

H 1 : Current Ratio has a significant positive effect on the company's financial performance

2.3. Relationship between *Cash Turn Over* to Company's Financial Performance

Cash Turn Over is a ratio used to measure the level of cash availability in paying bills (debt) and costs related to sales [15]. The higher the *cash turn over*, it shows that the greater the level of cash availability in paying debts and the costs associated with sales. If the company's ability to pay debts and costs associated with sales is high, it shows that the company has high cash availability. The high availability of the cash can also be used by companies for operational activities in increasing sales, therefore if sales increase and other costs remain then it will increase income and profits for the company. Based on these descriptions, the hypothesis can be formulated as follows:

H 2 : Cash Turn Over has a significant positive effect on the company's financial performance.

2.4. Relationship between *Debt to Asset Ratio* to Company's Financial Performance

Debt to Asset Ratio is a ratio used to measure how much a company's assets are financed by debt or how much the company's debt affects asset management [15]. The higher the *debt to asset ratio,* it shows that the greater the company's assets that are financed by debt, therefore the funding with the debt in the company are higher. If the company tends to use higher funding with debt, the company will also have a higher interest expenses, this is because the external loan is also high. The higher the company's interest expense, the higher the costs used to pay the interest expense, therefore it can reduce income

and profits of the company. Based on the description, the hypothesis can be formulated as follows:

H 3 : Debt to Asset Ratio has a significant negative effect on the company's financial performance.

2.5. Relationship between *Debt to Equity Ratio* to Company's Financial Performance

Debt to Equity Ratio is a financial ratio that shows how much shareholders' equity and debt are used to finance company assets [16]. *Debt to Equity Ratio* is used to know every Rupiah of its own capital which is used as guarantee for debt. The higher the *debt to equity ratio,* it can be shown that the greater the equity is used as guarantee for company debt. If companies tend to use higher funding from their own capital than debt capital, the company will have a lower interest expense because the number of external loans is also low. This will have an impact on the income obtained by the company. The lower the interest expense, the lower the costs used to pay the interest expense, therefore it can increase income and profits in the company, vice versa, if the company tends to use higher funding from debt capital, the profits to be obtained by the company are lower. Based on the description, the hypothesis can be formulated as follows:

H 4 : Debt to Equity Ratio has a significant negative effect on the company's financial performance.

2.6. Relationship between *Inventory Turn Over* to Company's Financial Performance

Inventory Turn Over is a ratio to determine the company's ability to manage inventory, means that how many times the existing inventory will be converted into sales. The higher the *turn over* inventory, it can show that the greater the company's ability to manage inventory. If the company's ability to manage inventory is good, then inventory turnover in the company will also be better. Companies can work more productively by generating faster sales without holding back a lot of inventory. By generating high sales and other costs, the company's income will increase so that it will increase profits or the company's financial performance. Based on the description, the hypothesis can be formulated as follows:

H 5 : Turn Over Inventory has a significant positive effect on the company's financial performance.

2.7. Relationship between *Total Asset Turn Over* to Company's Financial Performance

Turn Over Total Asset is a ratio used to measure the turnover of all assets owned by a company and measure how many sales are obtained from each Rupiah of assets. The higher the *total asset turn over*, it can show that the greater the company's ability to use assets to generate sales. If the company's ability to use assets to generate sales is higher, then the income earned by the company will also increase. The higher the company produces sales and other costs that are required to remain, and then the income in the company can increase, therefore it can increase profits or the company's financial performance. Based on these descriptions, the hypothesis can be formulated as follows:

H 6 : Total Asset Turn Over has a significant positive effect on the company's financial performance.

3. Research Result

The research object used in this research is 13 companies that are consistently listed in the Jakarta Islamic Index (JII) for the 2014-2018 periods or for five years of observation and have complete data that can be processed and analyzed to see the effect of independent variables on the dependent variable. The list of companies that become objects in this study can be seen in Table 1 below.

