

Intellectual Capital Disclosure and Post-Issue Financial Performance

Wahyu Widarjo
Rahmawati
Ari Kuncara Widagdo
Eko Arief Sudaryono

*Accounting Study Program, Faculty of Economics and Business
Universitas Sebelas Maret, Indonesia*

Abstract

This research analyzes the relationship of intellectual capital disclosure with post-issue financial performance of the company. The analysis results on 85 companies which did Initial Public Offering (IPO) in Indonesian Stock Exchange period 2010 - 2014 show that intellectual capital disclosure affect positively on post-issue financial performance of the company. The results of this research indicate the usefulness of intellectual capital disclosure as a signal of company's performance quality in the future. The company which is more extensive in disclosing intellectual capital in the IPO prospectus is proved to have better future performance.

Keywords: Intellectual capital disclosure, initial public offering, post-issue performance.

INTRODUCTION

Intellectual capital is a very valuable resource for company in modern business (Williams, 2001). Business practitioners, investors, creditors, regulators, and academics have agreed that intellectual capital is a resource which can create added value and competitive advantage for the company (Bontis, 2001; Chen, 2008; Singh and Zahn, 2009). In addition, the literatures also show intellectual capital importance in improving financial performance and stock performance (see Chen et al., 2005; Tan et al., 2007; Sihotang and Winata, 2008; Zeghal and Maaloul, 2010; Ousama and Fatima, 2015; Saeed et al., 2016). But in practice, intellectual capital has not been fully recognized as a company asset. Only a few elements which can be recognized as assets and listed in the financial report, such as patents, trademarks and copyrights. These conditions result in outside parties difficulty in analyzing and assessing the company resources and prospects, especially at IPO, where there is high asymmetry information between internal parties with external parties (potential investors).

One of the alternatives which are suggested by researchers in intellectual capital field to show the intellectual capital ownership is by disclosing it in company's financial reporting or in financial reporting supplements (Abeysekera, 2013). Disclosure is the delivery of information in financial statements, including the financial statements themselves, financial statements notes, and additional disclosure which related to financial statements. Conceptually, disclosure is an integral part of financial reporting (Evans, 2003). The literatures show that voluntary disclosure may reduce asymmetry information and cost of capital (Lev, 1992;

Bottosan, 1997; Leuz and Verrecchia, 2000; Ritter and Welch, 2002; Hanley et al., 2010; Botazzi and Da Rin, 2016). In intellectual capital disclosure context, previous researches also show that intellectual capital disclosure can reduce asymmetry information during initial public offering, thus can decrease cost of capital and increase company value (Widarjo, 2011; Too et al., 2015; Widarjo et al., 2017; Widarjo and Bandi, 2018). Although there have been many researches on the usefulness of intellectual capital disclosure, but analysis of the relationship between intellectual capital disclosure and future performance is still a little (especially post-issue financial performance). Gelb and Zarowin (2002) and Lundholm and Myers (2002) state that better disclosure will help investors in better understanding company's future performance.

Singh and Van der Zahn (2009) have conducted an analysis of intellectual capital disclosure relationship with post-issue stock performance. These research results indicated a negative relationship. They explained that the condition is likely due to investors being overly optimistic with the company's future performance which is more extensive in disclosing its intellectual capital. Therefore, when investor expectations are not immediately fulfilled, investors are aggressively discounting the company stocks, which will have a negative impact on post-issue stock performance of the company.

In contrast to previous research that focus on stock performance, we focus on financial performance. This is based on several arguments: 1) financial performance more represents the company's ability to generate profits through the company's operating activities, 2) the stock performance is more influenced by external factors which are difficult to control (eg, economic conditions, regulatory changes, capital markets, etc.). Based on the explanation, this research aims to provide empirical evidence of intellectual capital disclosure usefulness in predicting the company's financial performance in the future. The next section explains the theoretical framework and hypothesis as well as discussion on the research method in the next section. The results and conclusions will be described at the end of this paper.

THEORITICAL BACKGROUND AND HYPOTHESIS

Intellectual capital is one of non-financial information which is needed by stakeholders (especially potential investors) in making investment decision. Therefore, intellectual capital disclosure financial reporting will extensively and systematically reduce asymmetry information and cost of capital during initial public offering (Too et al., 2015; Widarjo et al., 2017). In addition, intellectual capital disclosure will also provide comprehensive information to potential investors about company quality and prospects in the future. Theoretically, Diamond and Verrecchia (1991) explained that increased disclosure can decrease transaction costs, so it can increase stock liquidity and reduce adverse selection problems.

The previous literatures show that intellectual capital performance which is measured by Value Added Intellectual Coefficient (VAIC) is correlated positively on stock performance and financial performance (Firer and Williams, 2003; Riahi-Belkaoui, 2003; Chen et al., 2005; Abdolmohammadi, 2005; Shiu, 2006; Zeghal and Maaloul, 2010), although it is not in the IPO context. Furthermore, Tan et al. (2007) indicated a positive relationship between

intellectual capital and current and future corporate performance. In Indonesia, Ullum et al. (2008) supported the research result of Tan et al. (2007). Based on the study of theories and the research results, it can be assumed that companies with high intellectual capital intensity are more extensive in disclosing intellectual capital in financial reporting and IPO prospectus. Furthermore, it can be assumed that companies which are more extensive in disclosing intellectual capital will have future performance which are better than other companies. Therefore, it can be formulated the research hypothesis as follows:

H₁: There is a positive relationship between intellectual capital disclosure extent and post-issue financial performance.

RESEARCH METHODS

Sample and Data

The sample in this research is 85 companies which did IPO in Indonesian Stock Exchange period 2010 - 2014. Data of intellectual capital disclosure and post-issue financial performance of the company is obtained from the Initial Public Offering prospectus and Indonesian Capital Market Directory (ICMD).

Variable Measurement and Statistical Analysis

Dependent Variables

In this research, the post-issue financial performance is measured by return on equity one year after IPO (ROE_{t+1}). Return on equity is one of the financial performance indicators that measures how well a company uses its investment funds to generate profits. Return on equity is more important for shareholders than return on investment (ROI) because it provides information to investors how effectively their capital is reinvested. Companies with high return on equity are more successful in money making internally. Therefore, investors are always looking for companies with high and growing equity return as an investing place. The return on equity variable after the IPO (ROE_{t+1}) is calculated using the following formula.

$$ROE_{t+1} = \text{Net income}_{t+1} / \text{Total equity}_{t+1}$$

Independent Variables

Intellectual capital disclosure is measured by disclosure index which has developed by Widarjo et al. (2017). Intellectual capital disclosure level is calculated by the following formula.

$$ICD = \frac{\sum_{ij} D_{Item}}{\sum_{ij} AD_{Item}}$$

Remarks:

ICD : The level of intellectual capital disclosure,

D_{item} : Total score of intellectual capital disclosure in the prospectus,

AD_{item} : Numbers of items in intellectual capital disclosure index.

Control Variables

The ownership structure and the ownership concentration are used as control variables in this research. The ownership structure is proxied with ownership management and foreign ownership. The literatures show that ownership management is related positively on performance (Demsetz and Lehn, 1985; Hermalin and Weisbach, 1991). In addition, foreign ownership has also been shown to have a positive effect on performance (see Chibber and Majumdar, 1999; Douma et al., 2006). Managerial ownership is measured by assigning a value of 1 if management owns company stocks, and 0 for others. Foreign ownership is measured by assigning a value of 1 if there are individuals or foreign institutions holding company stocks, and 0 for others.

High concentrations of ownership will increase the benefits of cost monitoring is also higher. The ownership concentration is an instrument which is used by the involved parties in the agency conflict in achieving a resolution or alignment process so that the parties obtain the optimal utility (Syafuruddin, 2006). The previous researches provide evidence of a positive relationship between ownership concentration and performance (Leung, Richardson, and Jaggi, 2014; Vintila and Gherghina, 2014). The ownership concentration is measured by assigning a value of 1 if there is more than fifty percent (> 50%) of the company stocks and 0 for others.

Testing of research hypothesis use multiple linear regression analysis. Hypothesis testing use the following research model.

$$ROE_{t+1} = \alpha_0 + \beta_1 ICD + e \quad (1)$$

$$ROE_{t+1} = \alpha_0 + \beta_1 ICD + \beta_2 MO + \beta_3 FO + \beta_4 OC + e \quad (2)$$

Remark:

ROE_{t+1} : Return on equity one year after IPO,

ICD : Intellectual capital disclosure,

MO : Managerial ownership,

FO : Foreign ownership,

OC : Ownership concentration,

e : Error term.

