

Market Reaction on the Information of Related Party Transaction Disclosure

(An Event Study on Public Companies in Indonesia)

Ni Wayan Sri Widari¹, Bambang Subroto² & Aulia Fuad³
^{1,2,3}Faculty of Economics and Business Brawijaya University, Indonesia.

Abstract: *This study tries to assess and analyze the content of information on the disclosure of related party transaction carried out by public companies in Indonesia Stock Exchange measured based on abnormal return of stock. This event study on 409 companies listed in Indonesia Stock Exchange in 2014 assesses the content of transaction information of related parties. The result of this research shows that related party transaction does not affect the abnormal return of stock. It shows the absence of information content in the disclosure of related party transaction done by companies. Market does not react on the disclosure of such transaction, where investors do not use such information, which is published in annual reports, for making decisions.*

Keywords: *related party transaction, abnormal return, event study, market reaction*

1. Introduction

Stock market provides useful information for market players to analyze every announcement or information made by companies. The source of information used by market players to make description about the performance of companies is the annual report. The report, which may contain information needed by market players, issued by companies can comprehensively describe the performance of companies, in which it states financial and non-financial information.

Regarding the importance of the information for market players in the context of efficient market, the disclosure of information about related party transaction plays an important role in the last few years. This is enforced with the issuance of IAS 24 (PSAK 7) on the disclosure of related parties. The objective of PSAK is to regulate the disclosure of related parties taking place in a company, so it can be published transparently in its annual report. IAS 24 (PSAK 7) enables information users to elaborate the transaction carried out by the company involving related parties. Related parties have special relationship with other parties, and they have the ability to control other parties. They also have a strong influence in making financial and

operational decisions of a company. Transaction among related parties is a transfer of resources, services, or liabilities between reporting entity and related parties regardless the existence of price. Related parties have a strong control on policies and votes in controlling financial decision and management of companies

Significant relationship of related parties influences financial and profit-loss position of a company, in which related parties may validate transactions desired by the parties without paying attention to the price of goods and services. In Indonesian business environment, where rules and regulations about protection for public investment are still weak, related party transaction is one of measures used by majority stockholder and management to gain personal profit and benefit (Dyanty, et al., 2009). Opportunistic transactions with related parties putting loss to a company can be seen as *conflict of interest hypothesis* (Gordon, et al., 2004). This is the reason why the author wants to assess the information content in related party transaction in regard to market reaction. The assessment tries to see the reaction of market after the disclosure of related party transaction carried out by a company.

The importance of information about the disclosure of related parties by people outside the company, especially by investors, can be proven by several empirical findings, for example the research by Wenxia, et al. (2010) in China. The study focused on two types of related party transaction: related party transaction of goods and related party transaction of assets. He used stock price per share as the dependent variable and annual *earning per share*, *book value of equity per share* and *related party transactions of goods and assets* as the independent variable. He found that, in 1997-2000, companies that sold their goods or asset to related party showed lower valuation coefficient compared to companies that did not make such transaction. Kuan et al. (2010) made a study on the relation between related party transaction and earning management. The sample is 50 companies listed in a capital market during the period of 2004-2005.

The hypothesis of the research was built from previous researches dealing with agency theory, which stated that the existence of related party transactions may raise conflict of interest, so it yields earning management and the tendency of control of major stockholder over the minor stockholder. The research indicates that no significant statistical evidence is found from the relation between related party transaction and the attribute of earning management. The existence of related party transaction in Indonesian companies does not always show bigger earning management.

Cheung et al (2009) examined the way companies listed in Hongkong stock exchange transferring asset through related party transaction. The research shows that public companies make offers to related parties using unfavorable price than the offer for other parties. The companies acquire asset from related party with price higher than the price of similar offer received from other parties. On the contrary, when they sell asset to related party, they receive lower price than the price of similar offer received from other parties.

Based on the aforementioned previous research, this study tries to assess and analyze the content of information in the disclosure of related party transaction done by companies listed in Indonesia Stock Exchange, which is measured based on the abnormal return of shares.

