

THE ROLE OF FIRM SIZE IN MODERATING THE EFFECT OF RELATED PARTY TRANSACTIONS ON FIRM VALUE

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ABSTRACT

This study examines the role of firm size in moderating the effect of *related party transactions* on firm value. This study used a sample of manufacturing companies in the food and beverage sector listed on the Indonesia Stock Exchange (IDX) through the *purposive sampling method* for the 2016-2020 period, so the final sample number was 10, with a total of 50 observations. Hypothesis testing used panel data regression with *eviews* version 12. Study results show that sales-related party transactions have a positive and significant effect on firm value, while purchased-related party transactions do not affect on firm value. The results of the moderation effect study show that company size cannot moderate the relationship between sales related party transactions and purchased related party transactions on firm value.

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1. INTRODUCTION

The development of the current era, which is increasingly rapid confronts the company's competitive situation in various sectors. The company will likely position itself in a safe and stable condition so that it can to compete in the long term. Efforts made by the company to make it happen, namely by increasing its value because the company's value is the basis for assessing whether the company is in good or bad condition. Investors will be interest in investing in companies if the value of a company is good. One of the company values in a company is reflected in the stock price. The stock price is the basis for investors' views to assess a company's level of success. Investors will invest if the stock price of a company is high. Agree with the research by Rosa *et al.*, (2018), which explains that, when many investors put their capital into the company, the value of the company will increase.

Zulaikah *et al.*, (2019) define company value as a benchmark for the success of a company's performance which will affect the views of company investors. Several analytical approaches are used as a basis for consideration in making investment decisions by investors, namely the technical and fundamental analysis approaches (Sutrisno, 2012). The technical analysis emphasizes the assessment of stock price movements that are known through the capital market to see stock price fluctuations. Furthermore, fundamental analysis is assessed based on the company's financial ratios, which are usually used as a basis for estimating company performance with economic decisions made by company managers, namely investment decisions and dividend policies (Irawati *et al.*, 2019). Since managers' decisions impact shareholders' welfare, the accuracy of managers in making decisions must be carefully considered so that investors' funds can be managed properly (Zulaikah *et al.*, 2019).

One of the strategies implemented by the company to increase its value of the company is by conducting related party transactions. Related party transactions are regulated based on Statement of Financial Accounting Standards No. 7 Revision 2009 regarding related party disclosures. In PSAK No. 7 2009, paragraph 4 explains that must disclose related party transactions in the financial statements. PSAK No. 7 defines related parties as transactions made between companies and their subsidiaries, affiliates, owners, family companies, or owners of entities. Huang & Liu (2010) provide two different views on the effect of *related party transactions* on firm value. The first view explains that related party transactions positively impact firm value. The opinion of Ross *et al.*, (2010), which explains that related party transactions are company business activities carried out through agreements on sales or purchase price levels to increase company profits.

The next view regarding *related party transactions* is that they have a negative impact on company value. In the application of related party transactions to companies, sometimes there are conflicts of interest between the principals of the corporate group or management and minority principals caused by *agency problems*. For companies that carry out related party transactions, the policies implemented

regarding the allocation of resources within the company are more vulnerable to only providing benefits for the company group but detrimental to investors who invest in the company. In addition, another problem that occurs in related party transactions is related to the fairness of the transaction which is still in doubt. The market considers that related party transactions carried out are less trusted because of fraud in reporting. Agree with this statement, (Chen, 2011) explains that related party transactions have a negative impact on company performance.

The biggest fraud cases that have become one of the world's special concerns regarding related party transactions are the Enron and Adelphia cases. The fraud involved in the related party transactions in the case involved overstating revenues by \$1.5 billion for the period 1997 to June 30, 2001, overstating equity by approximately \$1.5 billion at December 31, 2000, \$1.9 billion at December 30. June 2001, and understated the debt by \$885 million on December 31, 1999. The fraud committed in this case was aimed at increasing reported profits for the period, so that the manager's opportunity to obtain compensation was fulfilled. Another reason underlying the falsification of reporting is to attract the market to invest its resources in companies (Gordon *et al.*, 2007).

Another case related to related party transactions that occurred in companies in Indonesia is PT Adaro Energy Tbk Indonesia. The fraud committed by the Adaro company was selling coal to its affiliated company in Singapore, namely Coltrade Services International, far below market prices and Coltrade Services International reselling it at high prices (Roselina & Kanti, 2022). The NGO Global Witness reported that there were allegations of tax evasion by PT Adaro Energy Tbk by escaping its revenues and profits abroad, thereby suppressing the taxes paid to the Indonesian government.