Table 1. List of Companies Jakarta Islamic Index 2014-2018

No	Code	Company Name
1	AALI	Astra Agro Lestari Tbk
2	AKRA	AKR Corporindo Tbk
3	ASII	Astra International Tbk
4	ICBP	Indofood CBP Sukses Makmur Tbk
5	INDF	Indofood Sukses Makmur Tbk
6	INTP	Indocement Tunggal Prakarsa Tbk
7	KLBF	Kalbe Farma Tbk
8	LPKR	Lippo Karawaci Tbk
9	LSIP	PP London Sumatra Indonesia Tbk
10	SMGR	Semen Indonesia (Persero) Tbk
11	TLKM	Telekomunikasi Indonesia (Persero) Tbk
12	UNTR	United Tractors Tbk
13	UNVR	Unilever Indonesia Tbk

Source: www.syariahsaham.com

This research has passed the classic assumption test, while the results of statistical tests can be seen in Table 2.

Table 2. Statistical Test Results T

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2.260	.253		-8.938	.000
Current Ratio	-.009	.057	-.018	-.165	.870
Cash Turnover	.004	.002	.178	1.848	.070
Debt to Asset Ratio	-.838	.320	-.538	-2.615	.011
Debt to Equity Ratio	.079	.296	.060	.267	.790
Inventory Turn Over	.004	.002	.265	2.925	.005
Total Asset Turn Over	.981	.180	.709	5.461	.000

a. Dependent Variable: Company's Financial Performance

3.1. Effect of *Current Ratio* on Company's Financial Performance (*Return on Asset*)

Based on the results of data analysis, it is known that the *Current Ratio* variable does not affect the company's financial performance as measured by using *Return On Assets*. The results of individual hypothesis testing show

that the *Current Ratio* variable has a value of t count (-0.165) < t table (1.672) and a significance value of 0.870 > α = 0.05. This proves that the *Current Ratio* variable does not affect the company's financial performance (*Return On Asset*). This study was supported by the research of [17,18] who found that the current ratio did not affect *Return on Assets*.

Current Ratio can be used to measure a company's ability to pay short-term obligations, so that the higher *Current Ratio* can indicate that the company has high assets. However, the company's ability to pay short-term obligations and have high assets will not affect the company's financial performance. This is because the companies listed in the Jakarta Islamic Index (JII) prefer to place more funds on assets than they have to manage assets to generate sales by incurring additional costs.

Based on the Current Ratio data for companies listed in the Jakarta Islamic Index (JII) for the 2014-2018 period shows that the increase in *Current Ratio* is not followed by an increase in *Return on Assets*, vice versa; where an increase in *Return on Assets* is not followed by increase in *Current Ratio*. This can be seen in the Lippo *Karawaci* Company in 2018 which has a value of *Current Ratio* above the average of 5.45, while the *Return on Asset* value is actually below the average of 0.03. Furthermore, in the PP London Sumatra Indonesia Company in 2014 which has a value of *Current Ratio* above the average of 2.49 and the *Return on Asset* value is below the average of 0.10. Furthermore, the Unilever Indonesia Company in 2015 has a *Return on Asset* value above an average of 0.37, while the *Current Ratio* value is actually below the average of 0.65.

The level of company's ability to pay short-term obligations and have high assets cannot provide guarantees will affect the financial performance of the company. The higher the company's ability to pay short-term obligations and to have assets that are also high, it cannot show the ability of the company to manage the higher assets as well, therefore it cannot be ascertained that companies that have the ability to pay short-term obligations properly can increase profits or financial performance of a company.

3.2. Effect of Cash Turn Over on the Company's Financial Performance (Return on Asset)

Based on the results of data analysis, it is known that the *Cash Turn Over* variable does not affect the company's financial performance as measured by using *Return on Asset*. The results of individual hypothesis testing show that the *Cash Turn Over* variable has a value of t count (1.848) > t table (1.672) and a significance value of 0.070 > α = 0.05. This proves that the *Cash Turn Over* variable does not affect the company's financial performance (*Return on Asset*).