2. Literature Review

Many researchers review related party transaction and its effect on stock. A research by Wenxia et al (2010) in China about the relevance of the disclosure of related party transaction with new regulations set by the government of China. Using the dependent variables of *book value of equity per share*, *annual earning per share*, and dummy variable of *selling goods and assets to related party*, it is found that the regulation set by Chinese government about the sale accounting of asset sold to related party is effective in reducing the behavior of management practicing earning management. During 1997-2000, researchers have found that companies selling their goods and assets to related party have a lower valuation coefficient, when it is compared to companies that are not making such transaction. It indicates the necessity of strict legal regulation governing related party transaction, so the practice of earning management by

Kuan et al (2010) assessed the relation between related party transaction and earning management based on the data taken from 50 companies listed in the capital market during the period of 2004-2005. The result indicates that there is no significant

statistical evidence regarding the relation between related party transaction and the attribute of earning management. The presence of related party transaction in Indonesian companies does not always show bigger earning management. Related party transaction is a part of an efficient contract with involving parties. This finding is supported by Gordon and Henry (2004), who state that transaction with related party rationally fulfills the economic needs (such as the need for corporate knowledge) of a company, which serves as the bond mechanism for the company. Thus, it will reduce the incentive of involving in earning management behavior that will harm the company.

Cheung et al (2009) examined the way companies listed in Hongkong stock exchange transfer assets through related party transaction. The research found that public companies made offers to involving parties using unfavorable price compared to similar offer to other parties. The company acquires assets from related party by paying higher price compared to similar offer from other parties. On the contrary, when they sell asset to related party, they receive offer with smaller amount of money than offer from other parties.

3. Research Hypothesis

In business and trade, the relation of related party is normal. Significant relation with related party can influence financial and profit-loss position of a company, where related party can confirm transactions desired by the parties. Significant relationship of related parties influences financial and profit-loss position of a company, in which related parties may validate transactions desired by the parties without paying attention to the price of goods and services. In Indonesian business environment, where rules and regulations about protection for public investment are still weak, related party transaction is one of measures used by majority stockholder and management to gain personal profit and benefit (Dyanty et al., 2009). The research of Cheung et al. (2009) found that companies experienced negative return around the announcement date of trade transaction with controlling stockholder. The companies experienced value depreciation during related party transaction because investors anticipated expropriation through related transaction and discounted the stock price of companies making many related party transactions. Based on the description, the following hypothesis is formulated.

H₁: the disclosure of information about party related transaction is reacted by market shown by abnormal return of stock.

4. Research Method

The type of this research is event study, which is aimed at assessing information content.

1. Research Population, Sample, & Time

The population of this research is companies listed in Indonesia Stock Exchange. The observation period is year 2014. The sample is selected through purposive sampling method, which is the selection of sample based on certain criteria. The criteria are described as follow.

1. The companies are public companies listed actively in Indonesia Stock Exchange in 2014. The year is chosen since the author needs to get the newest data on the disclosure of related party transaction.
2. The companies must have announced complete financial statement audited by independent auditor during the observation period. The complete and audited financial statements are secondary data used by the author to assess and analyze the hypothesis.
3. The companies must have presented the disclosure of related party transaction in their financial statement, which is the year of 2014.

Based on the sample selection procedure mentioned above, the author obtained 409 companies. This study uses market adjusted model approach for the event period of 11 days, which are five days before the event, the day of event, and five days after the event.

2. Definition & Variable Measurement

The dependent variable of this study is abnormal return of shares. Reaction of investors is measured using abnormal return projected with *average abnormal return* (AAR). The author calculates abnormal return of shares using market adjusted model approach. The independent variable of this study is the disclosure of related party transaction (RPT). This research uses two controlling variables; they are the size of the company (SIZE) and Return on Assets (ROA). Table 1 describes the measurement of each research variable.

Table 1 Measurement of Research Variable

Variable	Measurement	Description
AR	$AR_{it} = R_{it} - R_{mt}$	AR_{it} = abnormal return of shares i at time t

		R_{it} = actual return of shares i at time t R_{mt} = return of market at time t
RPT	$\text{Ratio RPT} = \frac{\text{RPT payable} + \text{RPT receivable}}{\text{Total Asset}}$	Ratio RPT = Ratio of related party transaction
SIZE	SIZE = Ln Total Assets	Size = Company's size Ln = Natural Logarithm
ROA	$\text{ROA} = \frac{\text{Earning after Tax}}{\text{Total Asset}} \times 100\%$	ROA = Return on Asset

3. Data Analysis

Steps of abnormal return calculation applied in this research are as follows.

