

**INTELLECTUAL CAPITAL DISCLOSURE AND THE UNDERPRICING
OF INDONESIAN INITIAL PUBLIC OFFERINGS**

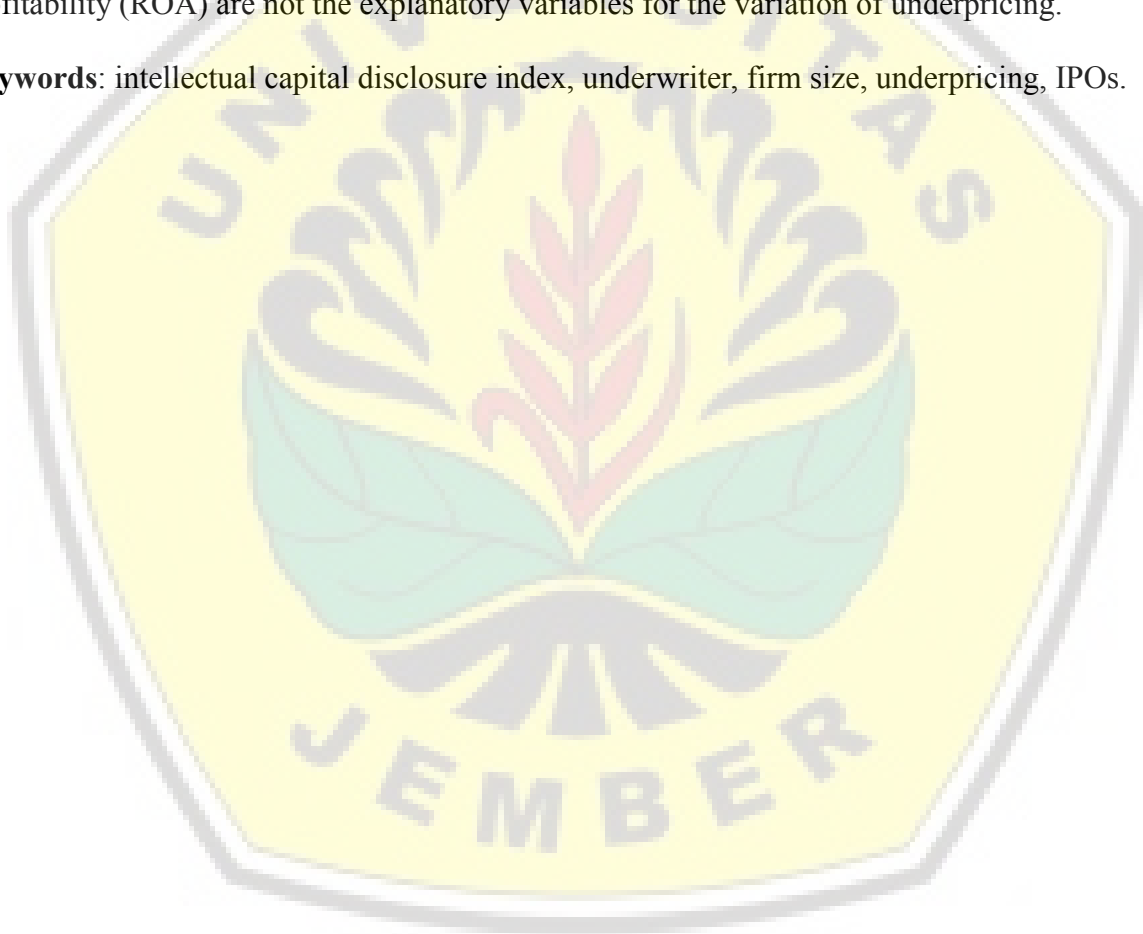
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Abstract

Studies examining the relationship between the level of intellectual capital with firm values of public companies have been mounting. Yet, very view is devoted on those that are making initial public offering (IPO). For already publicly companies, intellectual capital disclosure can be seen in the annual report. For IPO, the information is embedded in the prospectuses. This study is aimed to analyze the influence of intellectual capital disclosure index (ICDI) and other variables including the prestige of underwriter, financial leverage, return on assets, and firm size on the extent of underpricing of companies making IPO from 2013 to 2017. The population consist of 125 companies. A total of 79 IPOs satisfied the selection criteria for the sample. Results using multiple linear regression analysis show ICDI, the prestige of underwriter, and company size have negative and significant effect on the level of underpricing. Whilst, financial leverage and profitability (ROA) are not the explanatory variables for the variation of underpricing.

