

**The Effect of Diversification:
By Number of Subsidiaries and Type of Relatedness on Financial
Performance with Board of Directors as Moderating Variable
(Case study: Manufacturing Companies Listed in
Indonesia Stock Exchange for 2016-2018)**

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Abstract

Diversification strategy is strategy in expanding market and products that are related or unrelated by increasing subsidiaries. This increasing is expected to increase financial performance with proper analysis. This study aims to examine the effect of diversification strategy analyzed by number of subsidiaries, type of relatedness (related-unrelated business) on financial performance and considering the moderating effect of board of directors. This research uses 197 data from 71 manufacturing companies listed on Indonesia Stock Exchange during 2016-2018. Results show that the number of subsidiaries has no effect on firm performance and the unrelated type outperform related type. This is also supported by a theory of portfolio diversification which can reduce risk. The board of directors as a moderator has no effect on the number of subsidiaries on financial performance. Meanwhile the board of directors has a positive effect on type of relatedness. This research concludes that the board of directors is able to direct what type of diversification will be taken.

Keywords: diversification strategy, subsidiaries, type of relatedness (related-unrelated business), financial performance (ROA)

JEL : M21

DOI : 10.24002/kinerja.v26i1.4976

Received : 10/06/2021 Reviewed: 02/04/2022 Final Version: 02/09/2022

1. INTRODUCTION

In a world of complete current global competition, each company is given the opportunity to develop its business and effort to improve company performance in various ways that aim to get maximum profit. This opportunity requires companies to maintain their existence. One of the efforts that can be done to maintain its existence is to develop a new strategy that is appropriate and believed to be able to improve

the company's performance, to win the global competition. One of the alternative new strategies that can be done is by implementing a diversification strategy. The diversification strategy is one of the strategies that is considered important in developing the company's growth in a dynamic and competitive business environment. In implementing the diversification strategy, the company must be able to choose the type of business it will enter with several factors owned by the company, including internal and external factors.

Diversification strategy is a strategy used by companies in expanding into new process, product and service lines, or markets, in order to pursue growth, increase sales, increase profitability, and flexibility (Tjiptono, 2015). Companies that have implemented diversification strategies, such as: HM Sampoerna Tbk has 9 subsidiaries engaged in manufacturing, distribution, property, stock investment, expedition and warehousing services, printing, and tourism. The variety of subsidiaries it has shown that HM Sampoerna Tbk is pursuing a diversification strategy. In its annual report as of December 2018, HM Sampoerna showed a dividend of Rp 13.5 trillion. Another example, PT Indofood Sukses Makmur, Tbk has 20 direct subsidiaries. Where, the 20 subsidiaries are engaged in different sectors, ranging from manufacturing, distribution, plantation, shipping and even investment. This also shows that PT Indofood Sukses Makmur Tbk carries out a diversification strategy. PT Indofood Sukses Makmur Tbk showed its dividend as of December 30, 2018, of IDR 4.9 trillion (source: www.idx.co.id). However, PT Indomobil Sukses Internasional, Tbk which has 78 subsidiaries engaged in sectors such as spare part sales, motor vehicle trading, vehicle rental, spare parts distributors, services, and machinery industry suffered a loss of Rp 64.2 billion in 2017.

The company's ability to generate profit is the main focus of the company's performance appraisal. This is influenced by the implementation of corporate governance (Prabowo, Titisari, Wijayanti, 2018). Corporate governance can be defined as a process and structure that includes a series of relationships between company management, the board of commissioners, investors, and people who have roles in the company that are used to direct and manage businesses in increasing economic efficiency. Corporate governance is also a tool used as a monitoring technique, including in ensuring that the provision of appropriate resources among competing users today. Previous studies related to corporate governance have been investigated. Dharmastuti (2013), in her research it was shown that the external mechanism of corporate governance as measured by the stability and percentage of institutional ownership has a significant effect on the company's financial performance. This condition means that the external mechanism of corporate governance has greater power in supervising and influencing the company's financial performance. Thus, to realize corporate governance into good corporate governance, a balance between internal and external mechanisms of corporate governance is needed. Another study that examines the effect of diversification with corporate governance on company performance is (Mehmood, Hunjra, & Chani, 2019) which

states that diversification with good corporate governance can improve company performance.