RESEARCH RESULT AND DISCUSSION

Descriptive analysis in Table 1 shows the average of ROE_{t+1} is 8 percent and mean of ICD is 46 percent. The average value of intellectual capital disclosure level in this research is relatively higher than researches from outside Indonesia. The research results of Singh and Van der Zahn (2007) showed the average intellectual capital disclosure in Singapore is 27.5 percent, while Singh and Van der Zahn (2008) showed a value of 28 percent. The research of Rashid et al. (2012) in Malaysia showed a value of 34.9 percent, while Too et al. (2015) which also examined companies which did IPO in Malaysia showed an average value of intellectual capital disclosure in amount of 19 percent. The research results of Branswijk and Everaert (2012) in Belgium and Netherlands showed that intellectual capital disclosure level

is relatively higher than those researches, the amount of percentage is 34.5 percent. The differences in intellectual capital disclosure level in IPO prospectuses in these countries may be caused by the differences of used index in intellectual capital disclosure. It may be caused by intellectual capital disclosure which is still voluntary and there is no standard that regulates the categories and items which should be disclosed in the IPO prospectus. The correlation analysis in Table 1 shows a positive correlation between performance variables (ROE_{t+1}) with intellectual capital disclosure (ICD) and ownership concentration (OC). These results are an early indication of the relationship between intellectual capital disclosure and post-issue financial performance. In addition, correlation analysis results do not show the existence of multicollinearity among independent variables.

The ICD data descriptions per category in Table 2 indicate that the most dominant intellectual capital categories which are disclosed in the prospectus are strategies and processes, while the category of human resources, customers, research and development (R&D) and information technology are relatively less disclosed. The results indicate that the company places greater emphasis on extending business strategy information and business processes (internal and external) to convince potential investors about the potencies and prospects of strategic resources which is owned by the company.

Table 1: Statistic Descriptive and Correlation

	ROE_{t+1}	ICD	MO	FO	OC
Min	-0.66	0.27	0.00	0.00	0.00
Max	0.50	0.60	1.00	1.00	1.00
Mean	0.08	0.46	0.44	0.18	0.33
SD	0.16	0.08	0.49	0.38	0.47
ROE_{t+1}	1.000				
ICD	0.226*	1.000			
MO	0.049	-0.034	1.000		
FO	0.100	-0.079	-0.033	1.000	
OC	0.223*	0.106	-0.010	-0.259*	1.000

Notes: * Correlation is significant at the 0.05 level (2-tailed). ROE_{t+1} =Return on equity one year after the IPO; ICD=Intellectual capital disclosure; MO=Managerial ownership; FO=Foreign ownership; OC=Ownership concentration.

Table 2: Description of ICD per Category

	Minimum	Maximum	Mean	Std. Deviation
Human Resource	0.20	0.67	0.45	0.09
Customer	0.05	0.63	0.33	0.12
Information Technology	0.00	1.00	0.29	0.38
Process	0.33	0.89	0.59	0.14
Research and Development	0.00	0.80	0.31	0.29
Strategy	0.18	0.88	0.62	0.13

Table 3: The Analysis Result of Regression

Variable	Equation 1		Equation 2	
	Coeff.	t-value	Coeff.	t-value
Constant	-0.113	-1.188	-0.154	-1.602
Main Variable				
ICD	0.434	2.116**	0.415	2.056**
Control Variables				
MO			0.020	0.621
FO			0.075	1.692*
OC			0.082	2.281**
R ²		0.051		0.126
Adj. R ²		0.040		0.082
F-value		4.477		2.878
Sig		0.037		0.028
N		85		85

Notes: * and ** indicate significance at the 10% and 5% levels, respectively. ICD=Intellectual capital

disclosure; MO=Managerial Ownership; FO=Foreign Ownership; OC= Ownership Concentration.

We suspect that intellectual capital disclosure in the initial public offering prospectus is correlated positively on the future financial performance. The regression analysis result in Table 3 shows that the regression coefficient of intellectual capital disclosure variable is marked positive and significant at 5 percent level. The result is consistent after structure control variable and ownership concentration are added. Therefore, the hypothesis in this research is supported. The company which is more extensive in disclosing intellectual capital in the IPO prospectus is having better future performance than the others.

The results of this research reinforce the arguments and findings of the previous researches which showed that intellectual capital is a resource which can create added value and competitive advantage of the company (Bontis, 2001; Chen, 2008; Singh and Zahn, 2009). Intellectual capital performance can improve efficiency and effectiveness of the company's business processes, so the performance is increased (Riahi-Belkaoui, 2003; Chen et al., 2005; Abdolmohammadi, 2005; Tan et al., 2007; Zeghal and Maaloul, 2010). In addition, the company with high intellectual capital intensity are more competitive and more successful than the others (Youndt et al., 2004).

The analysis results in Table 3 also show that variable of foreign ownership and ownership concentration are correlated positively with post-issue financial performance of the company. These results indicate the effectiveness of monitoring role which is performed by foreign owners. Foreign investors are judged to have better capacity and capability of resources in monitoring business activities of company management. Research findings which indicate a positive correlation between ownership concentration and post-issue performance indicate that majority shareholders obtain greater benefit of cost monitoring than minority

shareholders. This means that majority shareholders have a higher chance and authority to monitor the activities of company management. Thus, the company management will work optimally to increase the utility of capital owner.

Robustness checks

We do additional testing to ensure that the results are robust and consistent. This test is focused on the use of alternative measurement of intellectual capital disclosure variables. It aims to anticipate the existence of measurement error which is caused by the disclosure index development which were did by researchers. Therefore, it is necessary to retest the research model using the disclosure index which has developed by Bukh et al. (2005) as an alternative measurement of intellectual capital disclosure variables.

The underlying arguments of the use of Bukh et al. (2005) index as an alternative measurement in this research is the index which has often been used as a reference by previous researchers in several different countries (see Rimmel et al., 2009; Branswijck and Everaert, 2012). In addition, there is a common legal system which is used in this country (Danish country) with the legal system in Indonesia, the code law system.

The analysis result in Table 4 shows the regression coefficient of intellectual capital disclosure variable is marked positive and significant at 10 percent level. The results are relatively consistent with the previous test. Therefore, it can be concluded that there is a positive correlation between intellectual capital disclosure and post-issue financial performance of the company.

Table 4: The Analysis Result of Alternative Measurement

Variable	Equation 2		Equation 2	
	Coeff.	t-value	Coeff.	t-value
Constant	-0.154	-1.602	-0.160	-1.547
Main Variable				
ICD	0.415	2.056**		
ICD_Ater			0.396	1.959*
Control Variables				
MO	0.020	0.621	0.021	0.625
FO	0.075	1.692*	0.072	1.629
OC	0.082	2.281**	0.083	2.299**
R ²		0.126		0.122
Adj. R ²		0.082		0.078
F-value		2.878		2.772
Sig		0.028		0.033
N		85		85

Notes: * and ** indicate significance at the 10% and 5% levels, respectively. ICD=Intellectual capital

disclosure; MO=Managerial Ownership; FO=Foreign Ownership; OC= Ownership Concentration.

CONCLUSION

The literature has showed the usefulness of intellectual capital disclosure in reducing asymmetry information and cost of capital. This research extends the previous literatures by analyzing the relationship of intellectual capital disclosure with post-issue financial performance, especially in developing countries. The results support the hypothesis that intellectual capital disclosure is correlated positively with post-issue financial performance of the company. The findings of this research have important implications in literature and practice. The results of this research indicate the usefulness of intellectual capital disclosure as a medium in analyzing and predicting the company's performance in the future. Companies which have high intellectual capital intensity are relatively more efficient and effective in running the business, so it will produce better performance than other companies. Furthermore, the findings of this research support and extend the application of signalling theory which states that the disclosure extent can reduce asymmetry information level and help the potential investors in investment analysis and decision making (see Welker, 1995; Jog and McConomy, 2003; Guo et al., 2004; Yosano, 2015; Widarjo et al., 2017).