With regard to related party transactions, there are several indicators in it, namely sales transactions, purchase transactions, accounts receivable transactions and debt transactions. In this study, researchers only focused on two proxies for related party transactions, namely related party sales and purchase transactions. The reason the researcher only uses these two proxies is that the researcher considers that these two proxies are the most important factors in the company's operational processes. Sales and purchase transactions are the main focus in this study because they are considered to be able to measure the success and failure of the company from the transactions made. In addition, research related to these two variables is still little researched so that this research can fill in the literature that is still empty.

Furthermore, related party sales transactions are carried out by the company basically to increase sales intensity and reduce transaction costs. High sales intensity and cost savings will have a good impact on increasing revenue so that the company's value will be higher. Conversely, it will be different if the company does not carry out related party sales transactions. Sales intensity is not as high as related transactions and the company must pay higher costs in sales so that it will have an impact on decreasing company profits and of course affecting lower company value. This statement is supported by research findings from Lin *et al.*, (2010) which explain that related party sales transactions have a positive impact on the company's financial performance.

Furthermore, the implementation of related party purchase transactions in the company's business activities is believed to be very efficient. The reason is that the company can buy below the market price and the company can save on transaction costs. Thus, the opportunity to earn profits will be even greater and will have an impact on higher corporate value. This is supported by Prasetyorini's (2013) research findings, namely related purchase transactions have a positive impact on financial performance.

Several previous studies on the impact of related party transactions on firm value still found many inconsistencies in the findings. Fransiska & Lestari (2017) revealed that related party purchase transactions can improve company performance. Wong *et al.*, (2015) found that, the impact of related party sales transactions on firm value is positive. However, research by Gordon *et al.*, (2004) explains that, investors and market observers consider transactions with related parties dangerous for company shareholders. This statement is supported by the research findings of Huang & Liu (2010) and Chen (2011) which reveal that related party sales transactions have a negative effect on firm value.

Firm size is another important factor that affects firm value. This is assessed based on the size of the company by taking into account the number of assets, share price and company income. The bigger the size of the company, the company has a good market share and the company has the potential to get funding from external parties.

The results of research findings on firm size on firm value do not yet have coherent results. That is, the results of this study still have inconsistent findings. Research by Ta'dir *et al.*, (2014) and (Rachmawati & Dahlia, 2015) revealed that company size has a positive impact on firm value. The research findings of Indriyani (2017) explain that company size has a negative effect on company value. Prasetyorini (2013) proves that company size simultaneously has an effect on firm value.

2. METHOD

Population for this research is a food and beverage sector manufacturing company on the Indonesia Stock Exchange for the 2016-2020 period. The sample determination method uses purposive sampling with the criteria of (a) manufacturing companies in the food and beverage sector listed on the Indonesia Stock Exchange (IDX) during the 2016-2020 period, (b) manufacturing companies that issued annual reports in the 2016-2020 period, (c) the financial statements of manufacturing companies are displayed using the rupiah currency in their reporting, and (d) data on total sales and purchases of related parties, shares outstanding, closing price, total assets, total debt, and operating profit are available in full. The final result of the data analysis shows that the final sample is 10 with 50 observations.

Secondary data is used in this study to test the hypothesis obtained directly through the Indonesian Stock Exchange's website, namely www.idx.co.id.

This study uses quantitative methods, namely analyzing data and matters relating to numbers or calculation formulas used to analyze the problem being studied. Data analysis using multiple linear regression. In regression analysis, the dependent variable is often influenced not only by quantitative variables according to the scale, but also by qualitative variables.

3. RESULT AND DISCUSSION

Food and beverage sector manufacturing companies as Sample Data

The table displayed above is the result of the sample determination process. The total number of manufacturing companies in the food and beverage sector listed on the IDX for the 2016-2020 period is 27 companies. The complete data of companies that meet the criteria are ten companies, with a total sample of 50 data.

Table 1. Sample Criteria

No.	Criteria	Does Not Meet Criteria	Accumulation
1.	Food and beverage sector manufacturing companies listed on the Indonesia Stock Exchange (IDX)		27
2.	Manufacturing companies that do not use the rupiah currency in issuing annual reports	17	
3.	The number of companies that meet the sample criteria		10
4.	The sample used is the 2015-2019 period		50

Table 2. Descriptive Statistics

Variable	Obs.	Min.	max.	Means	Median	std. dev.
TOBIN'S Q	50	2011,000	56815,00	7685,560	6066,000	7977,226
SRPT	50	0,000	31794,00	3367,560	845,500	5344,186
PRPT	50	1,000	6719,000	707,140	572,500	1032,065
SIZE	50	268616,0	327256,0	289951,2	283415,5	16136,27
SRPT*SIZE	50	9,000	952830,0	100131,1	26198,00	160735,7
PRPT*SIZE	50	15,000	201370,0	20778,78	16145,50	31126,05

SRPT (*Sales Related Party Transactions*); PRPT (*Purchased Related Party Transaction*); SIZE (Firm Size); Tobin's Q (Firm Value); SRPT*SIZE (*Sales Related Party Transaction Interaction and Firm Size*); PRPT*SIZE (*Purchased Related Party Transaction Interaction and Firm Size*).

