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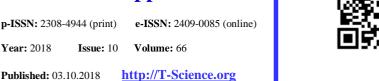
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DO FINANCIAL PERFORMANCE AFFECT THE ENVIRONMENTAL PERFORMANCE AND ENVIRONMENTAL DISCLOSURE? WITH SEM-PLS. CASE: INDONESIAN STOCK EXCHANGE

Abstract: The company's activities cannot be separated from its impact on the environment. Company activities can have an impact on the environment so that the company is not only faced with profit but also pay attention to the environment in carrying out its activities. However, companies often ignore the environment in their activities. This study aims to provide empirical evidence about the factors that influence the Environmental performance and environmental disclosure in the mining companies that are listed in Indonesian Stock Exchange for the period 2012 to 2016. The variables used are financial performance including liquidity, profitability, and leverage to determine the impact towards environmental performance and environmental disclosure. The method used is the SEM-PLS (Structural Equation Modeling-Partial Least Square) approach with path estimation. The results show that profitability, liquidity, and leverage have a significant effect on environmental performance and also show environmental performance has a significant effect on environmental disclosure. These results are expected to provide additional information about factors that influence environmental performance and environmental disclosure in companies listed in the Indonesia Stock Exchange in the mining sector and provide information for academics research for the development of the capital market.

Key words: Environmental Performance, Environmental Disclosure, profitability, liquidity, leverage, SEM-PLS.

Language: English

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Introduction

The company's activities cannot be separated from its impact on the environment. Company activities can have an impact on the environment so that the company is not only faced with profit but also give attention to the environment in carrying out its activities. But companies often ignore the environment in their activities.

The level of environmental pollution is getting worse as a result of the company's lack of attention to the environmental impacts caused by industrial activities both before and after the production process. Ministry of Environment of Indonesia data shows that currently companies that use nature as their source of production are one of the causes of environmental damage. The data is used as a basis for assessing the business feasibility of the company

against its impact on the environment. The assessment of the Ministry of Environment of is measured as Environmental Performance (environmental performance) and used by stakeholders in making decisions in investing as well as guaranteeing the sustainability of the company's business. Climate change raises risks and opportunities for organizations and investors and stakeholders [1].

The government in supporting environmental resilience and conservation has formalized Government Regulation Number 47 of 2012 concerning Social and Environmental Responsibility. This regulation will require companies to develop an environmental conservation framework as well as environmental accounting disclosure standards based on the company's sustainability reporting so that they



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are expected to actively participate in preventing environmental damage and thinking about the various negative impacts arising from the company's activities on the environment. In line with these conditions, good environmental management can avoid community and government claims and improve product quality which will ultimately increase economic benefits. Most companies in modern industry are fully aware that environmental issues are also an important part of the company. The problem now is that environmental reporting in the form of environmental disclosures at the company's annual report in most countries including Indonesia is still voluntary, and lacks transparency. The factors underlying this disclosure are important to know. The study shows that Indonesia is one of the third largest carbon emitters in the world after the United States and China and the Carbon Capture Workshop also states that Indonesia is among the top ten contributing countries for GHG emissions in the world [6].

Environmental disclosure is closely related to environmental performance, company performance, company characteristics, and firm value. Good environmental performance will be indicated by a gold or green rating in the Corporate Performance Rating Program (PROPER) by the Ministry of Environment of Republic Indonesia, as well as companies that have good performance, large company size, and longevity registered on the stock exchange tend to disclose more environmental information because it will benefit the company if it reveals good environmental information [7].

Environmental disclosure is influenced by several factors including environmental performance, performance including company liquidity, profitability, and leverage. Research [4] shows that profitability has a significant effect on environmental disclosure. While [5] prove that firm size affects social and environmental disclosure policies. Research [9] found that organizational factors are the main determinants of environmental performance of the company and define organizational factors as factors that influence the level of implementation of the preventive environment. Further in his study, organizational factors include the size and situation of the company, the industrial sector, available infrastructure (including the type and type of equipment used and other characteristics of the infrastructure environment) and patterns of human behavior, such as employee motivation and awareness and organizational culture.