This research has several limitations. First, the measurement of intellectual capital disclosure is only from the quantity aspect of disclosure, it has not represented the disclosure quality. It is important to consider because high quantity of disclosure may not necessarily represent a high quality of disclosure. Therefore, further research needs to consider aspects of intellectual capital disclosure quality as an alternative to intellectual capital disclosure measurement (see Cerbioni and Parbonetti, 2007; Yi and Davey, 2010). Second, this research only focuses on financial performance one year after the IPO, it has not analyzed long-run financial performance (three or five years after IPO). Future research can develop the research by analyzing long-run financial performance. In addition, further researchers can also perform intellectual capital disclosure analysis on long-run stock performance such as Singh and Zahn research (2009), especially in developing countries for comparison analysis with research in developed countries.

REFERENCES

- Abdolmohammadi, M.J. (2005). Intellectual Capital Disclosure and Market Capitalization. *Journal of Intellectual Capital*, 6(3): 397-416.
- Abeysekera, I. (2013). A Template for Integrated Reporting. *Journal of Intellectual Capital*, 14(2): 227-245.
- Bontis, N. (2000). Intellectual Capital and Business Performance in Malaysian Industries. *Journal of Intellectual Capital*, 1(1), 85-100.
- Bottazi, L. and Da Rin, M. (2016). *Voluntary Information Disclosure at IPO*. Available on line at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2810847 (Accessed 10 September 2016).
- Botosan, C. A. (1997). Disclosure Level and the Cost of Equity Capital. *The Accounting Review*, 72(3): 323-349.
- Branswijck, D. and Everaert, P. (2012). Intellectual Capital Disclosure Commitment: Myth or Reality? *Journal of Intellectual Capital*, 13(1): 3956.

- Bukh, P. N., Nielsen, C., Gormsen, P. and Mouritsen, J. (2005). Disclosure on Information Intellectual Capital in Danish IPO Prospectuses. *Accounting, Auditing and Accountability Journal*, 18(6): 713-732.
- Cerbioni, F. and Parboneti, A. (2007). Exploring the Effect of Corporate Governance on Intellectual Capital Disclosure: An Analysis of European Biotechnology Companies. *European Accounting Review*, 16(4): 791–826.
- Chen, Y. S. (2008). The Positive Effect of Green Intellectual Capital on Competitive Advantages of Firms. *Journal of Business Ethics*, 77: 271-286.
- Chen, M.C., Cheng, S.J. and Hwang, Y. (2005). An Empirical Investigation of The Relationship Between Intellectual Capital and Firms' Market Value and Financial Performance. *Journal of Intellectual Capital*, 6(2): 159-76.
- Chibber, P. K. and Majumdar, S. K. (1999). Foreign Ownership and Profitability: Property Rights, Control and The Performance of Firms in Indian Industry. *Journal of Law and Economics*, 46(3): 209–238.
- Demsetz, H., and Lehn, K. (1985). The Structure of Corporate Ownership Causes and Consequences. *Journal of Political Economy*, 93: 1155–1177
- Diamond, D. and Verrecchia, R. (1991). Disclosure, Liquidity and The Cost of Capital. *Journal of Finance*, 46(4): 1325–1359.
- Douma S., George, R. and Kabir, R. (2006). Foreign and Domestic Ownership, Business Groups, and Firm Performance: Evidence from a Large Emerging Market. *Strategic Management Journal*, 27(7): 637-657.
- Evans, T. G. (2003). *Accounting Theory: Contemporary Accounting Issues*. Australia: Thomson, South-Western.
- Gelb, D., and Zarowin. P. (2002). Corporate Disclosure Policy and The Informativeness of Stock Prices. *Review of Accounting Studies*, 7: 33-52.
- Guo, R. J., Lev, B. and Zhou, N. (2004). Competitive Costs of Disclosure by Biotech IPOs. *Journal of Accounting Research*, 42(2): 319-355.
- Hanley W., Kathleen, and Hoberg, G. (2010). The Information Content of IPO Prospectuses. *Review of Financial Studies*, 23(7): 2821-2864.
- Hermalin, B. and Weisbach, M. S. (1991). The Effects of Board Composition and Direct Incentives on Firm Performance. *Financial Management*, 20(4): 101-112.
- Jog, V. and McConomy, B. J. (2003). Voluntary Disclosure of Management Earnings Forecasts in IPO Prospectuses. *Journal of Business, Finance and Accounting*, 30(1/2): 125-67.
- Leung, S., Ricahrdson, G., and Jaggi, B. (2014). Corporate Board and Board Committee Independence, Firm Performance, & Family Ownership Concentration: An Analysis Based on Hong Kong Firm. *Journal of Contemporary Accounting & Economic*, 10(1): 16-31.
- Lev, B. (1992). Information disclosure strategy. *California Management Review*, 34(4): 9–32.
- Leuz, C. and Verrecchia, R. E. (2000). The Economic Consequence of Increased Disclosure. *Journal of Accounting Research*, 38 (Supplement): 91-135
- Lundholm, R., and Myers, L. M. (2002). Bringing The Future Forward: The Effect of Disclosure on The Returnearnings Relation. *Journal of Accounting Research*, 40(3): 809-839.

- Ousama, A.A. and Fatima, A.H. (2015). Intellectual Capital and Financial Performance of Islamic Banks. *International Journal of Learning and Intellectual Capital*, 12(1): 1–15.
- Riahi-Belkaoui, A. (2003). Intellectual Capital and Firm Performance of US Multinational Firms: A Study of the Resource-Based and Stakeholder Views. *Journal of Intellectual Capital*, 4(2): 215-226.
- Rimmel, G., Nielsen, C. and Yosano, T. (2009). Intellectual Capital Disclosure in Japanese IPO Prospectuses. *Journal of Human Resource Costing & Accounting*, 13(4): 316-337.
- Ritter, J. and Welch, I. (2002). A Review of IPO Activity, Pricing, and Allocations. *Journal of Finance*, 57(4): 1795-1828.
- Saeed, S., Rasid, S.Z.A. and Basiruddin, R. (2016). Relationship Between Intellectual Capital and Corporate Performance of Top Pakistani Companies: An Empirical Evidence. *International Journal of Learning and Intellectual Capital*, 13(4): 376–396.
- Shiu, H.-J. (2006). The Application of the Value Added Intellectual Capital Coefficient to Measure Corporate Performance: Evidence from Technological Firms. *International Journal of Management*, 23(2): 356-365.
- Sihotang, P., and Winata, A. (2008). The Intellectual Capital Disclosures of Technology-Driven Companies: Evidence from Indonesia. *International Journal Learning and Intellectual Capital*, 5(1), 63-82.
- Singh, I. and J-L.W. M. Van der Zahn. (2007). Does Intellectual Capital Disclosure Reduce an IPOs Cost of Capital: The Case of Underpricing. *Journal of Intellectual Capital*, 8(3): 494-516.
- Singh, I. and J-L.W. M. Van der Zahn. (2008). Determinants of Intellectual Capital Disclosure in Prospectuses of Initial Public Offerings. *Accounting and Business Research*, 38(5): 409-431.
- Singh, I. and Van der Zahn, J-L. W. M. (2009). Intellectual Capital Prospectus Disclosure And Post-Issue Stock Performance. *Journal of Intellectual Capital*, 10(3): 425-450.
- Syafruddin, M. 2006. Pengaruh Struktur Kepemilikan Perusahaan Pada Kinerja: Faktor Ketidakpastian Lingkungan Sebagai Pemoderasi. *Jurnal Akuntansi dan Auditing Indonesia*, 10(1): 85-99.
- Tan, H.P., Plowman, D. and Hancock, P. (2007). Intellectual Capital and Financial Returns of Companies. *Journal of Intellectual Capital*, 8(1): 76-95.
- Too, S.W., Fadzilah, W. and Yusoff, W. (2015). Exploring Intellectual Capital Disclosure as a Mediator for the Relationship Between IPO Firm-Specific Characteristics and Underpricing. *Journal of Intellectual Capital*, 16(3): 1-26.
- Ulum, I., Ghozali, I., dan Chariri, A. (2008). *Intellectual capital dan kinerja keuangan perusahaan: suatu analisis dengan pendekatan partial least squares*. *Simposium Nasional Akuntansi XI*. Pontianak, 23-26 Juli.
- Vintila, G. and Gherghina, S. C. (2014). The Impact of Ownership Concentration on Firm Value: Empirical Study of the Bucharest Stock Exchange Listed Companies. *Procedia Economics and Finance*, 15, 271-279.
- Welker, M. 1995. Disclosure Policy, Information Asymmetry, and Liquidity in Equity Markets. *Contemporary Accounting Research*, 11 (2): 801-827.