The application of diversification strategies in improving company performance is the subject of debate whether diversification can still improve company performance or otherwise. Several studies show different results regarding the effect of diversification on company's performance. Lizares (2019) conducted his research on public non-financial companies registered in the Philippines. The results of this study indicate that company diversification has a positive effect on company performance. Research by Bhatia & Thakur (2018) finds that diversification and performance have a positive two-way influence and confirms that company diversification has a positive influence on company performance. This shows that greater diversification leads to better performance. Meanwhile, Phung & Mishra (2017) examine the effect of company diversification on the performance of companies listed on the Vietnam stock exchange. This study found that corporate diversification has a negative impact on company's performance.

This shows that company diversification is detrimental to the performance of companies in Vietnam. Research also conducted by Amyulianthy & Sari (2013) examines the effect of diversification strategy on company performance in companies. The research object used is the company's financial statement data which is summarized in ICMD and listed on the Jakarta Stock Exchange from 2002 to 2007. The results found that the diversification strategy has a negative effect on the company's performance. The average value of diversified companies is lower than companies that do not diversify.

2. LITERATURE REVIEW

Lizares, 2019 examines the relationship between diversification and company performance in non-financial companies in the Philippines by using RBV analysis as a conceptual framework by looking at the level (degree) and type of diversification. The results show that the level (degree) of diversification has a significant influence on company performance and the type (related or unrelated) of diversification has a different effect on company performance, where related diversification outperforms unrelated diversification.

Bhatia & Thakur, 2018 examines the causal relationship between the level of diversification and the performance of whether diversification provides an opportunity to improve company performance among Indian companies. Product diversification is calculated using the Entropy Index to measure the combined endogeneity of company diversification and company performance. Both variables are treated as endogenous in the simultaneous equation model. The results showed that: the relationship between diversification and performance changed very positively and significantly after controlling for endogeneity problems. This study

found a strong two-way relationship between the level of diversification and company performance.

Phung & Mishra (2017) examine the effect of diversification of companies listed on the Vietnam Stock Exchange. The results showed that company diversification had a negative impact on company performance in companies listed on the Vietnam Stock Exchange for the period 2007-2012. In the context of Vietnam, there is a lack of an efficient corporate governance system, so it is not possible to encourage and follow the company diversification strategy and the company performance is disrupted.

Based on the description of the background above, this study will propose the following hypothesis:

- H1: The number of subsidiaries has a significant positive effect on financial performance.
- H2: The type of related-unrelated business has a significant positive effect on company performance, where related is superior to unrelated.
- H3: Corporate governance (board of directors) as a moderating variable strengthens the positive influence on the number of subsidiaries on financial performance.
- H4: Corporate governance (board of directors) as a moderating variable strengthens the positive influence on the type of related-unrelated business on financial performance.

3. METHODOLOGY

The research objects in this study are manufacturing companies listed on the Indonesia Stock Exchange in 2016-2018. Financial data used is derived from financial statements and annual reports obtained from the Indonesia Stock Exchange website, namely www.idx.co.id and the websites of each company. The research object used is a company that has a number of subsidiaries ($JAP > 0$), published the latest audited annual report December 31, published financial statements in Rupiah (Rp), and had complete data according to the 2015-2018 variables. Based on these criteria, 197 research objects were obtained consisting of 71 companies. A subsidiary is a company controlled by a holding company that has a special relationship. Measurement of the number of subsidiaries by calculating the number of subsidiaries owned by each holding company. The type of diversification is seen from the company category based on the company business unit consisting of related types and unrelated types. Determination of this type using a dummy variable with the related type assigned the number 1 and the unrelated type given the number 0. The board of directors in this study was measured by counting the number of members of the board of directors in each company. The board of directors is used as a moderating variable. The company's financial performance is

measured by Return on Assets (ROA) which is used to calculate the company's ability to generate profits by using its total assets. All data processing and analysis in this study used the IBM Statistical Product and Service Solution (SPSS) version 25 program using Moderated Regression Analysis.

