DETERMINAN OF INTELLECTUAL CAPITAL DISCLOSURE IN INITIAL PUBLIC OFFERINGS

[1]Elok Sri Utami, [2]Tatang Ary Gumanti, [3]Ira Puspita Sari

[1,3]Department of Management, Business and Economic Faculty, Universitas Jember, Jember, Indonesia
[2]Department of Management, Business and Economics Faculty, Universitas Bhayangkara, Jakarta, Indonesia

Abstract: **Intellectual Capital Disclosure (ICD) is one of the current issues in finance. This study is different from traditional Intellectual Capital that is used VAICTM to measure Intellectual Capital of the company (Pulic, 1998). This study uses ICD index developed by Bukh et al (2005). ICD index is consisting of 78 items. ICD is closely related to efforts to reduce the occurrence of information asymmetryy. If the company discloses more information, it will affect investors' perception that the company has a good IPO quality. This study examined the effect of ownership retention, leverage, company size, company age, and underwriter reputation on ICD of companies making initial public offering (IPO) in Indonesia Stock Exchange for periode 2008-2017. There are 68 companies as the population and 65 companies the selection criteria. The data are secondary data generated from company's website and IDX website. Multiple linear regression is used to analyze the data. Results show that there are three variable have positive effect on ICD namely ownership retention, company age, and underwriter reputation. However, other factor such as leverage and company size do not have significant effect on ICD. Ownership retention is a positive signal to investor to show the quality of the company. Companies that have been for years in the business will disclose more IC information. A reputable underwriter will encourage company to disclose more information. Companies with high level of leverage do not disclose more information because they want to mantain its reputation. A large companies do not disclose more IC's information because they want to keep the company's competitive advantages.**

Index Terms: **Intellectual capital disclosure, determinants, IPO**

1. INTRODUCTION

The management of intangible assets is considered very important as one of the company's competitive advantage. Many companies are starting to pay attention to the importance of managing intangible assets as one of their competitive strategies. One of the approach to measuring intangible assets the using intellectual capital (IC). Business dynamics in the 21st century is determined and controlled by intellectual elements and knowledge [1].

The emergence of thoughts about IC was originated from a study, that it could be measured using Value Added Intellectual Coefficient (VAIC TM) [2]. There are three main components of VAIC TM, namely physical capital (measured using Value Added Capital Employed (VACA)), human capital (Value Added Human Capital (VAHU)), and structural capital (Structural Capital Value Added (STVA)). VAIC TM is usually measured using an index.

This study uses a disclosure index to measure Intellectual Capital Disclosure (ICD) [3], [1], [4], [5]. There have been a number of studies examining the relationship between financial performance and IC. Studies have examined the relationship various factors of the financial performance and IC [3], [1], [4], [6], [5], [7], [8], [9]. This study is motivated by the existing regulation on the mandated report of intangible assets as stated in statement of standard on PSAK No. 9.

Previous studies show inconsistent findings. The first research example find company age has positive correlation with ICD [4], but the second research example finds the opposite [10]. Other research find company size has no correlation with ICD [5], but other research reports that company size positively affects ICD [8].

Most of studies on IC are focused on public company. Limited studies have been concentrated on companies making initial public offering [3], [1], [4], [6], [5], [7], [9]. In the case of IPO, IC information is disclosed in the prospectus.

ICD is believed to reduce information asymmetry [1]. If the information received is different between investors, then the informed investors would able to generate profits (abnormal returns). This is also true in the case of IPO. Good quality IPO company would have higher information to disclose information to reduce information asymmetry. ICD is expected to provide investors better information for better valuation of the IPO.

This study focuses on the examination the effect of ownership retention, leverage, company size, company age and underwriter reputation on ICD. Previous studies have shown that ownership retention is positively related to ICD [1], [6], [11]. Apart from that, other variables that are consistenly related to ICD. These include company size [10], [12], [8], and company age [4], [13], [10]. However, some studies do not find significant relationship between ownership retention and ICD [4], [9]; company size and ICD [3], [4], [5], company age and ICD [5], [6].