Keywords: intellectual capital disclosure index, underwriter, firm size, underpricing, IPOs.



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INTRODUCTION

Initial public offering (IPO) is the offer of a company shares to the public for first time. IPO is conducted with multiple objectives, for example generating funds for expanding the business, paying the debt or improve the company's image. To value an IPO, investors must use various information either internal or external to the company. One of them is non-financial information in the form of intellectual capital (IC). IC becomes an important factor in addition to physical assets in assessing company performance and determining the success of the company.

In Indonesia, IC phenomenon began to emerge since issuance of Statement of Financial Accounting Standard No. 19 (revised 2000) on intangible assets used to produce products, leased to other parties or for administrative purposes (Widarjo, 2011). In line with this issue, a company wishing to go public is getting interested to disclose IC information available in the issued prospectus. IC information relates to financial and non-financial information of the company, such as the value of shares to be offered to the public, underwriters, financial leverage, probability, and size of the company.

Intellectual capital (IC) is an intangible asset that plays a role in improving the competitiveness of enterprises and effective to increase corporate profits. The IC is disclosed by the company to comply with the provisions imposed by stock market governing body. Intellectual capital disclosure (ICD) is available in the prospectus issued by the company. For companies that will conduct an IPO, the information available in the prospectus is still limited. This can lead to information asymmetry between firms and investors, thus making it difficult for investors to assess the issuing company.

Determination of the price of shares offered to the public at the time IPO companies become the determining factor in obtaining funds and the amount of risk that must be borne by the underwriter (Zulhawati, 2014). The Company will prefer to sell its shares at a high price at the time of the IPO in order to obtain funds in line with expectations. On the other hand, underwriters prefer to sell stocks below the initial price as the company wishes to minimize the risk of unsold shares offered, since underwriters are in charge of securing the sale and payment of shares, in the case of a full commitment agreement. Selling price is lower than the fair price can be the trigger of underpricing. Underpricing phenomenon occurs when the stock price offered at the IPO on average is lower than the price in the secondary market.

Information asymmetry and coupled with ex-ante uncertainty about the issue is often a factor affecting underpricing levels. Prospectus helps investors obtain financial and non-financial information of companies that will assist in making investment decisions and so to reduce information asymmetry. Signaling theory explains how to reduce the asymmetry of information that occurs between firms and external parties, i.e., by reporting ICD (Zulhawati, 2014). ICD of a company can be measured using ICDI, where the measurement aims to find out how big or many ICs to be disclosed by the company.

This study examines the factors that influence the level of underpricing. The main focus of the research is on the intellectual capital variables. Zulhawati (2014) and Prasanti and Putra (2015) find ICDs negatively affect the level of underpricing. That is, the more extensive IC disclosure, the less the degree of information asymmetry, thereby reducing the risk of new issue and thus lowering the level of underpricing.

Other factors examined here include the quality of underwriters, financial leverage ratios, profitability (return on assets), and firm size. Selection of these factors is based on the results of previous research. Beatty (1989), Carter and Manaster (1990), Kim et al. (1993), How et al. (1995), Kusuma (2001), Bowen et al. (2008), Kristiantari (2013), and Zuhawati (2014) find that underwriters negatively related to the level of underpricing. Kim et al. (1993), Wijayanto (2010), and Susilowati and Turyanto (2011) report that financial leverage has a positive effect on underpricing level. Ambrose et al. (2010) find that return on assets have a significant positive effect on underpricing level. Bowen et al. (2008) and Kristiantari (2013) document that firm size negatively affects the level of underpricing.

