

## Effect of Activities on the Value of Chemical Sub-Sector Companies Listed on the Indonesia Stock Exchange

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### Abstract

*The study aims to evaluate two main aspects: first, to provide an overview of activities and company values among Chemical Sub-Sector companies listed on the Indonesia Stock Exchange, and second, to investigate how these activities impact the companies' values. The research design is based on library research, focusing on all Chemical Sub-Sector companies listed as of December 31, 2022. The study employs purposive sampling and combines both qualitative and quantitative descriptive analysis methods. Analytical techniques used include classical assumption tests, simple regression analysis, correlation coefficients, and hypothesis testing. The findings reveal several key points: Firstly, the average level of activity among these companies has shown a tendency to decrease, while their values have generally increased. Secondly, the simple regression analysis indicates that activity does not significantly affect company value, with a negative relationship observed. Thirdly, both the correlation coefficient and determination analysis suggest a very weak relationship between activity levels and company value. Finally, the t-test results confirm that activity has a negative and statistically insignificant impact on company value.*

**Keywords:** Activity, Company Value.

### 1. INTRODUCTION

Economic growth and development are getting better so that this makes Indonesian companies try to achieve their goals, namely increasing profits every year. In order to realize these goals, management must assess the company's performance well. To assess good company performance, significant information is needed that is related to the company for a certain period of time, with the ability to run a business financially as shown in the financial statements. If the company is able to create large profits, the company's value also increases.

Company value is a depiction of the current condition of the company and can also provide a picture of the company's potential in the future. One of the main considerations for investors to review the performance of a company is through a review of how good the company's value is. One of the ratios that is usually used in measuring company value is using Tobin's Q, which is the market value of the company's assets divided by its replacement cost

or book value. The reason the author uses this ratio is because this ratio is considered to be able to provide accurate information and this ratio also has a better concept than market value to book value. In addition, this ratio also focuses on a number of current company values relative to the funds needed to replace them today.

Various factors can impact a company's value, and one key factor is activity. Activity metrics evaluate how effectively a company leverages its assets to produce revenue and manage its operations. Essentially, this ratio assesses whether the company is making the most of its asset base. For this study, the author uses Total Assets Turnover (TATO) as a measure of efficiency. TATO indicates how well a company is using its total assets to generate income, by dividing net sales by the total value of assets.

The following are the Activities (TATO) and Company Value (Tobin's Q) for the 2018-2022 period which can be seen in Table 1.

Table 1. Activities and Company Value in the

Year	Aktivitiy	Company Value
	TATO (times)	Tobin's Q (times)
2018	1,0708	0,8606
2019	1,0283	0,8935
2020	0,9276	0,9057
2021	0,9644	0,9377
2022	1,0234	0,8791
<b>Average</b>	<b>1,0029</b>	<b>0,8953</b>

## 2. LITERATURE REVIEW

### 2.1 Management

As outlined by Wijaya and Rifa'i (2016), management involves a systematic process of organizing and deploying an organization's resources—such as human, financial, and material resources—in a collaborative effort with its members. The ultimate aim of this process is to accomplish the organization's goals with both effectiveness and efficiency. This definition emphasizes the importance of resource coordination and teamwork in achieving the desired outcomes of the organization.

### 2.2 Financial Management

Musthafa (2017) suggests that financial management is a compelling and dynamic field of study, presenting various challenges and opportunities. Professionals in this area have the advantage of accessing a wide range of career prospects, including roles in corporate finance, banking, real estate, insurance, and government sectors. This diversity of opportunities allows individuals in financial management to advance and grow their careers across multiple industries.

### 2.3 Activity

Hidayat (2018) describes the activity ratio as a metric that evaluates how effectively a company uses its resources or assets. This ratio measures the efficiency with which a company manages its assets to generate revenue and achieve operational effectiveness.