Cash Turn Over can be used to measure the level of cash availability in paying debts and costs related to sales, as result, the higher *Cash Turn Over* can indicate that the company has a high level of cash availability. The level of cash availability in paying debt and costs related to sales cannot affect the company's financial performance. This is because the companies listed in the Jakarta Islamic Index (JII) prefer not to manage the high level of cash availability to generate sales. The company prefers to just let the high level of cash availability in the company rather than having to use it for operational activities in increasing sales, which in these activities can result in an increase in other costs related to sales.

Based on the *Cash Turn Over* data on companies listed in the Jakarta Islamic Index (JII) for the 2014-2018 periods, the increase in *Cash Turn Over* is not followed by an increase in *Return on Assets*, vice versa; where an increase in *Return on Assets* is not followed by an increase in *Cash Turn Over*. This can be seen in AKR *Corporindo* Company in 2014 which has a *Cash Turn Over* value above the average of 41.92, while the Return on Asset value is actually below the average of 0.05. Furthermore, the *Kalbe Farma* Company in 2015 has a *Return on Assets* above the average of 0.15, while the *Cash Turn Over* value is actually below the average of 2.80.

The level of cash availability of the company in paying debt and costs related to sales cannot provide a guarantee that it will increase profits or financial performance in a company. The higher level of company cash availability in paying debt and costs related to sales cannot show the ability of the company to manage the availability of high cash well, so that it cannot be ascertained that the company has a high level of cash availability in paying debt and costs related to sales can increase profits or financial performance in a company.

3.3. Effect of Debt to Asset Ratio on Company's Financial Performance (Return on Asset)

Based on the results of data analysis it is known that the variable *Debt to Asset Ratio* has a negative and significant effect on the company's financial performance as measured by using *Return on Asset*. The results of individual hypothesis testing indicate that the variable *Debt to Asset Ratio* has a value of t count (-2.615) < t table (1.672) and a significance value of 0.011 < α = 0.05. This proves that the variable *Debt to Asset Ratio* has a negative and significant effect on the company's financial performance (*Return on Asset*).

Debt to Asset Ratio can be used to measure how much a company's assets are financed by debt, so that the higher the *Debt to Asset Ratio*, indicate that the higher the debt the company uses to funding with. The company's assets that are financed by debt can affect the company's financial performance. This is because the higher the assets of companies listed in the Jakarta Islamic Index (JII) financed by debt can show an increase in the company's interest expense; therefore, the company will use income to pay the interest expense. The reduced income of the company can reduce company profits so that it will also affect the company's financial performance. Increased *Debt to Asset Ratio* drives a decrease in *Return on Assets*. The greater the proportion of debt in the capital structure of a company, the higher the fixed costs and commitment of repayment caused.

3.4. Effect of Debt to Equity Ratio on Company's Financial Performance (Return on Asset)

Based on the results of data analysis it is known that the variable *Debt to Equity Ratio* does not affect the company's financial performance as measured by using *Return on Asset*. The results of individual hypothesis testing show that the variable *Debt to Equity Ratio* has a value of t count (0.267) < t table (1.672) and a significance value of 0.790 > α = 0.05. This proves that the variable *Debt to Equity Ratio* does not affect the company's financial performance (*Return on Asset*). The results of the study support [3] research who found that the *Debt to Equity Ratio* did not affect *Return on Assets*.

Debt to Equity Ratio can be used to find out every Rupiah of its own capital which is used as guarantee for debt. Each rupiah of its own capital is used as collateral for debt will not affect the company's financial performance. This is because the companies listed in the Jakarta Islamic Index (JII) prefer not to use their own capital as collateral for debt. The company prefers to just let the capital it has compared to having to use it to be used as guarantee for debt and result in an increase in the company's interest expense

Based on the *Debt to Equity Ratio* data on companies listed in the Jakarta Islamic Index (JII) for the 2014-2018 period, it shows that an increase in *Debt to Equity Ratio* is not followed by a decrease in *Return on Assets*, vice versa; where there is an increase in *Return on Assets* not followed by a decrease in the *Debt to Equity Ratio*. This can be seen in the in PP London Sumatra Indonesia Company in 2018 which has a *Return On Asset* value below the average of 0.06 and the value of *Debt to Equity Ratio* is also below the average of 0.24. Then the United Tractors Company in 2014 has a value of *Return on Assets* below the average of 0.08 and the value of *Debt to Equity Ratio* is also below the average of 0.56.