4. RESULT AND DISCUSSION

From the statistical descriptive table in table 1 (attachment) it is known that the minimum JAP value is 1. While the maximum JAP value of 11 is owned by PT Tunas Baru Lampung Tbk (TBLA) and PT Panca Budi Idaman Tbk (PBID). The average JAP is 3 subsidiaries. The minimum value for the type of relationship (TK) as an independent variable is 0 which means that the type of relationship is unrelated, and the maximum value is 1 which means the type of relationship is related. The amount of data with related types is 158 or 80% and unrelated types is 39 or 20%. The minimum value of company performance (ROA) as the dependent variable is -0.09070 or -9.07% which is found in PT Berlina, Tbk experienced in 2017. This negative sign means that PT Berlina, Tbk suffered a loss of 9.07% in 2017. The maximum value of 0.16900 or 16.9% was found at PT Industri Jamu dan Farmasi Sido, Tbk in 2017 and the average value for the company performance (ROA) was 0.0391766 or 3.917%. The minimum value for the moderating variable the number of boards of directors (DDIR) is 2 people and the maximum value is 10 people owned by PT Gajah Tunggal, Tbk with the average value for the number of boards of directors is 4.6 or as many as 5 people. Before further testing, research data must meet various classical assumption tests.

a. Normality Test

The results of the normality test using a probability plot (p-plot) from Figure 1 (attachment) and Kolmogorov Smirnov from table 2 (attachment) show the significance value in Asymp. Sig (2-tailed) obtained 0.2 which means it is greater than the significance level of 0.05 so that it can be concluded that the data in this study are normally distributed.

b. Multicollinearity Test

Based on table 3 (attachment), it shows that the Tolerance and VIF values each have a Tolerance value above 0.10 and a VIF below 10. Thus, it can be concluded that there is no multicollinearity between the independent variables in this study.

c. Autocorrelation Test

The results of the autocorrelation test using Durbin-Watson (DW) in table 4 (attachment) show 2,020 where the dU value for 197 research objects is 1.7873 and the 4-dU value is 2.2127. Because the Durbin-Watson (DW) value is between dU and 4-dU, it can be concluded that there is no autocorrelation in this research model.

d. Heteroscedasticity Test

The results of the heteroscedasticity test using the scatter diagram from Figure 2 (attachment) and Spearman Rho from table 5 (attachment) show that the p-value of each independent variable has a significance level ($\alpha = 0.05$). It is concluded that each independent variable in this research model is homoscedasticity and free from heteroscedasticity.

After testing the classical assumptions that must be met, then the regression analysis test and Moderated Regression Analysis (MRA) are carried out.

a. Coefficient of Determination Test

Based on table 6 (attachment) it is known that the R Square (R^2) obtained is 0.040 or 4.0%. This shows that the percentage of the influence of the independent variable is able to explain 4% of the variation in the dependent variable, namely company performance (ROA). While the remaining 96% is influenced or explained by other variables outside this research model.

b. Simultaneous Significant Test (Test F)

Based on table 7 (attachment) it can be seen that the p-value ($0.019 < 0.05$). From these results it can be concluded that the independent variables of the number of subsidiaries and the type of linkage are able to simultaneously affect the dependent variable of company performance.

c. Individual Parameter Significant Test (Test Statistical t)

Based on table 8 shows the results of testing the hypothesis with multiple regression analysis and Moderated Regression Analysis (MRA).