This research analyzes the factors that influence environmental performance and environmental disclosure in mining companies that directly manage and utilize natural resources so that they have a high risk of environmental damage and environmental concern. Based on the background described above, the problems that will be solved in this study are: (1)

Is there a significant effect of liquidity on environmental performance? (2) Is there a significant influence on leverage on environmental performance? (3) Is there a significant effect of profitability on environmental performance? (4) Are there significant effects of environmental performance on environmental disclosure?

Hypotheses Development

The company's financial resources provide a means to meet administrative costs related to environmental disclosure [10]. Firm profitability allows managers the freedom and flexibility to conduct and disclose social and environmental activities related to shareholders [11]. Companies with higher profitability will have more resources to buy activities with higher social value and they will be in a position to express the same things to differentiate themselves from companies that are less profitable [10], [12], [13], [14], [15], and [16]. This will lead to an increase in the good reputation of the stakeholders and help gain competitive advantage [12], and [17]. Based on the above discussion, the proposed hypothesis is:

 H_1 : There is a significant effect of profitability on environmental performance

Liquidity is used to determine the company's ability to pay short-term obligations. Liquidity is one indicator to measure a company's financial performance. Companies with high liquidity indicate that the company has a good financial condition because it is able to meet its short-term obligations. [18] stated that high liquidity can be associated with a wide range of high disclosures. The legitimacy theory states that companies with high liquidity will be better able to overcome the legitimacy gap by carrying out environmental disclosure. This is based on the expectation that the financial strength of a company will tend to provide more disclosure to provide broad information than companies with weak financial conditions. Likewise, with environmental related disclosures. Companies with high liquidity will disclose more environmental information because they are more capable in financial than companies with low liquidity. Research [18] found that liquidity has a positive influence on social and environmental disclosure. Based on the above discussion, the hypothesis is as follows:

H₂: There is a significant effect of liquidity on environmental performance

The level of environmental disclosure can also be influenced by the company's financial structure [19], [20], and [16]. Companies with more debt tend to provide more environmental information than small leverage companies because their shareholders value them based on the performance and behavior



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of the environment adopted [12], [13], and [21]. By increasing the amount of information disclosed, companies can reduce their agency costs arising from conflicts between owners and creditors [16]. Based on the above discussion, the hypothesis is as follows:

H₃: There is a significant effect of leverage on environmental performance

Research [7] stated that environmental performance is the company's performance in creating a good environment (green). Measurement of environmental performance is an important part of the environmental management system. This is a measure of the results of the environmental management system given to the company in real and concrete terms. In addition, environmental performance is a measurable result of the environmental management system, which is related to the control of environmental aspects. Assessment of environmental performance is based on environmental policies, environmental objectives and environmental targets in accordance with ISO 14004: 2016.

Environmental Performance can be a company mechanism to voluntarily integrate attention to the environment into its operations and their interactions with stakeholders, which exceeds organizational responsibility in the legal field. Environmental Performance can be measured by PROPER Performance (Environmental Management Assessment Program) conducted by the Ministry of Environment of the Republic of Indonesia. This PROPER is intended to enable stakeholders to actively respond to information on the level of environmental compliance, and encourage companies to further improve their environmental management performance. So that ultimately the environmental impact of the company's activities can be minimized. In other words, PROPER is a Public Disclosure Program for Environmental Compliance.

Environmental disclosure is the disclosure of organizational information to the environment, both qualitatively and quantitatively made by the organization to inform its activities, where disclosure of information can be both financial and nonfinancial. [2] defines environmental disclosure as a collection of information related to environmental management activities by companies in the past, present and future. This information can be obtained in many ways, such as qualitative statements, assertions or quantitative facts, forms of financial statements or footnotes. The field of environmental disclosure includes the following: expenditure or operating costs for facilities from pollution control equipment in the past and present. [3] argue that companies will disclose all information needed in the context of the functioning of the capital market. Supporters of the opinion stated that if an information is not disclosed this is because the information is not relevant to investors or the information is available elsewhere.