### Company

Source: Indonesia Stock Exchange (data processed, 2024)

In 2019 and 2020 TATO decreased while Tobin's Q increased. However, in 2022 TATO increased while Tobin's Q decreased. Research from Noviyanti and Ruslim (2019) states that "activity has a positive effect on company value.", while according to Andayani, Wiksuana and Sedana (2017), "company activity has a negative effect on company value".

### 2.4 Company Value

According to Hidayat (2018), the market ratio encompasses a set of metrics that assess various aspects of a company's stock performance. These ratios compare the company's stock price to its earnings, book value per share, and the market value relative to its book value. This helps in evaluating how the stock is priced in relation to its financial performance and intrinsic value.

### 2.5 Influence of Activities on Company Value

Research by Noviyanti and Ruslim (2019) indicates that there is a positive relationship between company activities and its value. Their findings suggest that increased activity levels contribute to a higher valuation of the company.

## 3. RESEARCH METHOD

The research location in this study is the Chemical Sub-Sector Company listed on the IDX, with the IDX head office located at Jalan Jendral Sudirman Kav. 52-53, South Jakarta 12190, Indonesia.

### 3.1 Populasi

The study's population comprises all companies within the Chemical Sub-Sector listed on the Indonesia Stock Exchange as of December 31, 2022.

### 3.2 Sample

The sampling method employed in this study is purposive sampling, a technique that involves selecting samples based on specific criteria or considerations. The details of the research sample are outlined in the table below:

Table 3 Research Sample

No	Issure Code	Company Name
1	AGII	PT Samator Indo Gas, Tbk
2	AKPI	PT Argha Karya Prima Industry, Tbk
3	APLI	PT Asiaplast Industry, Tbk
4	BMSR	PT Bintang Mitra Semestaraya, Tbk
5	BRPT	PT Barito Pacific, Tbk
6	BUDI	PT Budi Strach & Sweetener, Tbk
7	CLPI	PT Colorpak Indonesia, Tbk
8	DPNS	PT Duta Pertiwi Nusantara, Tbk
9	EKAD	PT Ekadharma Internasional, Tbk
10	ESSA	PT Surya Esa Perkasa, Tbk
11	FPNI	PT Lotte Chemical Titan, Tbk
12	INCI	PT Intanwijaya Internasional, Tbk

13	LTLS	PT Lautan Luas, Tbk
14	MDKI	PT Emdeki Utama, Tbk
15	MOLI	PT Madusari Murni Indah, Tbk
16	OKAS	PT Ancora Indonesia Resource, Tbk
17	SRSN	PT Indo Acidatama, Tbk
18	TPIA	PT Chandra Asri Petrochemicals, Tbk
19	UNIC	PT Unggul Indah Cahaya, Tbk

Sumber: www.idx.co.id

Data collection was carried out using documentation methods. To analyze the data, the following techniques were employed: normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The results obtained were analyzed through both qualitative and quantitative descriptive approaches.

## 4 RESULT AND DISCUSSION

### 4.1 Result

#### 4.1.1 Analysis of Descriptive Data

This is an illustration of the Activities of Chemical Sub-Sector Companies Listed on the Indonesia Stock Exchange (IDX) for the 2018-2022 Period. Activity data on Chemical Sub-Sector Companies Listed on the IDX for the 2018-2022 period measured using Total Assets Turnover (TATO) is presented as follows.

Table 4. Activities measured by Total Assets Turnover in the companies

Source: Data processed (2024)

Referring to the table, it can be performed that the lowest value of Total Assets Turnover is 0.1601 at PT. Surya Esa Perkasa in 2018. This means that every Rp 1 of total assets can get net sales of Rp 0.1601. The maximum value of Total Assets Turnover is 5.4073 at PT. Bintang Mitra SemestaRaya (BMSR) in 2018. This means that every Rp 1 of total assets can achieve net sales of Rp 5.4073.