1. Calculating the actual return of shares during the *event window* (Jogiyanto, 2010:580)

$$(R_{it}) = \frac{P_{it} - P_{it-1}}{P_{it-1}}$$

Notation:

R_{it} = company's shares *actual return* i at time t

P_{it} = company's *stock price* i at time t

P_{it-1} = company's *stock price* i at the previous period

2. Calculating market return (Jogiyanto, 2010)

This research applies market adjusted model estimation where the estimated return of securities equals the return of market index.

$$(ER_{it}) = (R_{mt}) = \frac{CI_t - CI_{t-1}}{CI_{t-1}}$$

Notation:

ER_{it} = *expected return* i at time t

R_{mt} = market return at time t

CI_t = Composite Index at time t

CI_{t-1} = Composite Index at the previous period

3. Calculating abnormal return of shares of each issuer (Jogiyanto, 2010:580)

$$AR_{it} = (R_{it}) - (ER_{it})$$

Notation:

ER_{it} = expected return i at time t

AR_{it} = abnormal return of shares i at time t

R_{it} = actual return of shares i at time t

4. Calculating average abnormal return (Jogiyanto, 2010:592)

$$AAR_{it} = \frac{\sum_{i=1}^n AR_{it}}{n}$$

Notation:

AAR_{it} = Average Abnormal Return of shares i at time t

n = Sample

AR_{it} = Abnormal Return of shares i at time t

5. Calculating standard error of estimate (Jogiyanto, 2010:613)

$$KSE_t = \sqrt{\frac{\sum_{i=1}^n (AR_{it} - \overline{AR}_t)^2}{n-1}} \cdot \frac{1}{\sqrt{n}}$$

Notation:

KSE_t = standard error of estimate at day t during event window

AR_{it} = Abnormal return of securities i at day t during event window

\overline{AR}_t = Average abnormal return of securities i at day t during event window

n = sample

4. Testing research hypothesis

This study assesses and analyzes whether related party transaction disclosure influences the abnormal return of shares. Steps of analysis applied to assess the hypothesis are as follows.

- Calculating actual return and market return.
- Calculating abnormal return of each issuer during the event, before the event, and after the announcement of related party transaction.
- Calculating the average abnormal return of shares of all securities during the event, before the event, and after the announcement of related party transaction.
- Calculating (standard error of estimate) on abnormal return.
- Making statistical assessment of one sample t-test on abnormal return to see the

significance of abnormal return during the period of event.

- f. Making hypothesis testing for the research variables using multiple linear regression. The regression model used in this study is as follows.

$$AAR_{it} = \alpha_{it} + \beta_1 RPT_{it} + \beta_2 SIZE_{it} + \beta_3 ROA_{it} + \varepsilon$$

Notation:

AAR_{it} = Average abnormal return from t-5 to t+5

RPT_{it} = Related party transaction of company i

$SIZE_{it}$ = Size of company i

ROA_{it} = Return on Assets of company i

α = constant

β_{1-3} = Regression slope coefficient for independent variable

ε = Random error equals to zero

- g. Making classical assumption test on the regression model equation. The test includes normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test.

5. Result & Discussion

1. Classical assumption test

In this study, the normal distribution is detected using Kolmogorov-Smirnov parametric statistical analysis. Based on the testing result, the significance value of Kolmogorov-Smirnov test is of 0.953, which is greater than 0.05. Therefore, this research model meets normality assumption. Multicollinearity is observable from the variance inflation factor (VIF) value. The testing result indicates that all independent variables have VIF value of smaller than 10, so it is free from multicollinearity problem.

The assumption of autocorrelation is tested using Breush Godfrey, which is regressing the square of regression result by all independent variables. The result of the analysis shows that the three variables assessed in the research model do not contain autocorrelation because the probability value is greater than 0.05. Therefore, it can be concluded that assumption of non-autocorrelation is met. To test the heteroscedasticity, this research uses Glejser test. The result of the test shows that the three variables have the significance level greater than 0.05, so it can be concluded that there is no heteroscedasticity problem.

2. Result of Hypothesis Testing

In testing the hypothesis, multiple linear regression is used to find the relation between independent variable and dependent variable, which is the influence of relate party transaction on average abnormal return as the proxy of market reaction with the significance level of 5%. The result of multiple linear regression test can be seen in table 2.