Empirical research on the relationship between environmental performance and environmental disclosure in general has considered the strength of the relationship between these variables. [22] found no significant relationship between environmental disclosure and environmental performance. While [23] found a negative relationship between environmental disclosure published in the annual report and environmental performance. [2] found a significant positive relationship between environmental performance and environmental disclosure. Research [24] conducted a study of the relationship between environmental performance, environmental disclosure and financial performance using data from Newsweek's green rankings at large companies in the United States using the Three-stage least square (3SLS) approach to finding results that there was a negative relationship performance environmental with financial performance and a positive relationship between environmental performance and environmental disclosure, thus indicating that companies with good financial conditions tend to be poor in environmental performance but green firms tend to be better at disclosing environmental performance. Based on the above discussion, the hypothesis is as follows:

H₄: There is a significant effect of environmental performance on environmental disclosure

Materials and Methods

This study uses financial data from mining companies listed on the Indonesia Stock Exchange for the period of 2012 to 2016. A total of 21 mining companies listed on the Indonesia Stock Exchange were used as research samples, as many as 84 observations from 21 of these companies during 4 periods.

The data is processed in several stages with the Partial Least Square (PLS) regression method and path estimation. This method is specifically designed to overcome problems in multiple regression. Technically it aims to produce a model that transforms a set of explanatory variables that correlate to a set of new variables that are not correlated. Measurement model (outer model) is evaluated based on the substantive content model, namely by comparing the relative weight and significance of the weight size, then the inner model is evaluated by looking at the percentage of variance by looking at the R-square value and also seeing the magnitude of the structural path coefficient. The stability of these estimates is evaluated using a 2-way t-statistical test through a bootstrapping procedure. Table 1 shows the operational and measurement

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variables used in the study.

Table 1. Operationalization and Measurement of Variables

Variables	Proxy	Measurement
Environmental Disclosure	Global Reporting Initiative Index (GRI Index)	$GRI = \frac{Total \text{ item used by the company}}{Total \text{ item GRI disclosure}}$
Environmental Performance	PROPER	1. Gold: Absolutly Great, score = 5 2. Green: Very good, score = 4 3. Blue: Good, score = 3 4. Red: Poor, score = 2 5. Black: Very poor, score = 1
Profitability	Return on Equity (ROE), Return on Asset (ROA), and Net Profit Margin (NPM)	ROE = $\frac{\text{Earning after Interest and Tax}}{\text{Equity}}$ ROA = $\frac{\text{Earning after Interest and Tax}}{\text{Total Assets}}$ NPM = $\frac{\text{Earning after Interest and Tax}}{\text{Sales}}$
Liquidity	Current Ratio (CR) and Quick Ratio (QR)	$CR = \frac{Current Assets}{\frac{Current Liabilities}{Current Assets-Inventory}}$ $QR = \frac{Current Liabilities}{\frac{Current Liabilities}{Current Liabilities}}$
Leverage	Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR)	$DER = \frac{Debt}{Equity}$ $DAR = \frac{Total\ Debt}{Total\ Assets}$

Result and Discussions

The results of this study through several stages of the process so as to get a model that is in accordance with the research objectives. At the initial stage is to find a model that matches the indicators

and variables used, then by looking at the value of the loading factor, to determine the indicators that can be used to obtain the right model. The following are the initial results of the Partial Least Square regression stage of the study.

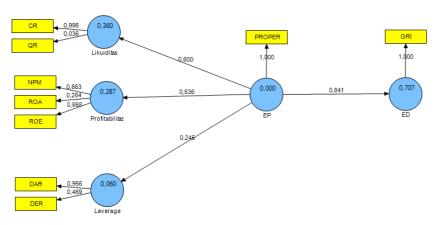


Figure 1. Early Model of SEM-PLS

The figure 1. shows the initial model produced by the SEM-PLS method. Based on this model we can see the suitability of the model by looking at table 2 and table 3.