- Widarjo, W. 2011. Pengaruh Modal Intelektual dan Pengungkapan Modal Intelektual pada Nilai Perusahaan yang Melakukan *Initial Public Offering*. *Jurnal Akuntansi dan Keuangan Indonesia*, 8(2): 157–170.
- Widarjo, W., Rahmawati, Bandi and Widagdo, A.K. (2017). Underwriter Reputation, Intellectual Capital Disclosure, and Underpricing. *International Journal of Business and Society*, 18(2), 227-244.
- Widarjo, W. and Bandi. (2018). Determinants of Intellectual Capital Disclosure in the IPOs and Its Impact on Underpricing: Evidence from Indonesia. *International Journal of Learning and Intellectual Capital*, 15(1), 1-19.
- Williams, S. M. 2001. Is Intellectual Capital Performance and Disclosure Practices Related?, *Journal of Intellectual Capital*, 2(3): 192–203.
- Yosano, T., Nielsen, C., and Rimmel, G. (2015). The Effects of Disclosing Intellectual Capital Information on the Long-Term Stock Price Performance of Japanese IPO's. *Accounting Forum*, 39(2), 83–96.
- Yi, An and Davey, H. (2010). Intellectual Capital Disclosure in Chinese (Mainland) Companies. *Journal of Intellectual Capital*, 11(3): 326-347.
- Youndt, M.A., Subramaniam, M. and Snell, S.A. (2004). Intellectual Capital Profiles: An Examination of Investments and Returns. *Journal of Management Studies*, 41(2): 335-361.
- Zeghal, D. and Maaloul, A. (2010). Analysing Value Added as An Indicator of Intellectual Capital and Its Consequences on Company Performance. *Journal of Intellectual Capital*, 11(1): 39-60.

Intellectual Capital Disclosure and Post-Issue Financial Performance

by Leon Akbar

Submission date: 23-Apr-2020 01:18PM (UTC+0700)

Submission ID: 1305328724

File name: tual_Capital_Disclosure_and_Post-Issue_Financial_Performance.pdf (333.26K)

Word count: 4246

Character count: 24619

Intellectual Capital Disclosure and Post-Issue Financial Performance

Wahyu Widarjo
Rahmawati
Ari Kuncara Widagdo
Eko Arief Sudaryono

36

*Accounting Study Program, Faculty of Economics and Business
Universitas Sebelas Maret, Indonesia*

Abstract

This research analyzes the relationship of intellectual capital disclosure with post-issue financial performance of the company. The analysis results on 85 companies which did Initial Public Offering (IPO) in Indonesian Stock Exchange period 2010 - 2014 show that intellectual capital disclosure affect positively on post-issue financial performance of the company. The results of this research indicate the usefulness of intellectual capital disclosure as a signal of company's performance quality in the future. The company which is more extensive in disclosing intellectual capital in the IPO prospectus is proved to have better future performance.

Keywords: Intellectual capital disclosure, initial public offering, post-issue performance.

INTRODUCTION

Intellectual capital is a very valuable resource for company in modern business (Williams, 2001). Business practitioners, investors, creditors, regulators, and academics have agreed that intellectual capital is a resource which can create added value and competitive advantage for the company (Bontis, 2001; Chen, 2008; Singh and Zahn, 2009). In addition, the literatures also show intellectual capital importance in improving financial performance and stock performance (see Chen et al., 2005; Tan et al., 2007; Sihotang and Winata, 2008; Zeghal and Maaloul, 2010; Ousama and Fatima, 2015; Saeed et al., 2016). But in practice, intellectual capital has not been fully recognized as a company asset. Only a few elements which can be recognized as assets and listed in the financial report, such as patents, trademarks and copyrights. These conditions result in outside parties difficulty in analyzing and assessing the company resources and prospects, especially at IPO, where there is high asymmetry information between internal parties with external parties (potential investors).

One of the alternatives which are suggested by researchers in intellectual capital field to show the intellectual capital ownership is by disclosing it in company's financial reporting or in financial reporting supplements (Abeysekera, 2013). Disclosure is the delivery of information in financial statements, including the financial statements themselves, financial statements notes, and additional disclosure which related to financial statements. Conceptually, disclosure is an integral part of financial reporting (Evans, 2003). The literatures show that voluntary disclosure may reduce asymmetry information and cost of capital (Lev, 1992;

Bottosan, 1997; Leuz and Verrecchia, 2000; Ritter and Welch, 2002; Hanley et al., 2010; Botazzi and Da Rin, 2016). In intellectual capital disclosure context, previous researches also show that intellectual capital disclosure can reduce asymmetry information during initial public offering, thus can decrease cost of capital and increase company value (Widarjo, 2011; Too et al., 2015; Widarjo et al., 2017; Widarjo and Bandi, 2018). Although there have been many researches on the usefulness of intellectual capital disclosure, but analysis of the relationship between intellectual capital disclosure and future performance is still a little (especially post-issue financial performance). Gelb and Zarowin (2002) and Lundholm and Myers (2002) state that better disclosure will help investors in better understanding company's future performance.

Singh and Van der Zahn (2009) have conducted an analysis of intellectual capital disclosure relationship with post-issue stock performance. These research results indicated a negative relationship. They explained that the condition is likely due to investors being overly optimistic with the company's future performance which is more extensive in disclosing its intellectual capital. Therefore, when investor expectations are not immediately fulfilled, investors are aggressively discounting the company stocks, which will have a negative impact on post-issue stock performance of the company.

In contrast to previous research that focus on stock performance, we focus on financial performance. This is based on several arguments: 1) financial performance more represents the company's ability to generate profits through the company's operating activities, 2) the stock performance is more influenced by external factors which are difficult to control (eg, economic conditions, regulatory changes, capital markets, etc.). Based on the explanation, this research aims to provide empirical evidence of intellectual capital disclosure usefulness in predicting the company's financial performance in the future. The next section explains the theoretical framework and hypothesis as well as discussion on the research method in the next section. The results and conclusions will be described at the end of this paper.

THEORITICAL BACKGROUND AND HYPOTHESIS

Intellectual capital is one of non-financial information which is needed by stakeholders (especially potential investors) in making investment decision. Therefore, intellectual capital disclosure financial reporting will extensively and systematically reduce asymmetry information and cost of capital during initial public offering (Too et al., 2015; Widarjo et al., 2017). In addition, intellectual capital disclosure will also provide comprehensive information to potential investors about company quality and prospects in the future. Theoretically, Diamond and Verrecchia (1991) explained that increased disclosure can decrease transaction costs, so it can increase stock liquidity and reduce adverse selection problems.

The previous literatures show that intellectual capital performance which is measured by Value Added Intellectual Coefficient (VAIC) is correlated positively on stock performance and financial performance (Firer and Williams, 2003; Riahi-Belkaoui, 2003; Chen et al., 2005; Abdolmohammadi, 2005; Shiu, 2006; Zeghal and Maaloul, 2010), although it is not in the IPO context. Furthermore, Tan et al. (2007) indicated a positive relationship between

intellectual capital and current and future corporate performance. In Indonesia, Ullum et al. (2008) supported the research result of Tan et al. (2007). Based on the study of theories and the research results, it can be assumed that companies with high intellectual capital intensity are more extensive in disclosing intellectual capital in financial reporting and IPO prospectus. Furthermore, it can be assumed that companies which are more extensive in disclosing intellectual capital will have future performance which are better than other companies. Therefore, it can be formulated the research hypothesis as follows:

H₁: There is a positive relationship between intellectual capital disclosure extent and post-issue financial performance.

RESEARCH METHODS

Sample and Data

The sample in this research is 85 companies which did IPO in Indonesian Stock Exchange period 2010 - 2014. Data of intellectual capital disclosure and post-issue financial performance of the company is obtained from the Initial Public Offering prospectus and Indonesian Capital Market Directory (ICMD).