The following is a description of the Company Value of Chemical Sub-Sector

Companies. Below is the Company Value data in

Issure Code	2018	2019	2020	2021	2022	Average
AGII	0,3119	0,3138	0,3073	0,3354	0,3249	<b>0,3187</b>
AKPI	0,7776	0,8107	0,8434	0,8103	0,8649	<b>0,8214</b>
APLI	0,8706	1,0447	0,8009	0,9755	1,1244	<b>0,9632</b>
BMSR	5,4073	4,6780	3,6776	3,3870	3,1060	<b>4,0512</b>
BRPT	0,4367	0,3345	0,3038	0,3415	0,3202	<b>0,3473</b>
BUDI	0,7271	1,0013	0,9200	1,1275	1,0658	<b>0,9683</b>
CLPI	1,1016	1,1806	1,1915	1,0828	1,0936	<b>1,1300</b>
DPNS	0,445	0,3738	0,3046	0,4064	0,4953	<b>0,4050</b>
EKAD	0,8668	0,7832	0,6207	0,5404	0,5031	<b>0,6628</b>
ESSA	0,1601	0,2479	0,2216	0,3749	0,8799	<b>0,3769</b>
FPNI	2,2156	2,003	2,071	2,2516	2,4652	<b>2,2013</b>
INCI	0,9402	0,9408	0,8857	1,0196	0,9641	<b>0,9501</b>
LTLS	1,1200	1,1145	1,0123	1,0658	1,2929	<b>1,1211</b>
MDKI	0,4367	0,3784	0,3594	0,4032	0,4655	<b>0,4086</b>
MOLI	0,6372	0,5994	0,646	0,7085	0,6942	<b>0,6571</b>
OKAS	0,7329	0,8442	0,6329	0,6540	0,8880	<b>0,7504</b>
SRSN	0,8751	0,8784	0,9825	1,0554	1,1153	<b>0,9813</b>
TPIA	0,8014	0,5450	0,5027	0,5168	0,4837	<b>0,5699</b>
UNIC	1,4822	1,4657	1,3414	1,2677	1,2976	<b>1,3709</b>
Total Average	<b>1,0708</b>	<b>1,0283</b>	<b>0,9276</b>	<b>0,9644</b>	<b>1,0234</b>	<b>1,0029</b>
TATO Maximum						<b>5,4073</b>
TATO Minimum						<b>0,1601</b>

Chemical Sub-Sector companies measured using Tobin's Q.

Table 5. Overview of Company Value measured by Tobin's Q

Issure Code	2018	2019	2020	2021	2022	Average
AGII	0.8402	0.8336	0.9126	1.1302	1.3031	1.0039
AKPI	0.7643	0.6423	0.6316	0.7698	0.7181	0.7050
APLI	0.8217	1.0744	1.1570	1.1152	1.1492	1.0635
BMSR	1.0824	0.9528	0.9515	0.9970	1.1508	1.0269
BRPT	1.0330	1.9638	1.5653	1.1454	1.0939	1.3603
BUDI	0.7657	0.7260	0.7041	0.8054	0.8480	0.7699
CLPI	0.6372	0.6601	0.6007	0.7515	0.6898	0.6679
DPNS	0.4628	0.3777	0.3883	0.5100	0.5099	0.4497
EKAD	0.8510	0.8917	0.9335	0.9883	0.8841	0.9097
ESSA	0.9935	0.9568	0.9008	1.3471	1.4699	1.1336
FPNI	0.7948	0.6888	1.3194	1.4176	0.8681	1.0177
INCI	0.4706	0.3633	0.5698	0.4718	0.4262	0.4604
LTLS	0.8155	0.7939	0.7323	0.7451	0.8683	0.7910
MDKI	0.8377	0.6418	0.6888	0.6051	0.5510	0.6649
MOLI	1.5456	1.4916	1.2609	0.8559	0.5747	1.1457
OKAS	1.0344	1.0661	1.0556	1.0683	0.9985	1.0446
SRSN	0.8565	0.8649	0.7368	0.6778	0.5992	0.7471
TPIA	1.0115	1.3057	1.3920	1.0826	1.1092	1.1802
UNIC	0.7331	0.6813	0.7070	1.3340	0.8919	0.8695
Total Average	0.8606	0.8935	1.0268	1.0194	0.8833	0.9570
Tobin's Q Maximum						1,9638
Tobin's Q Minimum						0,3633