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Table 2. Outer Model

	AVE	Composite Reliability
Liquidity	0.496532	0.514078
Profitability	0.421027	0.649864
Leverage	0.566567	0.700726
ED	1.000000	1.000000
EP	1.000000	1.000000

Table 3. Loading Factor

	Liquidity	Profitability	Leverage	EP	ED
QR	0.036258	0.050179	0.123476	0.054039	0.061621
CR	0.995866	0.368254	0.211313	0.594540	0.657548
NPM	0.292299	0.662909	0.095012	0.321101	0.382850
ROA	-0.009911	0.264409	0.193492	0.075780	0.095370
ROE	0.311469	0.868171	0.084613	0.497699	0.566156
DAR	0.204271	0.124023	0.955533	0.245471	0.309125
DER	0.130085	0.065758	0.469140	0.081966	0.122200
PROPER	0.599954	0.536181	0.245320	1.000000	0.840714
GRI	0.663705	0.619466	0.314632	0.840714	1.000000

As we can see in Figure 1, the initial model and table 2 and 3 show that the value of the loading factor on the variable liquidity indicator QR has a value smaller than 0.6 that is equal to 0.036258 and has an AVE value on the variable liquidity is also smaller than 0.5 which is 0.496532. Other indicators that also have the same conditions are ROA indicator factors of profitability variables. The value of the ROA indicator loading factor is smaller than 0.6 which is 0.264409 with the AVE value of the Profitability variable is smaller than 0.5 which is equal to 0.421027. Then for the value of loading factor for DER indicator from leverage variable also

has a value smaller than 0.6 that is equal to 0.469140 with AVE value of leverage variable greater than 0.5 that is equal to 0.566567.

With this initial result, the initial model needs to be modified by eliminating indicators that have a loading factor value of less than 0.6 so that the AVE value is greater than 0.5. Modification is done by eliminating the QR, ROA and DER indicators and then repeating the model building stages so that a new model and the AVE value and loading factor are repeated. The following are the new modeling results in Figure 2 with the AVE and loading factor values in table 4 and 5.



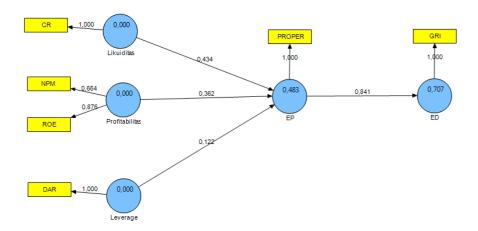


Figure 2. Final Model of SEM-PLS

Table 4. Outer Model

	AVE	Composite Reliability	R Square
ED	1.000000	1.000000	0.706801
EP	1.000000	1.000000	0.483497
Leverage	1.000000	1.000000	
Liquidity	1.000000	1.000000	
Profitability	0.603907	0.749534	

Table 5. Loading Factor

	Liquidity	Profitability	Leverage	EP	ED
CR	1.000000	0.379562	0.190030	0.594540	0.657548
NPM	0.293499	0.663810	0.056033	0.321101	0.382850
ROE	0.305650	0.875883	0.112842	0.497699	0.566156
DAR	0.190030	0.114245	1.000000	0.245471	0.309125
PROPER	0.594540	0.540476	0.245471	1.000000	0.840714
GRI	0.657548	0.623515	0.309125	0.840714	1.000000

The result of modification of the model by eliminating the QR, ROA and DER indicators shows that the indicator loading value of each indicator has exceeded 0.6 with an AVE value of more than 0.5 so that the model can be said to be valid. The next step is to test the reality by looking at the validity of the

variables and the Composite reliability value. In table 4 above shows that all Composite Reliability values have exceeded 0.7, and the loading factor value of all indicators in table 5 has exceeded 0.6, so that it can be concluded that all of the indicators are able to measure the variables well.



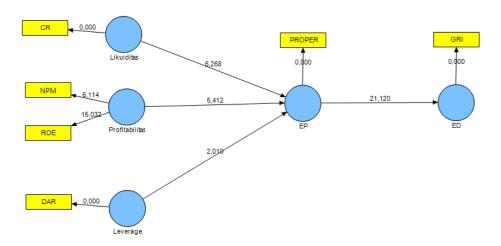


Figure 3. Path Analysis Model

Table 6. Path Coefficients (Mean, STDEV, T-Values)