4.1. Discussion Results of the Moderated Regression Analysis Hypothesis Test

The results of hypothesis testing stated that H1 was rejected. This result can be interpreted that the number of subsidiaries has no effect on the company performance. This indicates that the more subsidiaries, the company is not necessarily able to improve the company performance. It is suspected that a company that has many subsidiaries makes the company not focus on its main business, it requires more operational costs, more complicated management, and additional allocation of required resources. The addition of the number of subsidiaries carried out can also lead to excessive investment allocation without proper calculation and analysis so that capital management becomes inefficient and carries a high risk. The results of this test are supported by research conducted by Amyulianthy & Sari (2013) which states that companies that diversify, namely companies that have more than one subsidiary have lower performance than single companies. The results of hypothesis testing stated that H2 was rejected. This means that the type of relationship (related-unrelated business) has a different effect on company performance, where related is not superior to unrelated. This means

that the unrelated type is superior to the related type. This result is suspected to occur with the unrelated type being superior because the company tries to share the risks that occur by dividing it into a new, different type of business (unrelated business type) with the parent company in order to improve company performance.

The results of this test are supported by research conducted by Ramadhan (2017) which states that companies with related diversification strategies have lower performance when compared to companies with unrelated diversification strategies, so that many companies prefer to implement an unrelated diversification strategy rather than related diversification. In his research, it was stated that many companies prefer to implement unrelated diversification because this strategy does not incur higher transaction costs than the costs incurred by companies with related diversification strategies.

4.2. Results of Discussion on Investment Decisions as Moderating Variables

The results of hypothesis testing state that the board of directors as a moderating variable does not strengthen the positive influence on the number of subsidiaries on company performance. This indicates that the higher the number of the board of directors, the lower the company performance. In this case, it is suspected that the board of directors is considered not to have had much of a role to play in realizing improved performance. This can happen for several reasons, including: the board of directors has not exercised full authority and responsibility in managing the company, the board of directors has not carried out their duties effectively and the decisions taken by the board of directors are partial, only in their respective divisions. Another possibility can be due to the addition of the number of subsidiaries due to differences in interests and objectives between the principal and the agent in this study the board of directors. The principal (owner) increases the number of subsidiaries or expands to make it look prestigious in front of the public which makes the company appear to be growing without proper calculations, while the board of directors can only be mandated to continue and carry out the company's activities. Another possibility is that the board of directors overinvests in increasing the number of subsidiaries and often does not focus so that the targets set by the head office are often not achieved.

The results of hypothesis testing state that the board of directors as a moderating variable strengthens the effect on the type of linkage on company performance. This indicates that the board of directors is reliable and trustworthy in determining the type of business relationship to be taken due to the experience they have in leading and running the company. The more the number of the board of directors is considered the more it adds input for improving the performance of the company with various backgrounds owned by the board of directors. However, this can only be realized if there is effective coordination and communication.

5. CONCLUSION

The results showed that the number of subsidiaries and the type of linkage did not affect the company performance. The number of subsidiaries owned by manufacturing companies in this study is an average of 3 subsidiaries with companies with related types of linkages as much as 80%. The board of directors as a moderating variable that provides a moderating effect is only proven on the related type of variable. Thus, it can be concluded that an effective board of directors can share risks not only on related business types but also on unrelated business types. However, the board of directors needs to be wary of making excessive investments by increasing the number of subsidiaries because it will result in inefficient working capital management which can also reduce the company performance.

REFERENCE

- Adimukti, A., Rinaningsih, & Yulianti, R. (2018). *Strategi Diversifikasi Terhadap Performa Perusahaan Dengan Efektivitas Komite Audit Sebagai Variabel Pemoderasi*. Jurnal Akuntansi, Vol. 18, No. 1A, Januari-Juni 2018.
- Ananta, I., D. (2013). *Pengaruh Good Corporate Governance Terhadap Kinerja Perusahaan Dengan Ukuran Perusahaan Sebagai Variabel Kontrol. Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia 2008-2012*.
- Amyulianthy, Rafrini & Sari, Nuraini. (2015). *Pengaruh Diversifikasi Terhadap Kinerja Perusahaan. Accounting and Finance Department, Faculty and Communication, BINUS University*.
- Baker, R. E., Lembke, V. C., King, T. E., & Jeffrey, C. G. (2010). *Advanced Financial Accounting*. Boston: McGraw-Hill.
- Bhatia, A., & Thakur, A. (2018). Corporate diversification and firm performance: an empirical investigation of causality. *International Journal of Organizational Analysis*.
- Chen, C., & Yu, C.J. (2012). Managerial Ownership, Diversification, and Firm Performance: Evidence from an Emerging Market. *International Business Review*.
- Effendi, M. A. (2016). *The Power of Good Corporate Governance: Teori dan Implementasi*. Jakarta : Salemba Empat.