Variable Measurement and Statistical Analysis

Dependent Variables

In this research, the post-issue financial performance is measured by return on equity one year after IPO (ROE_{t+1}). Return on equity is one of the financial performance indicators that measures how well a company uses its investment funds to generate profits. Return on equity is more important for shareholders than return on investment (ROI) because it provides information to investors how effectively their capital is reinvested. Companies with high return on equity are more successful in money making internally. Therefore, investors are always looking for companies with high and growing equity return as an investing place. The return on equity variable after the IPO (ROE_{t+1}) is calculated using the following formula.

$$ROE_{t+1} = \text{Net income}_{t+1} / \text{Total equity}_{t+1}$$

Independent Variables

Intellectual capital disclosure is measured by disclosure index which has developed by Widarjo et al. (2017). Intellectual capital disclosure level is calculated by the following formula.

$$ICD = \frac{\sum_{ij} D_{item}}{\sum_{ij} AD_{item}}$$

Remarks:

ICD : The level of intellectual capital disclosure,

D_{item} : Total score of intellectual capital disclosure in the prospectus,

AD_{item} : Numbers of items in intellectual capital disclosure index.

Control Variables

The ownership structure and the ownership concentration are used as control variables in this research. The ownership structure is proxied with ownership management and foreign ownership. The literatures show that ownership management is related positively on performance (Demsetz and Lehn, 1985; Hermalin and Weisbach, 1991). In addition, foreign ownership has also been shown to have a positive effect on performance (see Chibber and Majumdar, 1999; Douma et al., 2006). Managerial ownership is measured by assigning a value of 1 if management owns company stocks, and 0 for others. Foreign ownership is measured by assigning a value of 1 if there are individuals or foreign institutions holding company stocks, and 0 for others.

High concentrations of ownership will increase the benefits of cost monitoring is also higher. The ownership concentration is an instrument which is used by the involved parties in the agency conflict in achieving a resolution or alignment process so that the parties obtain the optimal utility (Syafuddin, 2006). The previous researches provide evidence of a positive relationship between ownership concentration and performance (Leung, Richardson, and Jaggi, 2014; Vintila and Gherghina, 2014). The ownership concentration is measured by assigning a value of 1 if there is more than fifty percent (> 50%) of the company stocks and 0 for others.

Testing of research hypothesis use multiple linear regression analysis. Hypothesis testing use the following research model.

$$ROE_{t+1} = \alpha_0 + \beta_1 ICD + e \quad (1)$$

$$ROE_{t+1} = \alpha_0 + \beta_1 ICD + \beta_2 MO + \beta_3 FO + \beta_4 OC + e \quad (2)$$

Remark:

ROE_{t+1} : Return on equity one year after IPO,

ICD : Intellectual capital disclosure,

MO : Managerial ownership,

FO : Foreign ownership,

OC : Ownership concentration,

e : Error term.

RESEARCH RESULT AND DISCUSSION

Descriptive analysis in Table 1 shows the average of ROE_{t+1} is 8 percent and mean of ICD is 46 percent. The average value of intellectual capital disclosure level in this research is relatively higher than researches from outside Indonesia. The research results of Singh and Van der Zahn (2007) showed the average intellectual capital disclosure in Singapore is 27.5 percent, while Singh and Van der Zahn (2008) showed a value of 28 percent. The research of Rashid et al. (2012) in Malaysia showed a value of 34.9 percent, while Too et al. (2015) which also examined companies which did IPO in Malaysia showed an average value of intellectual capital disclosure in amount of 19 percent. The research results of Branswijk and Everaert (2012) in Belgium and Netherlands showed that intellectual capital disclosure level

is relatively higher than those researches, the amount of percentage is 34.5 percent. The differences in intellectual capital disclosure level in IPO prospectuses in these countries may be caused by the differences of used index in intellectual capital disclosure. It may be caused by intellectual capital disclosure which is still voluntary and there is no standard that regulates the categories and items which should be disclosed in the IPO prospectus. The correlation analysis in Table 1 shows a positive correlation between performance variables (ROE_{t+1}) with intellectual capital disclosure (ICD) and ownership concentration (OC). These results are an early indication of the relationship between intellectual capital disclosure and post-issue financial performance. In addition, correlation analysis results do not show the existence of multicollinearity among independent variables.

The ICD data descriptions per category in Table 2 indicate that the most dominant intellectual capital categories which are disclosed in the prospectus are strategies and processes, while the category of human resources, customers, research and development (R&D) and information technology are relatively less disclosed. The results indicate that the company places greater emphasis on extending business strategy information and business processes (internal and external) to convince potential investors about the potencies and prospects of strategic resources which is owned by the company.

Table 1: Statistic Descriptive and Correlation

	ROE_{t+1}	ICD	MO	FO	OC
Min	-0.66	0.27	0.00	0.00	0.00
Max	0.50	0.60	1.00	1.00	1.00
Mean	0.08	0.46	0.44	0.18	0.33
SD	0.16	0.08	0.49	0.38	0.47
ROE_{t+1}	1.000				
ICD	0.226*	1.000			
MO	0.049	-0.034	1.000		
FO	0.100	-0.079	-0.033	1.000	
OC	0.223*	0.106	-0.010	-0.259*	1.000

Notes: * Correlation is significant at the 0.05 level (2-tailed). ROE_{t+1} =Return on equity one year after the IPO; ICD=Intellectual capital disclosure; MO=Managerial ownership; FO=Foreign ownership; OC=Ownership concentration.

Table 2: Description of ICD per Category

	Minimum	Maximum	Mean	Std. Deviation
Human Resource	0.20	0.67	0.45	0.09
Customer	0.05	0.63	0.33	0.12
Information Technology	0.00	1.00	0.29	0.38
Process	0.33	0.89	0.59	0.14
Research and Development	0.00	0.80	0.31	0.29
Strategy	0.18	0.88	0.62	0.13

Table 3: The Analysis Result of Regression

Variable	Equation 1		Equation 2	
	Coeff.	t-value	Coeff.	t-value
Constant	-0.113	-1.188	-0.154	-1.602
Main Variable				
ICD	0.434	2.116**	0.415	2.056**
Control Variables				
MO			0.020	0.621
FO			0.075	1.692*
OC			0.082	2.281**
R ²		0.051		0.126
Adj. R ²		0.040		0.082
F-value		4.477		2.878
Sig		0.037		0.028
N	28	85		85

Notes: * and ** indicate significance at the 10% and 5% levels, respectively. ICD=Intellectual capital disclosure; MO=Managerial Ownership; FO=Foreign Ownership; OC= Ownership Concentration.

We suspect that intellectual capital disclosure in the initial public offering prospectus is correlated positively on the future financial performance. The regression analysis result in Table 3 shows that the regression coefficient of intellectual capital disclosure variable is marked positive and significant at 5 percent level. The result is consistent after structure control variable and ownership concentration are added. Therefore, the hypothesis in this research is supported. The company which is more extensive in disclosing intellectual capital in the IPO prospectus is having better future performance than the others.

The results of this research reinforce the arguments and findings of the previous researches which showed that intellectual capital is a resource which can create added value and competitive advantage of the company (Bontis, 2001; Chen, 2008; Singh and Zahn, 2009). Intellectual capital performance can improve efficiency and effectiveness of the company's business processes, so the performance is increased (Riahi-Belkaoui, 2003; Chen et al., 2005; Abdolmohammadi, 2005; Tan et al., 2007; Zeghal and Maaloul, 2010). In addition, the company with high intellectual capital intensity are more competitive and more successful than the others (Youndt et al., 2004).

The analysis results in Table 3 also show that variable of foreign ownership and ownership concentration are correlated positively with post-issue financial performance of the company. These results indicate the effectiveness of monitoring role which is performed by foreign owners. Foreign investors are judged to have better capacity and capability of resources in monitoring business activities of company management. Research findings which indicate a positive correlation between ownership concentration and post-issue performance indicate that majority shareholders obtain greater benefit of cost monitoring than minority shareholders. This means that majority shareholders have a higher chance and authority to monitor the activities of company management. Thus, the company management will work optimally to increase the utility of capital owner.

Robustness checks

We do additional testing to ensure that the results are robust and consistent. This test is focused on the use of alternative measurement of intellectual capital disclosure variables. It aims to anticipate the existence of measurement error which is caused by the disclosure index development which were did by researchers. Therefore, it is necessary to retest the research model using the disclosure index which has developed by Bukh et al. (2005) as an alternative measurement of intellectual capital disclosure variables.

The underlying arguments of the use of Bukh et al. (2005) index as an alternative measurement in this research is the index which has often been used as a reference by previous researchers in several different countries (see Rimmel et al., 2009; Branswijck and Everaert, 2012). In addition, there is a common legal system which is used in this country (Danish country) with the legal system in Indonesia, the code law system.