Source: Data processed (2024)

Referring to the table, it can be showed that the smallest value of Net Profit Margin is 0.3633, in PT Intanwijaya Internasional, Tbk (INCI) in 2019. This illustrates that the stock market price and book value of the amount of debt are lower by 0.3633 than the total assets. Then, the maximum value of Net Profit Margin is 1.9638 in PT Barito Pacific, Tbk (BRPT) in 2018. This means that the stock market price and book value of the amount of debt are higher by 1.9638 than the total assets.

#### 4.1.2 Analysis of Regression

In this study, a simple linear regression analysis was performed using SPSS version 21. The results of this analysis are detailed in the table below:

Table 6. Result of Regression Analysis Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	.888	.046	
	TATO	-.001	.035	-.004

a. Dependent Variable: TobinsQ

Source: Data processed (2024)

Looking at the table, the simple linear regression equation model is:

$$\hat{Y} = 0,888 - 0,01X1$$

This equation reveals that there is a negative relationship between activity and company value. Specifically, as the level of activity increases, the company value tends to decrease. This suggests that higher activity levels are associated with a reduction in the value of the Companies.

#### 4.1.3 Analysis of Correlation Coefficient and Determination

The following are the results of processing SPSS version 21 data to show the correlation coefficient and determination:

Table 7. Results of Correlation Coefficient and Determination on Company Value

##### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.004 <sup>a</sup>	.000	-.011	.2937554

a. Predictors: (Constant), TATO

b. Dependent Variable: TobinsQ

Source: Data processed (2024)

The table explains the correlation value (r) with a value of 0.004, which means that there is a very low correlation of the variable activity can explain the variable company value. In the table it can also be seen that the value of the determination coefficient (R square) is 0.000 (0.0%), which means that the independent variable has not been able (very small) to describe the dependent variable (company value). This means that there are still many influences from other factors that are not included in the part studied in this study such as liquidity, leverage, company size, capital structure, and sales growth.

#### 4.1.4 T-test (hypothesis test)

The outcomes of the T-test, which are used to verify the hypothesis of this study, are detailed in the table below:

Table 8. Results of t-Test

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**Coefficients<sup>a</sup>**

Model	t	Sig.	Collinearity Statistics		
			Tolerance	VIF	
1	(Constant)	19.292	.000		
	TATO	-.042	.966	1.000	1.000

a. Dependent Variable: TobinsQ

Source: Data processed (2024)

Look at the table description above, the t-value of the activity variable is -0.42. While for the t table with a significance level of 5%, with the formula  $df = n - k - 1 = (95 - 1 - 1) = 93$ , the t table obtained the number 1.98580. according to the calculation, this is possibly concluded that the activity variable, the t-value  $< t$  table (-0.42  $< 1.98580$ ) or sig.  $> 0.05$  (0.966  $> 0.05$ ). Thus, H1 is rejected, which means that activity has a negative influence (no influence) and is not significant on the company value.

## 4.2 Discussion

### 4.2.1 Activity Factor

Referring to the previous analysis, it has been shown that the activity of the Companies has relatively decreased. This is because there was a decrease in sales that occurred in net sales, while the number of assets increased, with an average value of 1.0029 times. It can be understood that every Rp 1 of the amount of assets used can create sales of Rp 1.0029.

The minimum score of activity in the Company is 0.1601 times, which is presented in the company PT Surya Esa Perkasa, Tbk (ESSA) in 2018. This means that for every Rp 1 of total assets, the company can get net sales of Rp 0.1601. This happens because there is a decrease in net sales, while total net fixed assets and non-current assets increase.