Based on the results of previous studies of mixed results regarding the factors that affect on ICD, it is interesting to re-examine this issue. This study aims to prove empirically the determinants of ICD in Indonesia IPOs, particularly in the primary sectors (agricultural sector and mining sector) and secondary sectors (basic industries and chemical sector, miscellaneous sector, and consumer goods sector). The primary and secondary sector are chosen because these sector have important role in developing the Indonesian economy through the creation of products. Although it is not directly related to the importance of using human factors

that require knowledge and high intellect as major factors of production as well as service companies, intangible assets such as knowledge will be very useful for companies where such knowledge will be used in creating product innovations for the companies able to survive in industry, face competitors and achieve competitive advantage.

II. LITERATURE REVIEW

Intellectual capital (IC) is one of the company's key strategic assets in the knowledge-based economy [14]. IC is a set of knowledge assets, information, intellectual property, and experience that companies use as resources to create value. The use of knowledge is a major force in creating growth and well being as defined by the Organization for Economic Co-operation and Development [15]. Human intellectual ability becomes an intellectual key and a strategic asset that improves the efficiency of a company. There are three main elements of IC namely knowledge relating to employees (human capital), knowledge relating to the customer (customer capital), and knowledge related companies (structural capital). These three elements form IC [16].

There are no rules that regulate and require the Intellectual Capital Disclosure (ICD). ICD is done voluntarily. In contrast, the mandatory disclosure must be made in accordance with the financial or accounting standards and regulated in the prevailing capital market regulations, voluntary disclosure is made in accordance with the expectation of the company [6]. This indicates that the company is free to disclose what elements or information will be informed in the company report.

There are many benefits for the company when presenting to extensive ICD. For example, ICD will reduce information asymmetry, can affect market perception of the market value and be able to increase the demand for corporate securities [6]. Information asymmetry is a condition where there is a difference in information that managers have better information than investors. In addition, investors will be able to assess the company more accurately about the prospects of the company in the future. Information on IC will affect the company's investment decisions, which in turn will have implications on the company's ability to raise capital.

One study uses Value Added Intellectual Coefficient (VAIC^{TM}) as an instrument to measure the company's IC [17]. This method provides information on efficiency of value creation from tangible assets and intangible assets of the company. This model begins with the company's ability to invent value added. Furthermore, this added value is considered as the most objective indicator to assess business success and show the company's ability in value creation. The VAIC^{TM} method measures IC by calculating the value added derived from the three combinations of human capital known as VAHU, structural capital known as STVA and capital employed commonly called VACA [18]. VAIC^{TM} method is relatively easy to do because the calculation uses the data contained in the company's financial statements. This frame is a traditional IC concept that focuses on the company's financial statements.

This study uses a contemporary intellectual framework that focuses on ICD and focuses on the company's prospectus. The ICD index can be used to measure ICD [3]. There are many IC components included in the process of calculating ICD index. However, there are six main components, namely human resources, customers information technology, research and development, process, and strategy [6]. The first is human resources which include reports on the qualifications of employees, the handling of a task management system of human resource development and employee satisfaction. Customer related issues which include a report on the composition of the customer, the business enterprise to develop relationships and customer satisfaction as well as customer loyalty. The information technology issues cover the scope of availability of information technology systems used to support the company's activities. Research and Development is oriented on the amount of business activity mainly preferred by the company. The process is expression of the quality, error rate, and the waiting time to the perimeter of company. The last is strategy taken by the company in order to utilize existing resources to create value and achieve the company's competitive advantage.

Ownership retention is the proportion of shares retained by the company after IPO. If the old stock owners tend to retain their shares then it will be a good signal to investors that the company has good quality [19]. Companies with high level of ownership retention are seen as having good prospects. The company with good prospect will provide good value of wealth for stockholders in the future. Good quality company will tend to provide more disclosures in the prospectus to support the company quality [9]. Previous studies report conflicting results on the relationship between ownership retention and ICD. Some studies have found positive effects [1], [6], [11]. It means companies with greater interest to retain ownership of the old shares (ownership retention) will disclose more ICD. However, some research report no relationship between ownership retention and ICD [4], [9]. Based on that theory and previous studies, it is known that ownership retention has positive significant effect on ICD. In other words the higher the level of share held by the old shareholder, the wider disclosure of the company's ICD. Thus, the following hypothesis is proposed:
H1: ownership retention positively affects ICD.