	Original Sample	Sample Mean	T Statistics	Information
EP -> ED	0.840714	0.838163	21.120167	Affected
Leverage -> EP	0.121645	0.119522	2.009906	Affected
Liquidity -> EP	0.434093	0.427089	6.268393	Affected
Profitability -> EP	0.361814	0.365053	5.412412	Affected
T table	1.96			

Based on table 6 above it can be concluded that environmental performance (EP) has a direct effect on environmental disclosure (ED) with a coefficient of 0.840714 and significant at 5% (t count 21.120167> t table 1.96), thus supporting the fourth hypothesis of this study that is there is influence Significantly between environmental performance towards environmental disclosure. In the Leverage variable, table 6 shows that there is a direct influence between leverage with environmental performance (EP) which is indicated by the coefficient of 0.121645 and significant at 5% (t count value 2.009906> t table 1.96), thus supporting the third hypothesis of this study that there is an influence significant between leverage and environmental performance. Liquidity variables also have a direct influence on environmental performance (EP) which is indicated by a coefficient of 0.434093 and significant at 5% (t count 6.268393> t table 1.96), thus supporting the first hypothesis of this study that there is a significant influence between liquidity and environmental performance. Profitability also has a direct effect on environmental performance (EP) with a coefficient of 0.361814 and significant at 5% (t count 5.412412> t table 1.96), so that it supports the second hypothesis of this study that there is a significant influence between profitability environmental performance.

The results of this study support research

conducted by [10], [12], [13], [14], [15], and [16] that is profitability has a positive and significant impact on environmental performance so that companies with higher profitability will have more resources to conduct higher social activities and they will be in a position that distinguishes themselves from other companies that are less profitable. This study also supports the research of [18] who found that liquidity has a positive influence on social and environmental disclosure. High liquidity will encourage companies to fulfill environmental performance improvements and environmental disclosures. Debt companies tend to provide more environmental information than companies that have lower debt levels because shareholders judge based on environmental performance and behavior. The results of this study support this statement and support the research of [12], [13], and [21]. Debt management shows the company's ability in managing corporate finances. Then the results of this research also support research [24], [2] who found a significant relationship between positive environmental performance and environmental disclosure and did not support research from [22] and [23] The higher the environmental performance, the more the company to have environmental disclosure, so that indicates that green firms tend to be better at disclosing environmental performance.



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Conclusion

The conclusion obtained is the finding of significant positive influence between variable liquidity on environmental performance where the higher the level of financial liquidity of the company, will further encourage the company's environmental performance to be better. Other significant positive influences were also found between the variables of profitability and leverage on environmental performance so that it can be concluded that the higher the level of profitability and the higher the ability of the company in debt management will be able to improve the company's environmental performance. Other results also found in this study relationship between environmental the performance and environmental disclosure. The results show that there is a significant positive relationship between environmental performance and environmental disclosure, so that it can be concluded that the better the environmental performance of mining companies listed on the Indonesia Stock Exchange will encourage the company's environmental disclosure.

The future research should to be able to use a sample of companies other than the mining sector to obtain results that enrich research in this field and can also use other statistical approaches that are able to provide diverse results or the same as the results of this study in order to strengthen the related theories used in the research

References:

- 1. Almilia, L.S., & Wijayanto, D. (2007). Pengaruh environmental performance dan environmental disclosure terhadap economic performance. *Proceedings The 1st Accounting Conference, Depok*, pp.7-9.
- 2. Al-Tuwaijri, S.A., Christensen T.E., & Hughes II, K.E. (2004). The Relations Among Environmental disclosure, Environmental performance, and Economic Performance: A Simultaneous Equations Approach. Accounting, Organizations, and Society, 29, 447-471.
- 3. Ghozali, I., & Chariri A. (2007). *Teori Akuntansi, Edisi 3.* Semarang: Badan Penerbit. Universitas Diponegoro.
- 4. Indriastuti, M. (2012, Aug.). Analisis Kualitas Auditor Dan Corporate Governance Terhadap Manajemen Laba. *Eksistansi (ISSN 2085-2401)*, *Vol. IV, No. 2.*
- Suaryana, A., & Febriana. (2012). Faktor-Faktor Yang Mempengaruhi Kebijakan Pengungkapan Tanggung Jawab Sosial Dan Lingkungan pada Perusahaan Manufaktur Di Bursa Efek Indonesia. *Jurnal Ilmiah Akuntansi* dan Bisnis 7.1.
- Suhardjanto, D., & Choiriyah, U. (2010). Information Gap: Demand Supply Environmental Disclosure di Indonesia. *Jurnal Keuangan dan Perbankan*, Vol. 14, No. 1, Hal. 36-51.
- 7. Suratno, D., & Mutmainah, S. (2007, September 24). Pengaruh Environmental performance Terhadap Environmental disclosure dan Economic Performance. Simposium Nasional Akuntansi IX Padang, 23-