Therefore, companies should optimize the use of company assets to increase sales and therefore increase profits.

### 4.2.2 Company Value Factor

Referring to the analysis above, the data shows that the value of the Company has relatively increased. This is due to the increase in total shares outstanding, share price, and total debt compared to total assets, with an average value of 0.9870 times. This means that every Rp 1 share price gets a higher price than the book value of Rp 0.9870.

The minimum value of the company's score in the Company is 0.3633, which occurred

in the company PT Intanwijaya Internasional, Tbk (INCI) in 2019. This means that every Rp 1 share price gets a lower price than the book value, which is Rp 0.3633. This happens because of the decrease in the total shares outstanding, the share price, and the amount of the company's debt compared to the total assets.

Therefore, companies should focus on improving their core operations and profitability. By doing so, they can attract more investor interest and potentially increase their share prices.

### 4.2.3 Influence of Activities on the Company Value of Chemical Sub-Sector Companies

Looking at the partial test (t-test) results, the t-value for activity is found to be 0.42, with a significance level of 0.966. Comparing this to the critical t-table value of 1.98580, the calculated t-value is smaller, and since the significance value is greater than the alpha level of 0.05, we accept H1. This implies that activity, measured using Total Assets Turnover (TATO), has a positive effect on company value, but the effect is not statistically significant. These results are consistent with the findings of Tiana and Triyonowati (2020), who similarly concluded that while activity has a positive influence on company value, this effect is not significant.

The correlation coefficient and determination analysis reveal an r value of 0.072, demonstrating a very weak relationship between activity and profitability in relation to the company's value. Additionally, the determination coefficient ( $R^2$ ) stands at 0.000, indicating that activity (X1) explains only 0.00% of the variation in company value (Y). This signifies that activity has a negligible effect on company value, with nearly 100% of the variance being influenced by other factors not covered in this study.

The study's findings align with the perspective of Brigham and Houston (2018), who suggested that when liquidity, asset management, debt management, and profitability metrics are robust and investors anticipate continued favorable trends, the market value ratio is likely to be high. Consequently, stock prices are expected to perform well, which signifies that management has effectively fulfilled its responsibilities.

## 5. CONCLUSION

1. The average activity value, as measured by the Total Assets Turnover (TATO) ratio for the 2018-2022 period, shows a tendency to rise. This increase is attributed to higher sales relative to the total assets employed by the companies.
2. Over the 2018-2022 period, the average company value, assessed using Tobin's Q, has shown a downward trend. This decline is primarily due to a significant decrease in the company's stock price during this timeframe.
3. The findings from the simple linear regression analysis suggest that activity does not contribute positively to the company's value. In fact, the data shows that there is a negative impact of activity on the company's value.
4. According to the correlation and determination coefficient results, the correlation coefficient (r) indicates a weak relationship between activity and company value. The coefficient of determination (R Square) reveals that activity and profitability account for only a small portion of the variation in company value, with the majority being influenced by other factors not covered in this study.
5. The findings from the t-test reveal that the impact of activity on company value is both negative and statistically insignificant. This suggests that changes in activity levels do not significantly affect the company's value, implying that other factors might be more influential in determining company value.

There are a number of recommendations for chemical sub-sector companies based on research data, including:

1. To increase the value of activities, chemical sub-sector companies should use their assets effectively and increase sales so that revenue increases.
2. To increase company value, chemical sub-sector companies should improve company fundamentals, namely from micro factors by improving short-term financial performance and macro factors through profit management so that activities are

good, thus investors will be encouraged to invest, which will increase stock prices.

3. In connection with the limitations of the study where the author has not described all the variables that can influence company value in companies, thus, for subsequent studies with similar research objects, it is recommended to use other factors that are not included in this research.

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