Leverage is used to measure a company's ability to pay its liabilities. Company with high debt levels will endure higher agency costs compared to company with a small proportion of debt [20]. To reduce the agency costs, the company seeks to make more disclosures. The agency theory predicts that firms with higher leverage ratios will disclose more information, as the agency cost company with such capital structures is higher [21]. Company with high levels of debt or leverage will tend to disclose more information [7]. That is because the company has an liabilities to provide more extensive information to creditors. Previous studies show leverage positively affects ICD [11], [13]. This indicates that companies with high leverage ratios, then the company will perform more disclosure especially ICD. However, some research show no significant relationship between leverage and ICD [7], [8]. Based on that theory and empirical evidence, it is known that leverage has positive effect on ICD. It means that the higher leverage ratio of the company, the wider the disclosure of ICD's company. Thus, the following hypothesis is proposed:
H2: leverage positively affects ICD.

Company size shows a company scale. Large company tends to engage in more activity and typically has different business units that are critical success factors and has the potential for long-term value creation [22]. An interested stakeholder group will be more often to oversee large companies about how management manages its intellectual capital, such as workers, customers and workers' organizations. Therefore, company is required to disclose more information, including information about intellectual capital. Large size companies have a lot of engagements to parties outside so that the demands in the higher disclosure. Large companies will

reveal more information when compared to small companies [9]. This indicates that company size becomes one of the decisive factors of ICD. Previous studies show different findings on the relationship between company size and ICD. Some research show positive effect [10], [12], [8]. This means that large company will more disclose the company's information mainly related to ICD. However, some research show no significant effect of company size on ICD [3], [4], [9]. Based on the above description, it seem the larger the company, the wider the disclosure of ICD's company. Thus, the following hypothesis is proposed: H3: company size positively affects ICD.

Company age indicates how long the company has been in the business. Old companies are assumed to have more experiences than younger companies. The company has very detailed information about the company and understands the importance of reporting company information to outsiders of companies that have an interest in the company [6]. Company life can be a proxy for company business risk. The extent of company disclosure is usually related to how long the company is in business [4]. Longer the life of the company will provide a wider disclosure of information, including the disclosure of intellectual capital than other company whose age is younger. Some researchers find different results about the relationship between company age and ICD. Some research show that company age has positive influence on ICD [4], [13]. It means a company that has long in running its business, usually the disclosure of ICD will be more widespread. However, [10] reports a negative effect. Other results show that company age have no significant effect on ICD [6], [8]. Based on that explanation and previous studies, can be concluded that company age has positive influence on ICD. The older of the company, the higher is the extent of its ICD. Thus, the following hypothesis is proposed: H4: company age positively affects ICD.

Underwriter is party who assist issuers in preparing and making of prospectus. A reputable underwriter has extensive experience in the preparation of prospectus that contain wider and better information. The underwriter's reputation may impact investors' perceptions of the quality of the company's prospectus. If the issuer uses a reputable underwriter then the investor will respond positively to the information [6]. It can be concluded that a reputable underwriter will be more knowledgeable in disclosing company information including IC compared to underwriters that are not in good standing. Some researchers find different results on the relationship between underwriter reputation and ICD. Some research report that underwriter reputation has a significant positive influence on ICD [6], [13]. It indicates if the company uses reputable underwriter, then disclosure related information ICD's company will be more broadly. In contrast, there is research reports no effect of underwriting reputation on ICD [7]. Based on the afore mentioned explanations, it is known that underwriter reputation has positive influence on ICD. If company uses high reputable underwriter, then the disclosure of ICD will be wider. Thus, it can be hypothesized as follow: H5: underwriter reputation positively affects ICD.