Table 2 Result of Hypothesis Testing

Variable	Coefficient Value	t value	Probability value
Constants	0.046		
RPT	0.00003	0.003	0.997
SIZE	0.002	-2.025	0.044**
ROA	0.014	-0.901	0.368

Dependent variable : *Average Abnormal Return (AAR)*
 Sig. F Change = 0.182, R = 0.109, R² = 0.012
 ** = significant level of 5 %

The dependent variable in this regression is market reaction using the proxy of average abnormal return. The independent variable is RPT, and the controlling variables are SIZE and ROA. The value of correlation coefficient (R) is used to measure the magnitude of the relation among variables. Coefficient of determination (R²) is used to measure the capacity of independent variable in explaining dependent variable. Table 2 shows that the value of R² in the regression model is of 0.012 or 1.2%. This regression coefficient value shows that the contribution of RPT, SIZE, and ROA on average abnormal return is of 1.2%. The remaining 98.8% is explained by other variables not included in the regression model of this study. Indriantoro and Supomo (2013:147) explained that correlation value of 0.0-0.4 indicates weak relation, correlation value of 0.40-0.70 indicates strong relation, and correlation value of 0.70-1.0 indicates high associational degree or very strong relation. Table 2 shows that the value of R with dependent variable of average abnormal return of 0.109 indicates weak correlation.

Based on the regression model testing result in table 2, the value of t test of related party transaction is of 0.003 with the significance level of 0.997. The significance value of t test is greater than the alpha value (α) = 0.05. Therefore, it can be concluded that related party transaction does not affect average abnormal return. The t test value for controlling variable of SIZE is of 2.025 with the significance level of 0.044. The significance value of t test is smaller than the alpha value (α) = 0.05. Thus, it can be concluded that SIZE affects average abnormal return. The t test value for controlling variable of ROA is of 0.901 with the significance

level of 0.368. The significance value of t test is higher than the alpha value (α) = 0.05. Therefore, it can be concluded that ROA does not affect average abnormal return.

To see the reaction of market before until after the announcement of related party transaction, which lasts for 11 days of observation period, this study uses *one sample t-Test* as the statistical instrument. Table 3 depicts the result of *one sample t-Test* during 11 days of observation

Table 3 Result of one sample t-Test

AR days	t	Probability Value	Information
AR t-5	-1.168	0.243	Not significant
AR t-4	0.785	0.433	Not significant
AR t-3	-1.748	0.081	Not significant
AR t-2	0.407	0.684	Not significant
AR t-1	-0.521	0.603	Not significant
AR t0	1.867	0.063	Not significant
AR t+1	0.824	0.411	Not significant
AR t+2	1.230	0.220	Not significant
AR t+3	-2.549	0.011**	significant
AR t+4	-0.798	0.425	Not significant
AR t+5	0.663	0.508	Not significant

Based on the result of one sample t-test during the observation period, which is five days prior to disclosure, during the day of disclosure, and five days after disclosure, presented in Table 3, the result suggesting probability value greater than $\alpha = 0.05$ is only found at t+3, which is the third day after the disclosure. The probability value is of 0.011, which is smaller than $\alpha = 0.05$. The probability values of other days during the observational period is greater than $\alpha = 0.05$.

3. Discussion on Research Result

Disclosure of related party transaction done by companies, based on the research result as the evidence, does not affect the abnormal return of shares. This indicates that there is no information content in the disclosure or related party transaction. Regarding the theory of efficient capital market, the result shows that market does not react on the disclosure of related party transaction, and investors do not use information on related party transaction in their decision-making process. This finding is similar to the finding of Kuan et al. (2010), who assessed the influence of related party transaction on earning management and found that related party transaction did not always lead to conflict of interest between the management and the controlling shareholders in the effort of getting personal benefit.

One of the controlling variables used in this research, i.e. the size of the company, based on the

result of the research, influences the abnormal return of shares. The negative coefficient of this variable shows that greater abnormal return appears more in small companies than in big company does. This finding is similar to the size effect proposed by Banz (1982), where higher return is found in shares of small companies, rather than in big companies. Another controlling variable in this research, ROA, does not influence abnormal return of shares. The level of return produced by companies' assets is not proven to influence the abnormal return of shares.