- Datta, Deppa. K., Rasheed, Abdul. A., & Rajagopalan, Nandini. (2007). Diversification and Performance: Critical Review and Future Directions. *Journal of Management Studies*.
- FCGI. (2011). *What is Corporate Governance*.
- Halim, Anthony., Setio, Hartawan. (2019). Pengaruh Strategi Diversifikasi Terhadap Efisiensi pada Perusahaan Manufaktur yang Tercatat di Bursa Efek Indonesia. *Studi Akuntansi dan Keuangan Indonesia. Vol 2 No. 2*
- Harto, Puji. (2005). Kebijakan Diversifikasi Perusahaan Dan Pengaruhnya Terhadap Kinerja: Studi Empiris Pada Perusahaan Publik di Indonesia. *SNA VIII Solo, 15-16 September 2005*.
- Hermawan, L. (2015). Dilema Diversifikasi Produk: Meningkatkan Pendapatan Atau Menimbulkan Kanibalisme Produk? *Jurnal Studi Manajemen* , Vol 9 No 2.
- Hidayat, Rahmad. (2015). *Pengaruh Good Corporate Governance dan Ukuran Perusahaan Terhadap Kinerja Keuangan Perusahaan* (Studi Empiris pada Perusahaan Perbankan yang Terdaftar di BEI 2010-2013).
- IICG, I. I. (2010). *Good Corporate Governance Sebagai Budaya*. Jakarta.
- Knecht, M. (2014). Strategic Management, Diversification, Industry Dynamism, and Economic Performance. *Altikel springer XXI, 348 p.14-23, ISBN: 978-3-568-02676-9*.
- KNKG, K. N. (2006). *Pedoman Umum Good Corporate Governance Indonesia* . Jakarta.
- Krivokapic, R., Njegomir, V., & Stojic, D. (2017). Effects of Corporate Diversification on Firm Performance : Evidence From The Serbian Insurance Industry. *Economic Research - Ekonomiska Istrazivanja*.
- Le, Han. (2019). Literature Review on Diversification Strategy, Enterprise Core Competence and Enterprise Performance. *American Journal of Industrial and Business Management*. 91-108.
- Liana, Lie. (2009). Penggunaan MRA dengan SPSS untuk Menguji Pengaruh Variabel Moderating terhadap Hubungan Antara Variabel Independen dan Variabel Dependen. *Jurnal Teknologi Informasi DINAMIK. Volume XIV No 2, Juli 2009: 90-97*.
- Lizares Regina. (2019). The Impact of Corporate Diversification on Firm Performance. *Phillipines Management Review. Vol. 26, 31-52*.