III. RESEARCH METHODS

POPULATION AND SAMPLE

The population of this study are the primary sectors (agricultural sector and mining sector) and secondary sectors (basic industries and chemical sector, miscellaneous sector, and consumer goods sector) that made IPO at Indonesia Stock Exchange during 2008-2017. The sample is determined using purposive sampling method with the following criteria:
1. Company prospectus is accessible on the company's website or other accessible sources.
2. Company has complete data in their prospectus or in other words there is no blank page in the prospectus that causes the incompleteness of data related to research variables.

MEASUREMENT OF VARIABLES

Operational definition and measurement of variables are explained as follow.

Table 1. Operational Definition and Variable Measurement Scale

No.	Variable	Note	Scale
1.	Intellectual Capital Disclosure (ICD)	Calculation ICD index is calculated by the following formula: $$\text{Score} = \frac{\sum di}{M} \times 100\%$$ Where: Score = value of ICD that is disclosured by the company (in percentages). d_i = number of items measured (given score 1 if item is disclosed in the IPO prospectus and given score if the item is not disclosed in the IPO prospectus). M = total number of items measured (78).	Rasio
2.	Ownership Retention (OwnRet)	Ownership retention is the shares proportion held by the owners after the IPO. $$\text{OwnRet} = \frac{\text{the number of share by the owners}}{\text{total number of share after IPO}}$$	Nominal
3.	Leverage (LEV)	Leverage is a company's ability to use assets that have a fixed cost (debt) in order to realize the company's goal to maximize the wealth of the stockholders. $$\text{Lev} = \frac{\text{Total debs}}{\text{total assets}} \times 100\%$$	Rasio
4.	Company Size (SIZE)	Company size is the scale of the company shown by the total value of assets. Size = Ln (Total Assets)	Rasio
5.	Company Age (AGE)	Company age indicates how long the company has been in the bussiness. Age = Ln (Listing date – Establishment date)	Rasio
6.	Underwriter Reputation (UND)	The underwriter reputation is underwriter who is included in the top 20 ranks of 50 most active IDX members in the total trading frecuency. The measurement of underwriter's reputation uses a method by giving a score 1 for underwriters who are included in top 20 ranks of 50 most active IDX members in total trading frequency and score 0 otherwise (Sari, 2011). Underwriter reputation data each year is obtained from IDX Fact Book.	Ordinal

DATA ANALYSIS METHOD

The equation of the regression model is as follows:

$ICD_i = b_0 + b_1 OwnRet_i + b_2 LEV_i + b_3 SIZE_i + b_4 AGE_i + b_5 UND_i + e_i$

Where:

ICD_i = ICD index of company-*i*

b_0 = constants

b_1, b_2, b_3, b_4, b_5 = regression coefficients

$OwnRet_i$ = ownership retention of company-*i*

LEV_i = leverage of company-*i*

$SIZE_i$ = company size of company-*i*

AGE_i = company age of company-*i*

UND_i = underwriter reputation of company-*i*

e_i = error term

IV. RESULT AND DISCUSSION

SAMPLES DETERMINATION PROCESS

There are 65 sample companies meeting the selection criteria. There are three companies that can not be selected as the sample. First, PT. Kertas Basuki Rachmat Indonesia, Tbk., the problem is because the prospectus can't be accessed in many related sites like IDX website, ticmi website and the company's website. Second, PT. Gunawan Dianjaya Steel, Tbk., and PT. Merdeka Copper Gold, Tbk., do not meet the criteria. As there are many blank pages in their prospectus. Table 2. shows the process of selecting the samples.

Table 2. Sample Selection Process

No.	Explanation	Amount
1	Companies of primary and secondary sectors that do an IPO in IDX period 2008-2015	68
2	Companies of primary and secondary sectors is not accesible prospectus	(1)
3	Companies of primary and secondary sectors with incomplete data in prospectus (There are many blank pages)	(2)
	Companies selected as sample	65

Data distribution by year of IPO and sector classification can be seen in Table 3. Based on table, most companies are making IPO in 2017 which is about 20% or 13 companies. Whereas in the year 2016 there are only 2 companies making IPO. The sample is dominated by basic industries and chemical sector which is 28% or 18 companies. While the miscellaneous sector is the sector that perform the least IPO of 11% or 7 companies.