Following the theoretical explanation and empirical evidence, the study predicts that the level of underpricing is negatively affected by the extent of intellectual disclosure available in the issued prospectuses. The quality of underwriters is expected to lower the level of underpricing of firm making IPO. Financial leverage, expressed as the ratio of debt over assets, will have positive relationship with the level of underpricing. The company's profitability is expected to positively affect the level of underpricing. The size of the company is negatively related to the level of underpricing.

RESEARCH METHODS

Population in this research are company that conduct IPO at Indonesian stock exchange from 2013 to 2017. The total population are 125 companies. Determination of sample is based on purposive sampling method. The sample must meet two criteria, namely company must experience underpricing when making IPO and the company's prospectus can be accessed online.

The study uses multiple linear regression analysis. To test the prediction and expressed in the following equation:

$$UPS_i = b_0 + b_1ICDI_i + b_2UW_i + b_3LEV_i + b_4ROA_i + b_5SIZE_i + e_i$$

where UPS_i is underpricing shares of company i ; b_0 is a constant; b_1 to b_5 are the values of the regression coefficients of independent variables; $ICDI_i$ is intellectual capital disclosure of company i ; UW_i is the underwriter prestige of the company i ; LEV_i is a financial leverage company i ; ROA_i is return on assets of company i ; $SIZE_i$ is the size of the company i ; e_i is the error term company i .

1. The level of underpricing is measured as follows:

$$UPS = [(Closing Price of Shares - Offering Price) / Offering Price] \times 100\%$$

Intellectual capital disclosure index is measured using measurement developed by Bukh et al. (2005) where there are 78 items and it can be expressed as follows:

$$Score = \left(\sum_{i=1}^m d_i / M \right) \times 100\%$$

where d_i is an item. A score of 1 is given if the item is disclosed in the prospectus, and zero otherwise. "M" represents the maximum items (78 items) of disclosure available in the prospectus.

2. Underwriter prestige (UW) is measured by underwriters' rank of under 50 most active IDX members in total trading frequency from 2013-2017. Scale 3 is given to an underwriter consistently ranked 1-25, scale 2 for ranked 26-50, and scale 1 for non 50 most active.
3. Financial leverage is measured as the ratio of total debt over total equity
4. Return on assets is measured as the ratio of net income after tax over total assets.
5. Size is measured as the natural logarithm of total assets.

RESULTS AND DISCUSSION

Based on the criteria used in sample selection, there are 79 companies that meet the criteria as presented in Table 1 below.

Table 1. Sample Selection Process

No	Description	Number of Companies
1	Companies that conduct an IPO at BEI in 2013-2017	125
2	Companies that are not underpriced at the IPO date	(27)
3	The company prospectus can be accessed online	(19)
	Companies that meet the criteria for selecting sample members	79

As required that the company must experience underpricing when making IPO, the study examines the level of underpricing based on year of offering and its corresponding industrial membership. Table 2 shows the results. Overall, the average level of underpricing is 32.9%. Based on the IPO year, the highest average underpricing rate was 55.0% of year 2017 and the lowest average of 25.7% of year 2013. Looking on the industrial based classification, the highest average underpricing rate was 53.6% found in the mining sector and the lowest average of 2.9% occurred in the agricultural sector. So the level of underpricing during the study period is dominated by companies engaged in the mining sector.