The analysis result in Table 4 shows the regression coefficient of intellectual capital disclosure variable is marked positive and significant at 10 percent level. The results are relatively consistent with the previous test. Therefore, it can be concluded that there is a positive correlation between intellectual capital disclosure and post-issue financial performance of the company.

Table 4: The Analysis Result of Alternative Measurement

Variable	Equation 1		Equation 2	
	Coeff.	t-value	Coeff.	t-value
Constant	-0.154	-1.602	-0.160	-1.547
Main Variable				
ICD	0.415	2.056**		
ICD_Ater			0.396	1.959*
Control Variables				
MO	0.020	0.621	0.021	0.625
FO	0.075	1.692*	0.072	1.629
OC	0.082	2.281**	0.083	2.299**
R ²		0.126		0.122
Adj. R ²		0.082		0.078
F-value		2.878		2.772
Sig		0.028		0.033
N	28	85		85

Notes: * and ** indicate significance at the 10% and 5% levels, respectively. ICD=Intellectual capital disclosure; MO=Managerial Ownership; FO=Foreign Ownership; OC= Ownership Concentration.

CONCLUSION

The literature has showed the usefulness of intellectual capital disclosure in reducing asymmetry information and cost of capital. This research extends the previous literatures by analyzing the relationship of intellectual capital disclosure with post-issue financial performance, especially in developing countries. The results support the hypothesis that intellectual capital disclosure is correlated positively with post-issue financial performance of the company. The findings of this research have important implications in literature and

practice. The results of this research indicate the usefulness of intellectual capital disclosure as a medium in analyzing and predicting the company's performance in the future. Companies which have high intellectual capital intensity are relatively more efficient and effective in running the business, so it will produce better performance than other companies. Furthermore, the findings of this research support and extend the application of signalling theory which states that the disclosure extent can reduce asymmetry information level and help the potential investors in investment analysis and decision making (see Welker, 1995; Jog and McConomy, 2003; Guo et al., 2004; Yosano, 2015; Widarjo et al., 2017).

This research has several limitations. First, the measurement of intellectual capital disclosure is only from the quantity aspect of disclosure, it has not represented the disclosure quality. It is important to consider because high quantity of disclosure may not necessarily represent a high quality of disclosure. Therefore, further research needs to consider aspects of intellectual capital disclosure quality as an alternative to intellectual capital disclosure measurement (see Cerbioni and Parbonetti, 2007; Yi and Davey, 2010). Second, this research only focuses on financial performance one year after the IPO, it has not analyzed long-run financial performance (three or five years after IPO). Future research can develop the research by analyzing long-run financial performance. In addition, further researchers can also perform intellectual capital disclosure analysis on long-run stock performance such as Singh and Zahn research (2009), especially in developing countries for comparison analysis with research in developed countries.

REFERENCES

- Abdolmohammadi, M.J. (2005). Intellectual Capital Disclosure and Market Capitalization. *Journal of Intellectual Capital*, 6(3): 397-416.
- Abeysekera, I. (2013). A Template for Integrated Reporting. *Journal of Intellectual Capital*, 14(2): 227-245.
- Bontis, N. (2000). Intellectual Capital and Business Performance in Malaysian Industries. *Journal of Intellectual Capital*, 1(1), 85-100.
- Bottazi, L. and Da Rin, M. (2016). *Voluntary Information Disclosure at IPO*. Available online at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2810847 (Accessed 10 September 2016).
- Botosan, C. A. (1997). Disclosure Level and the Cost of Equity Capital. *The Accounting Review*, 72(3): 323-349.
- Branswijck, D. and Everaert, P. (2012). Intellectual Capital Disclosure Commitment: Myth or Reality? *Journal of Intellectual Capital*, 13(1): 3956.
- Bukh, P. N., Nielsen, C., Gormsen, P. and Mouritsen, J. (2005). Disclosure on Information Intellectual Capital in Danish IPO Prospectuses. *Accounting, Auditing and Accountability Journal*, 18(6): 713-732.
- Cerbioni, F. and Parbonetti, A. (2007). Exploring the Effect of Corporate Governance on Intellectual Capital Disclosure: An Analysis of European Biotechnology Companies. *European Accounting Review*, 16(4): 791-826.

- 9
Chen, Y. S. (2008). The Positive Effect of Green Intellectual Capital on Competitive Advantages of Firms. *Journal of Business Ethics*, 77: 271-286. 21
- Chen, M.C., Cheng, S.J. and Hwang, Y. (2005). An Empirical Investigation of The Relationship Between Intellectual Capital and Firms' Market Value and Financial Performance. *Journal of Intellectual Capital*, 6(2): 159-76. 15
- Chibber, P. K. and Majumdar, S. K. (1999). Foreign Ownership and Profitability: Property Rights, Control and The Performance of Firms in Indian Industry. *Journal of Law and Economics*, 46(3): 209-238. 17
- Demsetz, H., and Lehn, K. (1985). The Structure of Corporate Ownership Causes and Consequences. *Journal of Political Economy*, 93: 1155-1177 19
- Diamond, D. and Verrecchia, R. (1991). Disclosure, Liquidity and The Cost of Capital. *Journal of Finance*, 46(4): 1325-1359.
- Douma S., George, R. and Kabir, R. (2006). Foreign and Domestic Ownership, Business Groups, and Firm Performance: Evidence from a Large Emerging Market. *Strategic Management Journal*, 27(7): 637-657. 35
- Evans, T. G. (2003). *Accounting Theory: Contemporary Accounting Issues*. Australia: Thomson, South-Western. 16
- Gelb, D., and Zarowin, P. (2002). Corporate Disclosure Policy and The Informativeness of Stock Prices. *Review of Accounting Studies*, 7: 33-52. 33
- Guo, R. J., Lev, B. and Zhou, N. (2004). Competitive Costs of Disclosure by Biotech IPOs. *Journal of Accounting Research*, 42(2): 319-355. 25
- Hanley W., Kathleen, and Hoberg, G. (2010). The Information Content of IPO Prospectuses. *Review of Financial Studies*, 23(7): 2821-2864. 7
- Hermalin, B. and Weisbach, M. S. (1991). The Effects of Board Composition and Direct Incentiv¹⁴ on Firm Performance. *Financial Management*, 20(4): 101-112.
- Jog, V. and McConomy, B. J. (2003). Voluntary Disclosure of Management Earnings Forecasts in IPO Prospectuses. *Journal of Business, Finance and Accounting*, 30(1/2): 125-67. 10
- Leung, S., Ricahrdson, G., and Jaggi, B. (2014). Corporate Board and Board Committee Independence, Firm Performance, & Family Ownership Concentration: An Analysis Based on Hong Kong Firm. *Journal of Contemporary Accounting & Economic*, 10(1): 16-21. 37
- Lev, B. (1992). Information disclosure strategy. *California Management Review*, 34(4): 9-32.
- Leuz, C. and Verrecchia, R. E. (2000). The Economic Consequence of Increased Disclosure. *Journal of Accounting Research*, 38 (Supplement): 91-135 4
- Lundholm, R., and Myers, L. M. (2002). Bringing The Future Forward: The Effect of Disclosure on The Returnearnings Relation. *Journal of Accounting Research*, 40(3): 809-839.
- Ousama, A.A. and Fatima, A.H. (2015). Intellectual Capital and Financial Performance of Islamic Banks. *International Journal of Learning and Intellectual Capital*, 12(1): 1-15.
- Riahi-Belkaoui, A. (2003). Intellectual Capital and Firm Performance of US Multinational Firms: A Study of the Resource-Based and Stakeholder Views. *Journal of Intellectual Capital*, 4(2): 215-226.