- Martin, C., J., G., & Herrero, B. (2018). Board of Directors: Composition and Effects on The Performance of The Firm. *Economic Research-Ekonomika Istrazivanja*.
- Mehmood, R., Hunjra, A. I., & Chani, M. I. (2019). The Impact of Corporate Diversification and Financial. *Journal of Risk and Financial Management*.
- Noviawan, R. A., & Septiani, A. (2013). Pengaruh Mekanisme Corporate Governance Dan Struktur Kepemilikan Terhadap Kinerja Keuangan. *Dipenogoro Journal of Accounting. Volume 2, Nomor 3, Tahun 2013, ISSN (Online): 2337-3806*.
- Taouab, Omar & Issor, Zineb. (2019). Firm Performance: Definition and Measurement Model. *European Scientific Journal. Vol. 15, No. 1 ISSN: 1857 - 7881 (Print) e-ISSN 1857-7431*
- Peace, N., N., & Augustine, I. (2018). Effect of Diversification on The Financial Performance of Selected Firms in Nigeria. *International Journal of Advanced Academic Research I Social & Management Sciences. ISSN: 2488-9849. Vol. 4, Issue 12 (December 2018)*.
- Phung, D. N., & Mishra, A. V. (2017). Corporation Diversification And Firm Performance: Evidence From Vietnamese Listed Firms. *Australian Economic Papers*.
- Raisa. (2017). *Analisis Pengaruh Strategi Diversifikasi Terhadap Kinerja Keuangan Perusahaan Dengan Proporsi Dewan Komisaris Independen Sebagai Variabel Moderasi*. Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di BEI Tahun 2013-2015.
- Ramadhan, G., C. (2017). *Pengaruh Srategi Diversifikasi Berhubungan dan Diversifikasi Tidak Berhubungan Terhadap Kinerja Pasar Perusahaan*. Studi Perusahaan Manufaktur di BEI 2011-2016).
- Selvam, M, Gayathri, Jayapal. (2016). Determinants of Firm Performances: A Subjective Model. *International Journal of Social Science Studies. Vol 4, No 7*.
- Sholikhannisa, Nur. (2018). *Pengaruh Strategi Diversifikasi, Profitabilitas Terhadap Nilai Perusahaan Dengan Kepemilikan Manajerial Sebagai Variabel Moderasi*. Studi Kasus: Perusahaan Manufaktur yang Terdaftar di BEI periode 2016-2017.
- Sulastri, U. (2015). *Pengaruh Strategi Diversifikasi Terhadap Kinerja Keuangan Perusahaan Dengan Struktur Modal Sebagai Variabel Intervening (Pada Perusahaan Sektor Properti dan Real Estate di Bursa Efek Indonesia)*.

- Sutanto, Hari. (2017). *Pengaruh Strategi Diversifikasi Terhadap Kinerja Dengan Kepemilikan Manajerial Sebagai Variabel Moderasi. Studi Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Perusahaan Tahun 2013-2015.*
- Sutedi, A. (2012). *Good Corporate Governance.* Jakarta : Sinar Grafika .
- Syafitri, T., Nuzula, F. N., & Nurlaily, F. (2018). Pengaruh Good Corporate Governance Terhadap Nilai Perusahaan (Studi pada perusahaan industri sub sektor logam dan sejenisnya yang terdaftar di BEI periode 2012-2016). *Jurnal Administrasi Bisnis (JAB).* Vol. 56 No. 1 Maret 2018.
- Tjiptono, F. (2015). *Strategi Pemasaran.* Yogyakarta : Andi Offset.
- Wahyuningsih, Mutia. (2016). *Pengaruh Efisiensi Pengelolaan Modal Kerja Terhadap Kinerja Keuangan Perusahaan Dengan Strategi Bisnis Sebagai Variabel Pemoderasi Pada Sektor Properti Dan Real State Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2017.*
- Wisnuwardhana , A., & Diyanty, V. (2015). *Pengaruh Strategi Diversifikasi Terhadap Kinerja Perusahaan Dengan Moderasi Efektivitas Pengawasan Dewan Komisaris.* Universitas Indonesia.
- Yameen, M., Farhan, N. H., & Tabash, M. I. (2019). *The Impact of Corporate Governance Practices on Firm's Performance: An Empirical Evidence from Indian Tourism Sector.* Journal of International Studies, 12 (1), 208-228.