The total amount company's own capital that used as guarantee for debt cannot provide a guarantee that it will affect the company's financial performance. The higher the equity that used as collateral debt cannot show the funding with high debt in the company can lead to an increase in the company's interest expense, therefore, it cannot be ascertained that a high *Debt to Equity Ratio* can reduce profits or financial performance in a company.

3.5. Effect of Inventory Turn Over on Company's Financial Performance (Return on Asset)

Based on the results of data analysis it is known that the *Inventory Turn Over* variable has a positive and significant effect on the company's financial performance as measured by using *Return on Asset*. The results of individual hypothesis testing indicate that *Inventory Turn Over* has a value of t count (2.925) > t table (1.672) and a significance value of 0.005 < α = 0.05. This proves that the *Inventory Turn Over* variable has a positive and significant effect on the company's financial performance (*Return on Asset*).

This research is supported by the research of [5, 12] who found that *Inventory Turn Over* has a positive effect on *Return On Assets*. A high *Inventory Turn Over* can show the ability of funds embedded in a rotating inventory in a given period, whereas a low Inventory Turn Over shows companies that are inefficient and unsuccessful in empowering funds. The higher the *Inventory Turn Over* can show operational efficiency, therefore, it can show how well management controls the capital in inventory.

Inventory Turn Over can be used to determine the ability of a company to managing inventory in generating sales. The company's ability to manage inventory can affect the company's financial performance. This is because the higher the ability of companies listed in the Jakarta Islamic Index (JII) to manage inventories to generate sales show that companies can work more productively by generating faster sales without much holding back inventory. The higher the company generates sales, the more revenue the company will increase; therefore, it will increase profits or financial performance in the company.

3.6. Effect of Total Asset Turnover on Company's Financial Performance (Return on Asset)

Based on the results of data analysis it is known that the variable *Total Asset Turn Over* has a positive and significant effect on the company's financial performance as measured by using *Return on Asset*. The results of individual hypothesis testing indicate that *Total Asset Turn Over* has a value of t count (5.461) > t table (1.672) and a significance value of 0.000 < α = 0.05. This proves that the *Total Asset Turn Over* variable has a positive and significant effect on the company's financial performance (*Return on Asset*).

Total Asset Turn Over can be used to measure the turnover of all assets owned by a company in generating sales. The company's ability to use assets to generate sales can affect the company's financial performance. This is because the higher the ability of companies listed in the Jakarta Islamic Index (JII) to use assets to generate sales indicate that the company can manage assets well to increase sales. The higher the company generates sales, the higher the company's revenue, so that it will increase profits or financial performance in the company. The higher the *Total Asset Turn Over*, the more efficient the use of assets and the faster the refund in the form of cash; therefore, when *Total Asset Turn Over* increases, then *Return On Assets* will also increase.

4. Conclusion

Based on the results of the research and discussion in this study, it appears that the dominant factors affecting the financial performance of companies in Jakarta Islamic Index, are *supply chain management*, *Debt to Asset Ratio, Inventory Turn Over, and Total Asset Turn Over. Debt to Asset Ratio* has a negative and significant effect on the company's financial performance. This shows that the higher assets that are financed by debt, the higher the company's interest expense, which can reduce income and profits in the company. Therefore, the level of company's assets are financed by debt can affect the company's financial performance.

Inventory Turn Over has a positive and significant effect on the company's financial performance in a supply

chain process. This shows that the company works more productively by generating faster sales without much holding back the inventory, so that the higher the sales, the higher the income and profits will also be. So, the level of company's ability to manage inventory can affect the company's financial performance. *Total Asset Turn Over* has a positive and significant effect on the company's financial performance (*Return On Asset*). This shows that the company manages assets well to increase sales, as a result, the higher the company produces sales, the higher income and profits will also be. Therefore, the level of company's ability to use assets to generate sales and its supply chain management procedure can affect the company's financial performance.

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