- Rimmel, G., Nielsen, C. and Yosano, T. (2009). Intellectual Capital Disclosure in Japanese IPO Prospectuses. *Journal of Human Resource Costing & Accounting*, 13(4): 316-337.
- Ritter, J. and Welch, I. (2002). A Review of IPO Activity, Pricing, and Allocations. *Journal of Finance*, 57(4): 1795-1828.
- Saeed, S., Rasid, S.Z.A. and Basiruddin, R. (2016). Relationship Between Intellectual Capital and Corporate Performance of Top Pakistani Companies: An Empirical Evidence. *International Journal of Learning and Intellectual Capital*, 13(4): 376-396.
- Shiu, H.-J. (2006). The Application of the Value Added Intellectual Capital Coefficient to Measure Corporate Performance: Evidence from Technological Firms. *International Journal of Management*, 23(2): 356-365.
- Sihotang, P., and Winata, A. (2008). The Intellectual Capital Disclosures of Technology-Driven Companies: Evidence from Indonesia. *International Journal Learning and Intellectual Capital*, 5(1), 63-82.
- Singh, I. and J-L.W. M. Van der Zahn. (2007). Does Intellectual Capital Disclosure Reduce an IPOs Cost of Capital: The Case of Underpricing. *Journal of Intellectual Capital*, 8(3): 494-516.
- Singh, I. and J-L.W. M. Van der Zahn. (2008). Determinants of Intellectual Capital Disclosure in Prospectuses of Initial Public Offerings. *Accounting and Business Research*, 38(5): 409-431.
- Singh, I. and Van der Zahn, J-L. W. M. (2009). Intellectual Capital Prospectus Disclosure And Post-Issue Stock Performance. *Journal of Intellectual Capital*, 10(3): 425-450.
- Syafruddin, M. 2006. Pengaruh Struktur Kepemilikan Perusahaan Pada Kinerja: Faktor Ketidakpastian Lingkungan Sebagai Pemoderasi. *Jurnal Akuntansi dan Auditing Indonesia*, 10(1): 85-99.
- Tan, H.P., Plowman, D. and Hancock, P. (2007). Intellectual Capital and Financial Returns of Companies. *Journal of Intellectual Capital*, 8(1): 76-95.
- Too, S.W., Fadzilah, W. and Yusoff, W. (2015). Exploring Intellectual Capital Disclosure as a Mediator for the Relationship Between IPO Firm-Specific Characteristics and Underpricing. *Journal of Intellectual Capital*, 16(3): 1-26.
- Ulum, I., Ghozali, I., dan Chariri, A. (2008). Intellectual capital dan kinerja keuangan perusahaan: suatu analisis dengan pendekatan *partial least squares*. *Simposium Nasional Akuntansi XI*. Pontianak, 23-26 Juli.
- Vintila, G. and Gherghina, S. C. (2014). The Impact of Ownership Concentration on Firm Value: Empirical Study of the Bucharest Stock Exchange Listed Companies. *Procedia Economics and Finance*, 15, 271-279.
- Welker, M. 1995. Disclosure Policy, Information Asymmetry, and Liquidity in Equity Markets. *Contemporary Accounting Research*, 11 (2): 801-827.
- Widarjo, W. 2011. Pengaruh Modal Intelektual dan Pengungkapan Modal Intelektual pada Nilai Perusahaan yang Melakukan *Initial Public Offering*. *Jurnal Akuntansi dan Keuangan Indonesia*, 8(2): 157-170.
- Widarjo, W., Rahmawati, Bandi and Widagdo, A.K. (2017). Underwriter Reputation, Intellectual Capital Disclosure, and Underpricing. *International Journal of Business and Society*, 18(2), 227-244.

- Widarjo, W. and Bandi. (2018). Determinants of Intellectual Capital Disclosure in the IPOs and Its Impact on Underpricing: Evidence from Indonesia. *International Journal of Learning and Intellectual Capital*, 15(1), 1-19.
- Williams, S. M. 2001. Is Intellectual Capital Performance and Disclosure Practices Related?, *Journal of Intellectual Capital*, 2(3): 192–203.
- Yosano, T., Nielsen, C., and Rimmel, G. (2015). The Effects of Disclosing Intellectual Capital Information on the Long-Term Stock Price Performance of Japanese IPO's. *Accounting Forum*, 39(2), 83–96.
- Yi, An and Davey, H. (2010). Intellectual Capital Disclosure in Chinese (Mainland) Companies. *Journal of Intellectual Capital*, 11(3): 326-347.
- Youndt, M.A., Subramaniam, M. and Snell, S.A. (2004). Intellectual Capital Profiles: An Examination of Investments and Returns. *Journal of Management Studies*, 41(2): 335-361.
- Zeghal, D. and Maaloul, A. (2010). Analysing Value Added as An Indicator of Intellectual Capital and Its Consequences on Company Performance. *Journal of Intellectual Capital*, 11(1): 39-60.

Intellectual Capital Disclosure and Post-Issue Financial Performance

ORIGINALITY REPORT

19%

SIMILARITY INDEX

9%

INTERNET SOURCES

12%

PUBLICATIONS

9%

STUDENT PAPERS

PRIMARY SOURCES

1	ejournal.uksw.edu Internet Source	1%
2	Wen-Chung Guo, Shin-Rong Shiah-Hou, Wei-Jer Chien. "A study on intellectual capital and firm performance in biotech companies", Applied Economics Letters, 2012 Publication	1%
3	Submitted to University of North Texas Student Paper	1%
4	Roshayani Arshad, Ruhaya Atan, Faizah Dams, Dennis Taylor. "Board composition and credible voluntary disclosures", 2010 2nd IEEE International Conference on Information Management and Engineering, 2010 Publication	1%
5	Submitted to 82915 Student Paper	1%
6	Submitted to Loughborough University Student Paper	1%

7	dspace.lib.cranfield.ac.uk Internet Source	1%
8	www.decon.unipd.it Internet Source	1%
9	Submitted to Golden Gate University Student Paper	1%
10	www.cityu.edu.hk Internet Source	1%
11	Submitted to City University Student Paper	1%
12	repositori.uin-alauddin.ac.id Internet Source	<1%
13	www.afajof.org Internet Source	<1%
14	于 2012-08-27 提交至 University of Birmingham Student Paper	<1%
15	PRADEEP K. CHHIBBER, SUMIT K. MAJUMDAR. "Property Rights and the Control of Strategy: Foreign Ownership Rules and Domestic Firm Globalization in Indian Industry", <i>Law & Policy</i> , 2004 Publication	<1%
16	Xin Ying Qiu, Shengyi Jiang, Kebin Deng. "Chapter 27 Automatic Assessment of	<1%

Information Disclosure Quality in Chinese Annual Reports", Springer Science and Business Media LLC, 2013

Publication

17

M. Holmen, E. Nivorozhkin. "The impact of family ownership and dual class shares on takeover risk", Applied Financial Economics, 2007

Publication

<1%

18

Submitted to Wilfrid Laurier University

Student Paper

<1%

19

Kenneth Peasnell, Sayjda Talib, Steven Young. "The fragile returns to investor relations: evidence from a period of declining market confidence", Accounting and Business Research, 2011

Publication

<1%

20

ir.lib.nthu.edu.tw

Internet Source

<1%

21

Sirinuch Nimtrakoon. "The relationship between intellectual capital, firms' market value and financial performance", Journal of Intellectual Capital, 2015

Publication

<1%

22

Submitted to KCA University

Student Paper

<1%

23	biblio.ugent.be Internet Source	<1%
24	Submitted to University of York Student Paper	<1%
25	orsociety.tandfonline.com Internet Source	<1%
26	Garcia-Meca, E.. "The use of intellectual capital information in investment decisions", International Journal of Accounting, 2007 Publication	<1%
27	ro.uow.edu.au Internet Source	<1%
28	Warren Bailey, Wei Huang, Zhishu Yang. "Bank Loans with Chinese Characteristics: Some Evidence on Inside Debt in a State-Controlled Banking System", Journal of Financial and Quantitative Analysis, 2011 Publication	<1%
29	Submitted to Universitas Pelita Harapan Student Paper	<1%
30	Submitted to University of Aberdeen Student Paper	<1%
31	www.scilit.net Internet Source	<1%

32	Sanghee Park. "Gender and performance in public organizations: a research synthesis and research agenda", Public Management Review, 2020 Publication	<1%
33	Submitted to University of North Florida Student Paper	<1%
34	cisgw3.law.pace.edu Internet Source	<1%
35	dspace.uni.lodz.pl:8080 Internet Source	<1%
36	jab.fe.uns.ac.id Internet Source	<1%
37	ndltd.ncl.edu.tw Internet Source	<1%
38	Submitted to Melbourne Institute of Business and Technology Student Paper	<1%
39	Tarlok Singh. "Testing J-curve hypothesis and analysing the effect of exchange rate volatility on the balance of trade in India", Empirical Economics, 2004 Publication	<1%
40	www.ideals.illinois.edu Internet Source	<1%