Classical Assumption Testing

The reason for using the classical assumption in this study is to obtain BLUE results. The three classic assumption tests of this study are:

1. Multicollinearity Test

The results of this study's multicollinearity test use the correlation values of four independent variables. The test results are:

Table 3. Main Effect Multicollinearity Test

Variable	SRPT	PRPT
SRPT	1,000	
PRPT	0.873	1,000

Information:

SRPT (*Sales Related Party Transactions*); PRPT(*Purchased Related Party Transactions*)

Table 4. Moderation Effect Multicollinearity Test I

Variable	SRPT	SIZE	SRPT*SIZE
SRPT	1,000		
SIZE	0.294	1,000	
SRPT*SIZE	0.999	0.316	1,000

Information:

SRPT (*Sales Related Party Transactions*); SIZE (Firm Size); SRPT*SIZE (*Sales Related Party Transaction Interaction and Firm Size*)

Table 5. Moderation Effect Multicollinearity Test II

Variable	P RPT	SIZE	P RPT*SIZE
PRPT	1,000		
SIZE	0.168	1,000	
PRPT*SIZE	0.999	0.197	1,000

Information:

PRPT (*Purchased Related Party Transactions*); SIZE (Firm Size); PRPT*SIZE (*Purchased Related Party Transaction Interaction and Firm Size*)

2. Heteroscedasticity Test

The reason for the heteroscedasticity test is to show that in the regression model there is an unequal variance from the residual one observation to another (Ghozali, 2013) . In order to obtain *robust results* , *White's Heteroscedasticity-consistent variance and standard errors* are used to examine heteroscedasticity problems . As explained by Ghozali & Ratmono (2017) that, the results of the *White-s heteroscedasticity-consistent variance and standard error test* are one unit with the results of the hypothesis. Thus, Ekananda (2019) added that the right solution to fix the heteroscedasticity problem is to use consistent variance with *heteroscedasticity-consistent variance and standard errors*.

3. Autocorrelation Test

Autocorrelation test detection uses Durbin-Watson values. The results of this study's autocorrelation test are:

Table 6. Autocorrelation Test

Variable	DW value	Rule of Thumb	Conclusion
Main Effect	2.34	1.54 - 2.46	There is no autocorrelation
Moderation Effect I	1.40	1.54 - 2.46	There is no autocorrelation
Moderation Effect II	2,2 3	1.54 - 2.46	There is no autocorrelation

Testing the Fit Model and the Coefficient of Determination

Table 7. Model Fit Test Results

Score	Effect Main	Effect Moderation I	Moderation Effect II	Conclusion
F-Stat	41,51	28.93	18.60	Fit models
Sig.	0.000	0.000	0.000	

This study uses the fit model to increase the robustness of the conclusion. The F test is used to determine the fit model. This study meets the assumptions of the fit model if sig. < 0.05. The fit model test is used for the main effect, moderation effect I and moderation II.

Table 8. Test Results for the Coefficient of Determination

Score	Effect Main	Effect Moderation I	Moderation Effect II
Adjusted R ²	62%	86%	81%

The table shows that *adjusted R²* the main effect panel data regression model is 62%. This means that the independent variables that affect the dependent variable are 62% and the rest are influenced by other variables. Next, the value of *adjusted R²* for the panel data regression model the moderating effect I is 86%. This means that the independent variables that affect the dependent variable are 86% and the rest are influenced by other variables. *Adjusted R²* value for the panel data regression model the moderating effect II is 81%. This means that the independent variables that affect the dependent variable are 81% and the rest are influenced by other variables.

Panel Data Model Determination Test

The researcher determines the model that fits the paired test in testing the panel data regression hypothesis.

Table 9. Panel Data Regression Model Determination Test Results

Score	Effect Main	Effect Moderation I	Moderation Effect II
Chow test			
Cross-section F	0.000	0.000	0.000
Conclusion	FEM	FEM	FEM
Hausman test			
Random cross-sections	0.000	0.000	0.000
Conclusion	FEM	FEM	FEM
Final conclusion	FEM	FEM	FEM

The table shows the results of the panel data regression determination test for the main effect, moderation I and moderation II. The test results of the three models show the same results, namely the *Chow test* produces a *fixed effect model* and the *Hausman test* produces a *fixed effect model*. Thus, the results of hypothesis testing for the three models use the *fixed effect model*.