Table 2. The Level of Underpricing Based on year of IPO and the Industry Sector

Description	Total IPO	Number of sample	% of Total	Average Underpricing (%)
Year	Panel A – Distribution based on year of IPO			
2013	31	22	71.0	25.4
2014	24	20	83.3	27.7
2015	18	16	88.9	29.2
2016	15	14	93.3	27.2
2017	37	33	89.2	55.0
Total	125	105	84.0	32.9
Sector	Panel B – Distribution based on Sector			
1	5	3	60.0	02.9
2	7	6	85.7	53.6
3	12	9	75.0	23.4
4	5	4	80.0	30.7
5	10	10	100.0	25.3

6	16	16	100.0	34.8
7	20	12	60.0	33.6
8	22	19	86.4	39.5
9	28	26	92.9	33.5
Total	125	105	84.0	32.9

Note:

1 (Agricultural), 2 (Mining), 3 (Basic and Chemical Industry), 4 (Miscellaneous Industry), 5 (Consumer Goods Industry), 6 (Property, Real Estate and Building Construction), 7 (Infrastructure, Utilities and Transportation), 8 (Finance), 9 (Trade, Service and Investment).

The statistical description describes the data characteristics. Descriptive statistics of the variables are shown in Table 3.

Table 3. Descriptive Statistics of Variables

Variable	Mean	Maximum	Minimum	Std. Deviation
UPS (%)	32.9	70.0	0.4	25.1
ICDI (%)	41.1	62.8	18	12.2
LEV (%)	131.1	1,028.7	-7,585.3	939.4
ROA (%)	7.4	32.0	-27.8	8.9
Ln SIZE	27.5	30.3	23.2	1.4

Note:

UPS is the level of underpricing, ICDI is Intellectual Capital Disclosure Index, UW is Underwriter quality, LEV is Financial Leverage, ROA is Return on Assets, SIZE is Company Size.

In Table 3 it can be seen that the average underpricing rate is 32.9%. The level of underpricing found the current study is greater than Singh and Van der Zahn (2007) of 27.1% and smaller than the findings of Kristiantari (2013) and Zulhawati (2014) with an average of 35.4% and 29.7%, respectively. The average of ICDI variables is 41.1%. The finding reported here is greater than that of Singh and Van der Zahn (2007) and Zulhawati (2014) at 22.3% and 34.1%. The average IC disclosure is less than 50%. This means that that the low disclosure of IC in companies that IPO in Indonesian Stock Exchange. So that often information asymmetry becomes the cause of underpricing. The average financial leverage is 131.1%. The finding is smaller than those of Kusuma (2001) and Kristiantari (2013) of 566.1% and 263.9%, respectively. Average return og assets is 7.4%, which is greater than Kristiantari (2013) of 5.7%. The average asset of the sample company is almost Rp1 trillions.

Multiple linear regression analysis was used to test the predicted effect of the independent variables on the dependent variable. The results of multiple linear regression analysis are shown in Table 4.

As can be seen in Table 4, ICDI has a negative and significant influence on the level of underpricing. This means that the larger the ICDI, the lower the potential level of underpricing. ICD provides a good signal for the company because the more extensive the IC disclosure related to the state of the company's, the less information asymmetry between the company and the investors that in turn will decrease the potential for underpricing. Extensive disclosure of ICs shows companies dare to provide information associated with the company because it has good quality. Good quality companies have a low risk of uncertainty resulting in low underpricing

potential. The results of this study support Zulhawati (2014) and Prasanti and Putra (2015) that ICDI. Yet, it contradicts with Singh and Van der Zahn (2007) who find ICDI has significant positive effect on the level of underpricing.

Table 4. Results of Regression Analysis (n=78)

Variable	Predicted Sign	Unstandardized	Standardized	t-Stat	F (p-value); Adj. R ²
Constant		0.004		0.107	6.720
ICDI	Negative	-1.052	-0.348	-3.380***	(0.000);
UW	Negative	-0.069	-0.278	-2.692***	27.1%
LEV	Positive	0.003	0.125	1.259	
ROA	Positive	-0.228	-0.079	-0.751	
SIZE	Negative	-0.041	-0.200	-1.889**	

Note:

ICDI is Intellectual Capital Disclosure Index, UW is Underwriter quality, LEV is Financial Leverage, ROA is Return on Assets, SIZE is Company Size. The hypothesis test is based on one-tailed test. ***, **, and * mean coefficients are significant at 1%, 5%, and 10% levels, respectively.