6. Conclusion

1. Conclusion

The statistical assessment shows that related party transaction does not affect average abnormal return of shares. It means that market does not react on the disclosure event of related party transaction. This research shows that there is information content in the disclosure of related party transaction done by companies. Regarding the theory of efficient market, this study shows that market does not react on the information about related party transaction done by public companies in Indonesia Stock Exchange. The result of this study shows that investors do not use information dealing with related party transaction published in the companies' annual report in making their decisions. The test result on the reaction of market on the disclosure of related party transaction shows that during the observation period there is no significant abnormal return. This insignificant market reaction indicates that market does not react on the disclosure of related party transaction. This means that the event of related party transaction disclosure does not have information content used by investor in making decisions.

2. Suggestion

Further research can use different and longer timeframe to identify the extent of information content about related party transaction influence market reaction. In addition, this study uses market adjusted model in estimating the expected return. Therefore, further research might use other estimation model, such as mean adjusted model or market model, to compare the result of return estimation.

7. References

- [1] Accountant Bonding Indonesia. 2015. *Financial Accounting Standards as 01 Januari 2015*, Jakarta: Salemba Four
- [2] Ball, Ray & Brown, Philip. 1968. An Empirical Evaluation of Accounting Income Numbers, *Journal of Accounting Research*, Vol.6, No.2, pp. 159-178.
- [3] Banz, Rolf W. 1981. The Relationship between Return and Market Value of Common Stocks, *Journal of Financial Economics*, Vol.9, pp. 3-18.
- [4] Baridwan, Zaki. 1997 . *Intermediate Accounting*, Yogyakarta: BPFE
- [5] Candrasari, Ratna. 2012. Tunneling and Prediction Model : Empirical Evidence on Related Party Transactions. Dissertation (*unpublished*) Accounting Doctoral Study Program Yogyakarta State University
- [6] Chen, Shenglan., Wang, Kun., & Li, Xiaoxue. 2012. Product Market Competition, Ultimate Controlling Structure and Related Party Transactions, *China Journal of Accounting Research*, Vol. 5, pp. 293-306
- [7] Cheung, Yan Leung., Jing, Lihua., & Lu, Tong. 2009. Tunneling and Propping up : An Analysis of Related Party Transactions by Chinese Listed Company, *Pacific Basin Finance Journal*, Vol.17, pp. 372-393
- [8] Cheung, Yan Leung & Qi, Yuehua. 2009. Buy High, Sell Low : How Listed Firms Asset Transfers in Related Party Transactions, *Journal of Banking & Finance*, Vol.33, pp. 914-924
- [9] Diamond, Douglas & Verrecchia, Robert. 1991. Disclosure, Liquidity and the Cost of Equity Capital, *Journal of Finance*, Vol.46, No.4, pp. 1325-1359.
- [10] Diaz, Marcella. 2009 . Analysis of Market Reaction to the Announcement of the Change of Public Accounting Firms. Thesis. (*unpublished*) Accounting Master Study Program the Faculty of Economics and Business Brawijaya University.
- [11] Dyanty, Vera., Utama, Sidharta., & Rossieta, Hilda. 2009. *The Influence of a Controlling Interest in the Final Against Related Party Transactions, Paper*, Indonesia University
- [12] Fama, Eugene F. 1970. Efficient Capital Markets: A Review of Theory and Empirical Work, *Journal of Finance*, Vol.25, No.2, pp. 383-417.
- [13] Gantowati, Evi & Sulistiyani, Yayuk. 2008. Market Reaction to the Announcement of Dividend on the Company's incoming Corporate Governance Perception Index, *Jurnal Bisnis 7 Akuntansi*, Vol.10, No.3, pp. 161-171
- [14] Ge, Wenxia & Drury, H. Donald. 2010. Value Relevance of Disclosed Related Party Transactions, *Advances in Accounting, incorporating Advances in International Accounting*, Vol. 26, pp. 134-141
- [15] Gordon, Elizabeth & Henry, Elaine. 2005. Related Party Transaction and Earning Management, *Working Paper*, Rutgers University.