Table 10. Research Hypothesis Test Results

Independent	Expectation	Main Effect Dependent: Tobin's Q Fixed Effects Model			Moderation Effect I Dependent: Tobin's Q Fixed Effects Model		
		β	t-stat.	Sig.	β	t-stat.	Sig.
		const.	±	203,897	0.314	0.755	-88529,62
SRPT	+	1,818	3,636	0.000	22,801	1.238	0.223
PRPT	+	1,924	0.800	0.429	-	-	-
SIZE	+	-	-	-	0.306	0.838	0.407
SRPT*SIZE	+	-	-	-	-0.692	-1.119	0.270
PRPT*SIZE	+	-	-	-	-	-	-
Obs.	50				50		

Independent	Expectation	Moderation Effect II Dependent: Tobin's Q Fixed Effects Model		
		β	t-stat.	Sig.
const.		- 28758.29	-0.323	0.749
SRPT	±	-	-	-
PRPT	+	-29,516	-0.698	0.490
SIZE	+	0.099	0.327	0.745
SRPT*SIZE	+	-	-	-
PRPT*SIZE	+	1,364	0.955	0.346
Obs.		50		

Information:

SRPT (*Sales Related Party Transactions*); PRPT (*Purchased Related Party Transactions*); SIZE (Firm Size); Tobin's Q (Firm Value); SRPT*SIZE (*Sales Related Party Transaction Interaction* and Firm Size); PRPT*SIZE (*Purchased Related Party Transaction Interaction* and Firm Size)

Table 10 shows the results of the main effects test for testing H₁ and H₂. This study proposes H₁, namely, sales related party transactions have a positive effect on firm value. The test results show that the coefficient value is 1.818; t-statistic is 3.636; and significance is 0.000. The results of this test indicate that sales related party transactions have a positive and significant effect on firm value, so that **H₁ is supported**.

This study proposes H₂, namely, purchased related party transactions have a positive effect on firm value. The test results show that the coefficient values are; 1.924, the t-statistic is; 0.800 and the significance is 0.429. The results of this test indicate that purchased related party transactions have a positive and insignificant effect on firm value, so H₂ **is not supported**.

Researchers propose H₃ namely, firm size strengthens the effect of sales related party transactions on firm value. The test results show that the coefficient values are; -0.692, the t-statistic is; -0.838 and the significance is; 0.270. The results of this test indicate that company size is not able to moderate the effect of sales related party transactions on firm value, so **H₃ is not supported**.

The researcher proposes H₄ namely, firm size strengthens the effect of purchased related party transactions on company value. The test results show that the coefficient values are; 1.364, the t-statistic is; 0.955 and the significance is; 0.346. The results of this test indicate that company size cannot moderate the effect of purchased related party transactions on firm value, so **H₄ is not supported**.

Discussion

The effect of sales related party transactions on firm value

Based on the results of hypothesis testing, it can be explained that related party sales transactions have a positive effect on company value. That is, in increasing the value of the company, related party sales transactions are one of the right strategies that must be applied in running the company's business. This strategy is able to increase the company's sales activities so that the profit earned is higher and the value of the company will increase. This study agrees with Handayani (2014) who found that related party sales transactions can increase company profits so that company value increases.

The effect of purchased related party transactions on firm value

The results of testing the hypothesis, it was found that the purchase transactions are related parties shows no positive effect on firm value. That is, managers as company managers are still less effective in implementing this strategy. Gordon *et al.*, (2004) explained that, the reason for the ineffectiveness of this strategy is that managers in carrying out their duties are more concerned with personal interests than the interests of investors. Therefore, related party purchase transactions do not need to be implemented in the company's business because they only have a negative effect on the company's development.

Firm size strengthens the effect of sales related party transactions on firm value

Based on the results of hypothesis testing, it was concluded that company size is not able to moderate the effect of related party sales transactions on firm value. That is, the size of the company is not able to guarantee an increase in the value of the company with a related party sales strategy, even though a certain company has large assets.

Company size moderates the effect of purchased related party transactions on company value

Based on the results of hypothesis testing, it is known that company size is not able to moderate the effect of related party purchase transactions on firm value. In other words, the larger the size of the company has no effect on the value of the company when a related party buying strategy is applied. Therefore, the related party purchase transaction strategy does not need to be implemented within the company. Obviously, based on the negative concept of related party transactions, namely the manager as the manager of the company implements the strategy only for personal gain.

4. CONCLUSION

Based on the research conducted, the results of the study show that *sales related party transactions* have a positive and significant effect on firm value, while *purchased related party transactions* have no effect

on firm value. The results of the moderation effect study show that company size is not able to moderate the relationship between *sales related party transactions* and *purchased related party transactions* on firm value.

The number of samples of manufacturing companies that implement related party transactions with sales and purchases is very limited. The reason is that not all manufacturing companies in Indonesia can implement related party selling and purchasing activities.

The limitation of this study is that it only uses related party sales and purchase transactions, so it is hoped that further research will use all related party transaction items in order to obtain complete results. It is hoped that further research will also include other industries, especially non-financial, so that they can obtain complete results.

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