APPENDIX

Table 1

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
JAP	197	1.00000	11.00000	3.3451777	2.66163974
TK	197	.00000	1.00000	.8020305	.39948428
ROA	197	-.09070	.16900	.0391766	.05329896
DDIR	197	2.00000	10.00000	4.6192893	1.84397350
Valid N (listwise)	197				

Figure 1

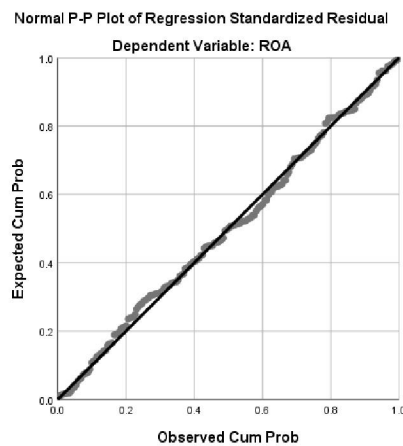


Table 2

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		197
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.05222240
Most Extreme Differences	Absolute	.038
	Positive	.034
	Negative	-.038
Test Statistic		.038
Asymp. Sig. (2-tailed)		.200 ^{c,d}
a. Test distribution is Normal. b. Calculated from data. c. Lilliefors Significance Correction.		

Table 3

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.026	.009		2.890	.004		
	JAP	.032	.011	.199	2.799	.006	.978	1.022
	TK	.001	.009	.005	.077	.939	.978	1.022

a. Dependent Variable: ROA

Table 4

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.200 ^a	.040	.030	.05249090	2.020

a. Predictors: (Constant), TK, JAP
 b. Dependent Variable: ROA

Figure 2

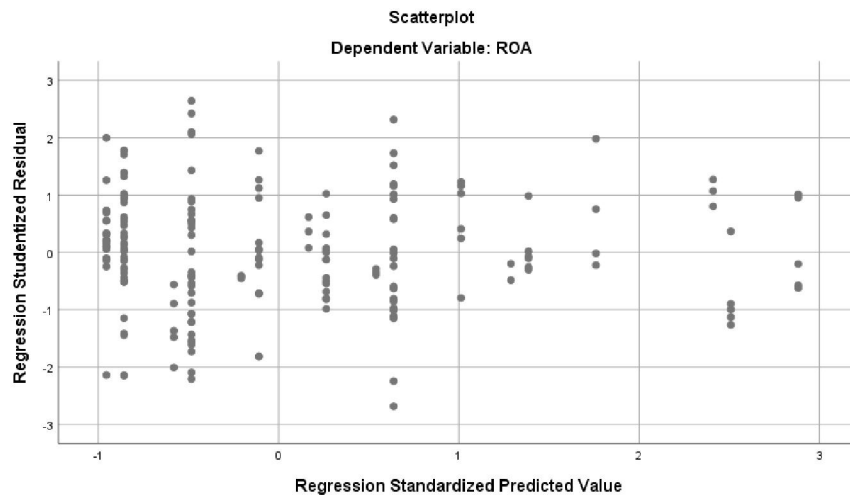


Table 5

		Correlations			
			JAP	TK	Unstandardized Residual
Spearman's rho	JAP	Correlation Coefficient	1.000	.155*	-.039
		Sig. (2-tailed)	.	.030	.587
		N	197	197	197
	TK	Correlation Coefficient	.155*	1.000	-.021
		Sig. (2-tailed)	.030	.	.769
		N	197	197	197
	Unstandardized Residual	Correlation Coefficient	-.039	-.021	1.000
		Sig. (2-tailed)	.587	.769	.
		N	197	197	197

*. Correlation is significant at the 0.05 level (2-tailed).

Table 6

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.200 ^a	.040	.030	.05249090

a. Predictors: (Constant), TK, JAP

Table 7

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.022	2	.011	4.040	.019 ^b
	Residual	.535	194	.003		
	Total	.557	196			

a. Dependent Variable: ROA
b. Predictors: (Constant), TK, JAP

Table 8

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.028	.009		3.165	.002
	JAP	.005	.041	.034	.133	.894
	TK	-.045	.023	-.335	-1.973	.049
	JAP_DDIR	.031	.057	.148	.542	.589
	TK_DDIR	.073	.032	.413	2.258	.025

a. Dependent Variable: ROA