- 26 Agustus 2006 Publik Sektor Manufaktur. Konferensi Nasional Akuntansi. Jakarta.
- 8. Syahrial, D. (2013). Analisis Laporan Keuangan, Jakarta Mitra Wacana Media.
- 9. Zilahy, G. (2004). Organizational factors determining the implementation of cleaner production measures in the corporate sector, *Journal of Cleaner Production*, 12, 311–319.
- 10. Brammer, S., & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment, 17* (2), 120-136.
- 11. Heinze, D.C. (1976). Financial correlates of a social involvement measure. *Akron Business and Economic Review*, 7(1), 48-51.
- 12. Al Arussi, A. S., Selamat, M. H., & Hanefah, M. M. (2009). Determinants of financial and environmental disclosures through the internet by Malaysian companies. *Asian Review of Accounting*, 17(1), 59-76.
- 13. Pahuja, S. (2009), Relationship between environmental disclosures and corporate characteristics: a study of large manufacturing companies in India. *Social Responsibility Journal*, Vol. 5, No. 2, 227-244.
- 14. Burgwal, D.V., & Rui Jose O.V. (2014). Environmental Disclosure Determinants in Dutch Listed Companies. *R. Cont. Fin. Sao Paulo, Vol. 25 No. 64*, 60-78.
- 15. Chaklader, B., & Gulati, P.A. (2015). A study of corporate environmental disclosure practices of companies doing business in India. *Global Business Review*, *16*(2), 321–335.
- 16. D'Amico, E., Coluccia, D., Fontana, S., & Solimene, S. (2016). Factors Influencing



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- Corporate Environmental Disclosure. *Business Strategy and the Environment, Vol. 25, No. 3*, 178-192.
- 17. Liu, X., & Anbumozhi, V. (2009). Determinant Factors of Corporate Environmental Information Disclosure: An Empirical Study of Chinese Listed Companies. *Journal of Cleaner Production, Vol. 17*, 593-600.
- 18. Syahrir, R.K., & Susy, S. (2010). The Effect of Company Characteristic to Disclosure Fittins of Miscellaneous Industry Sector Annual Reports Which is Registered in IDX. *Jurnal. Fakultas Ekonomi: Universitas Gunadarma*.
- Clarkson, P.M., Li, Y., Richardson, G.D., & Vasvari, F.P. (2008). Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis. Accounting, Organizations and Society, Vol. 33 No. 4, 303-327.
- 20. Andrikopoulos, A., & Kriklani, N. (2013). Environmental disclosure and financial characteristics of the firm: The case of

Denmark. Corporate Social Responsibility and Environmental Management, 20(1), 55–64.

= 6.630= 1.940

= 4.260

- Joshi P.L., Suwaidan M.S., & Kumar R. (2011). Determinants of Environmental Disclosures by Indian Industrial Listed Companies in their Websites: Empirical Study. *International Journal of Accounting and Finance, Vol. 3, No.* 2, 109-130.
- 22. Ingram, R.W., & Frazier, K.B. (1980). Environmental performance and corporate disclosure. *Journal of Accounting Research*, *Vol. 18 No. 2*, 614-622.
- Patten, D.M. (2002). The relation between environmental performance and environmental disclosure: a research note. Accounting, Organizations and Society, Vol. 27 No. 8, 763-773.
- 24. Lu, W., & Taylor, M.E. (2016). Which factors moderate the relationship between sustainability performance and financial performance? A meta-analysis study. *Journal of International Accounting Research*, Vol. 15 No. 1, 1-15.