- [16] Gordon, Elizabeth., Henry, Elaine, & Palia, Darius. 2004. Related Party Transaction and Corporate Governance, *Advances in Financial Economics*, Vol. 9, pp. 1-27.
- [17] Hartono, Jogiyanto. 2010. *Portfolio Theory and Investment Analysis 8th edition*, Yogyakarta: BPFE
- [18] Healy, Paul M & Palepu, Khrisna G. 1993. The Effect of Firms' Financial Disclosure Strategies on Stock Prices, *Accounting Horizons*, Vol. 7, No.1, pp. 1-11.
- [19] Huang, Derek Teshun & Liu, Zhien Chia. 2010. A study of the relationship between related party transactions and firms value in high technology firms in Taiwan and China, *African Journal of Business Management*, Vol. 4, No. 9, pp. 1924-1931
- [20] Indonesia Stock Exchange. 2010. *Guide Book Stock Price Index Indonesia Stock Exchange*, Jakarta: Indonesia Stock Exchange.
- [21] Indriantoro, Nur & Supomo, Bambang. 2002. *Business Research Metodology for Accounting and Management*, First Edition. BPFE. Yogyakarta.
- [22] Istikhoroh, Siti. 2011. *Marjet Reaction to Earnings Announcements over the Event on Companies that do Income Smothing in Indonesia Stock Exchange*, <http://google.com>. (Accesses on 14 November 2015).
- [23] Jensen, Michael C., & Meckling, William H. 1976. Theory of The Firm: Managerial Behavior, Agency Costs, and Ownership Structure, *Journal of Financial Economics*, Vol. 3, No.4, pp. 305-360.
- [24] Jian, Ming & Wong, T.J.. 2004. Earnings Management and Tunneling through Related Party Transactions: Evidence from Chinese Corporate Groups. *Working Paper* Nanyang Technological University Paper.
- [25] Jian, Ming & Wong, T.J, 2010. Propping through related party transactions, *Review of Accounting Studies*, Vol. 15, pp. 70-105.
- [26] Junaedi, Dedi. 2005 . The Impact of the Level of Corporate Disclosure of the Trading Volume and Stock Returns, *Accounting and Finance Journals Indonesia*, Vol. 2, No. 2, pp. 1-28
- [27] Kieso, Donald E. & Weygandt, Jerry J.. 2010. *Intermediate Accounting*, First Edition. Jakarta: Salemba Four
- [28] Kuan, Linvani. 2010. Related Party Transactions and Earnings Mangement. *Paper*. Curtin University.
- [29] Lin, Wen Yi., Keng, I., & Liu, Y. Angela. 2010. Related Party Transactions, Firm Performance, and Control Mechanism : Evidence from Taiwan, *International Research Journal of Finance and Economics*, Vol. 35, pp. 1450-2887
- [30] Munir, Sa'adiah., Saleh, M. Norman., Jaffar, Romlah., & Yatim, Puan. 2013. Family Ownership, Related Party Transaction and Earning Quality, *Asian Academy of Management Journal of Accounting and Finance*, Vol. 9, No. 1, pp. 129-153
- [31] Pozzoli, Matteo & Venuti, Marco. 2014. Related Party Transaction and Financial Performance : Is There a Correlation? Empirical Evidence from Italian Listed Company, <http://www.scirp.org>. (Accesses on 14 November 2015).
- [32] Pratama, Bhakti I.G. & Sinarwati, N. K. 2015. Indonesian Capital Market Reaction to Political Events (Event Study on the Event's Inauguration as President Joko Widodo 7th), Vol.3, No.1, pp. 121-127.
- [33] Satriya, Budi I. W. 2014. *Reaction on Capital Markets and Investment Policy at the Company's Funding Policy, Thesis. (Unpublished)*. Accounting Master Study Program the Faculty of Economics and Business Udayana University.
- [34] Sekaran, Uma. 2006. *Business Research Methodology*, Salemba Four. Jakarta.
- [35] Sir, Jennie., Subroto, Bambang., & Chandrarin, Grahita. 2010. Intellectual Capital dan Abnormal Stock Return , *Accounting National Symposium Purwokerto*
- [36] Sugiyono. 2010. *Business Research Methods*, Bandung: CV Alfabeta
- [37] Tandelilin, Eduardus. 2001. *Investment Analysis and Portfolio Management*, First Edition. Yogyakarta: BPFE
- [38] Yeh, Y., Shu, P., & Su, Y. 2012. Related Party Transactions and Corporate Governance : The Evidence from the Taiwan Stock Market, *Pasific Basin Finance Journal*, Vol. 20, pp. 755-776