Table 3. Sample based on Listing Year and Sector

Listing Year (Panel A - Based on listing year / IPO)			
Year	Population	Sample	(%)
2008	5	4	6%
2009	4	3	5%
2010	9	9	14%
2011	9	9	14%
2012	7	7	11%
2013	9	9	14%
2014	5	5	8%
2015	5	4	6%
2016	2	2	3%
2017	13	13	20%
Total	**68**	**65**	**100%**
Sector (Panel B - Based on sector clasification)			
Code	Population	Sample	(%)
1	10	10	15%
2	17	16	25%
3	20	18	28%
4	7	7	11%
5	14	14	22%
Total	**68**	**65**	**100%**

Note: 1 (agriculture), 2 (mining), 3 (basic industries and chemical), 4 (miscellaneous), 5 (consumer goods).

The descriptive statistics of each variable are shown in Table 4. The value of ICD is ranging from 32% to 74% and the mean is 56.23%. It shows that the companies disclose its IC items amounting to 56% or about 44 items of 78 items of disclosure on average. The value of ownership retention, leverage, company size, company age and underwriter reputation are 74.91%, 63,69%, 27.22 or Rp 2,167,254,184,084, and 5.99 or 400 days, respectively on average.

Table 4. Descriptive Statistics of Variables

Variable	Minimun	Maximum	Mean	Std Deviation
ICD (%)	32	74	56.23	9.37
OwnRet (%)	27	90	74.91	11.06
Lev (%)	11	60	63.69	23.31
Size (Ln Total Assets)	19.25	30.68	27.2278	1.8438
Age (Ln days)	5.99	9.74	8.5398	0.8956

Note: ICD is Intellectual Capital Disclosure, generated by comparing the number of intellectual capital item (measured by giving score 1 if the item is disclosed and giving score 0 if the item is not disclosed in the IPO prospectus) with the total number of items (78). OwnRet is ownership retention, generated by comparing the number of shares of the old owners with the total number of shares outstanding. Lev is leverage, generated by comparing total debts with total assets. Size is company size, calculated by natural logarithm of total assets. Age is company age, calculated by natural logarithm of the days since the establishment of the company until the date of IPO.

The result of normality test of the model is shown in Table 5. Kolmogorov-Smirnov is used to test whether the value of the regression residual is normally distributed or not. As shown on the table the significance value is 0.925 greater than 0.05, it can be concluded that the data residual is normally distributed.

Table 5. Normality Test Result

Variable	Z-Value	Sig.	Description
ICD	0.668	0.764	Normal
OwnRet	0.834	0.490	Normal
Lev	0.907	0.383	Normal
Size	0.749	0.628	Normal
Age	1.065	0.207	Normal
Res	0.594	0.872	Normal

Note: The variable definitions are shown in the note of Table 4.

The result of multiple linear regression is shown in Table 6. All variables have positive coefficients. It is consistent with the prediction. Ownership retention, company age and underwriter reputation significantly affect on ICD, but leverage and company size do not have significant effect on ICD.

Table 6. Multiple Linear Regression Result

Variable	Prediction	Coefficients	t-statistic	Sig.	Description
Constant		-0.065	-0.326	0.373	
OwnRet	Positive	0.204	2.093	0.021	Ha_1 Accepted
Lev	Positive	0.009	0.192	0.424	Ha_2 Rejected
Size	Positive	0.004	0.711	0.240	Ha_3 Rejected
Age	Positive	0.039	3.015	0.002	Ha_4 Accepted
Und	Positive	0.043	1.993	0.026	Ha_5 Accepted

Note: The variable definitions are shown in the note of Table 4.

This study predicts that the five variables will have a positive influence on ICD. In line with the predictions, the five variables have a positive coefficient on ICD. However from the five variables, there are only three variables namely ownership retention, company age and underwriter reputation that have significant influence on ICD, while the other two variables do not have significant effect on ICD.