The quality of underwriter has a negative and significant influence on the level of underpricing. This finding is in line with the prediction. This means that the higher the reputation of underwriters will further lower the level of underpricing. It ascertains that underwriter quality is a good sign of the company as investors believe that highly reputable underwriters would underwrite only quality companies, thereby reducing the risk of uncertainty about public bidding and resulting in a low potential for underpricing. The result of this study supports Beatty (1989), Carter and Manaster (1990), Kim et al. (1993), How et al. (1995), Kusuma (2001), Bowen et al. (2008), Kristiantari (2013), and Zulhawati (2014) that the higher reputation of underwriters will minimize the risk of underpricing.

The results show that financial leverage has positive but not significant effect on underpricing level. This means that the amount of debt owned by the company does not affect the level underpricing. Based on this, financial leverage is unable to explain that the company ability to pay its debt cannot reflect the risk of the company so it does not relate to the level underpricing. The result of this study is in line with Singh and Van der Zahn (2007) and Kristiantari (2013). However, it contradicts with Kim et al. (1993), Kusuma (2001), Wijayanto (2010), and Susilowati and Turyanto (2011) who find significant positive effect. To make sure whether the level of financial leverage matters on giving the effect to the level of underpricing, we run regressions by dividing the sample into two groups based on median value of financial leverage. However, the findings is qualitatively unchanged. This means that financial leverage is not a strong determinant for the level of underpricing.

Return on assets has a negative but insignificant effect on underpricing level. This means that the size of the profits obtained by the company does not reflect the riskiness of an IPO, so it does not relate to the underpricing level. In other words, profitability is not a signal for the quality of the company making IPO. The result of this study is similar to Susilowati and Turyanto (2011) and Kristiantari (2013). Interestingly, Ambrose et al. (2010) find that return on assets has significant positive effect on underpricing level, but Kim et al. (1993) and Wijayanto

(2010) report significant negative effect. The sensitivity analysis suggests that the level of underpricing is not sensitive to the larger or lower profitability. We divide the sample into two groups based on the median value of return on assets and run the regression analysis. Yet, the results of two regressions are not qualitatively different.

Company size is found to have a negative and significant impact on underpricing level and it is consistent with predictions. This means the larger the size of the company, the lower the company's underpricing rate. Based on this, company size can be a good signal for the company because large company will be indicative that it has been able to survive in the competitive world of business so to make investors more interested to invest. The result of this study is consistent with Bowen et al. (2008) and Kristiantari (2013).

COCLUSION

This study aims to examine the factors that affect the level of underpricing of companies making IPO from 2013 to 2017 at Indonesian stock exchange. It finds that Intellectual Capital Disclosure Index (ICDI) has a significant negative effect on the level of underpricing. The quality of underwriter has a significant negative effect on the level of underpricing. Financial leverage has positive and insignificant effect on underpricing level. Return on assets has negative but insignificant effect on level of underpricing. Company size has negative and significant effect on the level of underpricing. Overall, the study finds that three independent variables have significant effect on the level of underpricing, namely Intellectual Capital Disclosure Index, the quality of underwriter, and the size of the company.

This study has several limitations that can be used as a reference for further research development. Firstly, this research focuses only on groups of companies experiencing underpricing, so it can only know the influence of ICDI, underwriter, financial leverage, ROA, and firm size against underpricing companies. Subsequent research is expected to not only research on companies that have underpricing, but also in companies that experience overpricing. Second, the study period is relatively short so that the sample studied is not too much. The results can be different and can be analyzed better if the study period is longer. Further research is expected to increase the period of study so that later the number of sample members also increases so that more represent the level of underpricing at the time of IPO. Third, this study was conducted on all IPO firms and did not conduct an underpricing level analysis on each sector, so this study did not specifically analyze the level of underpricing in more detail. Subsequent research can also focus more on a group of companies with few ICD criteria, high reputable underwriters, small financial leverage portions, and small firm size in accordance with the results of sensitivity analysis in this study.

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