41 Madan Lal Bhasin. "Disclosure of Intellectual Capital in Annual Reports:An Empirical Study of the Indian IT Corporations", Modern Economy, 2011
Publication <1%

42 ihyaul.staff.umm.ac.id
Internet Source <1%

43 eprints.undip.ac.id
Internet Source <1%

44 Sustainability Accounting, Management and Policy Journal, Volume 6, Issue 2 (2015)
Publication <1%

45 www.mysciencework.com
Internet Source <1%

46 Pina Puntillo. "A CRITICAL REVIEW OF THE RELATIONSHIP BETWEEN HUMAN CAPITAL MANAGEMENT AND CORPORATE PERFORMANCE", Corporate Ownership and Control, 2012
Publication <1%

47 Submitted to University of KwaZulu-Natal
Student Paper <1%

48 Submitted to Northern Melbourne Institute of TAFE
Student Paper <1%

Exclude quotes Off

Exclude matches Off

Exclude bibliography Off

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : **PROSIDING** *

Judul Karya Ilmiah (paper) : Intellectual capital disclosure and post-issue financial performance
 Jumlah Penulis : 4 Orang (Wahyu Widarjo, Rahmawati, **Ari Kuncara Widagdo**, E.A. Sudaryono)
 Status Pengusul : ~~Penulis pertama~~ / penulis ke 3 / ~~penulis korespondensi**~~
 Identitas Prosiding : a. Nama Prosiding : **SMICBES 2018**
 b. ISBN/ISSN : -
 c. Tahun Terbit, Tempat Pelaksanaan : **July 17-19, 2018 Bali, Indonesia**
 d. Penerbit/organiser :
 e. Alamat repository PT/web prosiding : <https://repository.feb.uns.ac.id/lihatpdf.php?lokasi=publikasi&kode=857>
 f. Terindeks di (jika ada) :

Kategori Publikasi Makalah : Prosiding Forum Ilmiah Internasional
 (beri * pada kategori yang tepat) Prosiding Forum Ilmiah Nasional

Hasil Penilaian Peer Review :

Komponen Yang Dinilai	Nilai Maksimal Prosiding 15		Nilai Akhir Yang Diperoleh
	Internasional <input type="checkbox"/>	Nasional <input type="checkbox"/>	
a. Kelengkapan unsur isi paper (10%)	1.5		1.3
b. Ruang lingkup dan kedalaman pembahasan (30%)	4.5		4.2
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	4.5		4.5
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	4.5		4.2
Total = (100%)	15		14.2
Nilai Pengusul = (40% x 14.2) / 3 = 1.9 (Penulis Ketiga)			

Catatan Penilaian artikel oleh Reviewer:

- a. Kelengkapan dan kesesuaian unsur isi artikel:
 Artikel ini mempunyai unsur yang lengkap dan sesuai. Penulis menyajikan pendahuluan, review literatur dan pengembangan hipotesis, metode penelitian, hasil analisis dan diskusi, serta kesimpulan..
- b. Ruang lingkup dan kedalaman pembahasan:
 Pembahasan sudah dilakukan cukup baik. Pada bagian awal disajikan pembahasan terhadap hasil statistik deskriptif dan korelasi. Pada bagian selanjutnya, penulis menyajikan tiap hasil uji hipotesis termasuk juga hasil uji robustness.
- c. Kecukupan dan pemutakhiran data/informasi dan metodologi :
 Data sudah mencukupi dan mutakhir, yaitu berasal dari pengamatan pada 2008-2014. Metodologinya juga sudah baik, karena pengujian hipotesisnya dengan analisis regresi yang dilakukan secara bertahap. Selain itu, penulis juga melakukan pengujian robustness dengan menggunakan alternatif pengukuran IC disclosure.
- d. Kelengkapan unsur dan kualitas terbitan:
 Prosiding ini merupakan kumpulan artikel dari konferensi internasional yang baik, karena diselenggarakan oleh FEB UNS dan diikuti oleh banyak peserta dari dalam maupun luar negeri. Selain itu, prosiding ini juga disusun secara lengkap dan diterbitkan oleh Taylorr & Francis Group.
- e. Indikasi Plagiat:
 Hasil uji kemiripan adalah 19 persen, sehingga artikel ini tidak memiliki indikasi plagiat.
- f. Kesesuaian bidang ilmu:
 Pengungkapan sukarela, yaitu pengungkapan intelektual, sangat sesuai dengan bidang penulis (akuntansi).

Surakarta, **03 JUN 2020**



Prof. Drs. Djoko Suhardjanto, M.Com.(Hons), Ph.D., Ak
NIP. 196302031989031006
 Jabatan : Guru Besar
 Pangkat, Gol Ruang : Pembina Utama Muda/IVc
 Unit Kerja : Fakultas Ekonomi dan Bisnis
 Bidang Ilmu : Akuntansi

*Dinilai oleh dua Reviewer secara terpisah
 **Coret yang tidak perlu

5-3

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : **PROSIDING** *

Judul Karya Ilmiah (paper) : Intellectual capital disclosure and post-issue financial performance
 Jumlah Penulis : 4 Orang (Wahyu Widarjo, Rahmawati, **Ari Kuncoro Widagdo**, E.A. Sudaryono)
 Status Pengusul : ~~Penulis pertama~~ / penulis ke 3 / ~~penulis korespondensi**~~
 Identitas Prosiding :
 a. Nama Prosiding : **SMICBES 2018**
 b. ISBN/ISSN : -
 c. Tahun Terbit, Tempat Pelaksanaan : **July 17-19, 2018 Bali, Indonesia**
 d. Penerbit/organiser :
 e. Alamat repository PT/web prosiding : <https://repository.feb.uns.ac.id/lihatpdf.php?lokasi=publikasi&kode=857>
 f. Terindeks di (jika ada) :

Kategori Publikasi Makalah : Prosiding Forum Ilmiah Internasional
 (beri ~ pada kategori yang tepat) Prosiding Forum Ilmiah Nasional

Hasil Penilaian Peer Review :

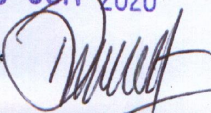
Komponen Yang Dinilai	Nilai Maksimal Prosiding 15		Nilai Akhir Yang Diperoleh
	Internasional <input type="checkbox"/>	Nasional <input type="checkbox"/>	
a. Kelengkapan unsur isi paper (10%)	1.5		1.4
b. Ruang lingkup dan kedalaman pembahasan (30%)	4.5		4
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	4.5		4
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	4.5		4
Total = (100%)	15		13.4
Nilai Pengusul = (40% x 13.4) / 3 = 1.79 (Penulis Ketiga)			

Catatan Penilaian artikel oleh Reviewer :

- a. Kelengkapan dan kesesuaian unsur isi artikel : Unsur artikel ini lengkap dan sesuai. Penulis menyajikan bagian pendahuluan, landasan teori dan pengembangan hipotesis, metodologi penelitian, pembahasan hasil dan kesimpulan dengan terorganisir dan baik.
- b. Ruang lingkup dan kedalaman pembahasan : Ruang lingkup pembahasan artikel ini baik dan mendalam. Penulis mampu memberikan pembahasan yang rinci dan argumentasi yang tepat mengenai pengungkapan modal intelektual dan kinerja keuangan.
- c. Kecukupan dan pemutakhiran data/informasi dan metodologi : Data yang digunakan dalam penelitian ini cukup baik. Metodologi penelitian yang digunakan dijabarkan dengan baik dan tepat.
- d. Kelengkapan unsur dan kualitas terbitan : Kualitas prosiding ini baik.
- e. Indikasi Plagiat : Artikel ini tidak terindikasi plagiat. Hal ini dapat dilihat dari nilai similarity sebesar 19% dengan menggunakan software turnitin.
- f. Kesesuaian bidang ilmu : Artikel ini membahas tentang pengungkapan modal intelektual, sehingga artikel ini sesuai dengan bidang ilmu akuntansi.

Surakarta, 05 JUN 2020

Reviewer 1/2 **



Prof. Doddy Setiawan., SE.,MSi., Ph.D, Ak
NIP. 197502182000121001

Jabatan : Guru Besar
 Pangkat, Gol Ruang : Pembina Tingkat I / IV/b
 Unit Kerja : Fakultas Ekonomi dan Bisnis
 Bidang Ilmu : Akuntansi

*Dinilai oleh dua Reviewer secara terpisah
 **Coret yang tidak perlu