Classical Assumption Test
a. Multicollinierity Test
    This test is used to check out whether there is a strong corellation between independent variables. Based on the result of multicollinierity test, all variables have VIF value of less than 10. It can be concluded that there is no multicollinierity between those variables.
b. Heteroscedasticity Test
    Gletser test is used to examine heteroscedasticity. The result of Glejser test shows all of independent variables have significant value greater than (α) of 0,05. It indicates that there is no heteroscedasticity.

The result shows that ownership retention has positive effect on ICD. This finding is in support to the theory. The theory states that company with a high level of ownership retention will provide good signal to investors that the company has a good quality [19], so ownership retention will have possitive effect on ICD.

This empirical evidence supports [1], [6], [11]. However, it is different with some research who do not find significant effect [4], [9].

This study concludes that ownership retention has positive and significant effect on ICD. The possible reason is the large proportion held by the old shareholders indicate that the company has good prospects in the future. A good prospect company will provide additional wealth to shareholders. To attract investors, companies will be encouraged to disclose more IC as a way to create value added in their business activities. Therefore, the higher ownership retention by the old owner, the larger the disclosure of IC information.

This study predicts that leverage will have positive effect on ICD, but this result finds no significant. This is in contrast with the theory that states firms with higher leverage ratios will disclose more information [21]. This finding also contradicts with research that state company with high levels of debt or leverage will tend to disclose more information about the ICD's [11].

This finding does not support some studies [11], [13]. However it is similar with some research that leverage does not have significant relationship with ICD [7], [8].

Leverage is not the factor affecting the extent of ICD. A high degree of leverage has no significant effect on ICD. One possible reason for this is because the company wants to maintain the image and reputation of the company. Company does not want to be unoptimized in managing leverage ratios known to external parties. Company with high levels of leverage seem to reduce the level of disclosure so as not to be in the spotlight of the debtholder.

The regression result reports that there is no relationship between company size with ICD. This finding shows that the size of the company does not affect the company to disclose information its ICD. It is in contrast with the theory. The theory states that large company is required to more and more disclose information, including information about intellectual capital because the interested stakeholder group will be more often to oversee large companies about how the company runs its business [22].

This finding is inconsistant with some research who state that company size positively and significantly affects ICD [10], [12], [8]. However, this finding is similar with several other studies that show no relationship between company size and ICD[3], [4], [9].

The study confirms that there is no relationship between company size and ICD. This can be caused by several factors. The first reason could be due to the lack of ability to maximize the company's IC owned so the company decided not to disclose IC. Another reason could be because the company wants to keep its competitive advantage as a secret so its competitors do not imitate it. For example, when a company has employees with good knowledge, skills and innovation skills, it tends to reduce the disclosures associated with it so that competitors do not seek to recruit that employee.

In line with the hypothesis, the result reports that company age positively affects ICD. It is in line with the theory. The theory states the extent of company disclosure usually related to how long the company is in business. The longer the life of the company will provide a wider disclosure of information, including the disclosure of intellectual capital than any other company whose age is shorter [4].

This results is similarly with some research [4], [13]. In contrast, other research reports a negative effect [10]. This finding is also different with several other studies that report company age has no relationship with ICD [3], [7], [8].

This finding indicates that the older of company, the higher is the extent of its ICD. The possible explanation is the company that has been long in the business has a lot of experience in reporting detailed information about company including IC information. Company understands the importance of company information disclose, so company tend to disclose more information to attract the investors.

This study finds that underwriter reputation has positive effect on ICD. Underwriter is party in reducing the occurrence of information asymmetry between issuers and investors through the disclosure of detailed company information. A reputable underwriter has extensive experience to assist the company in preparing its prospectus in order to disclose wider and better company information, especially IC information (Sari, 2011).

This finding supports previous studies that show positive effect of underwriter reputation on ICD [6], [13]. But it has different result with other study that reports no relationship between underwriter reputation and ICD [7].

From the result, it can be concluded that reputable underwriter will disclosure more detail information especially ICD. Through the selection of a reputable underwriter, it will affect investors' perceptions of the quality of the company's IPO.

There are two limitations lified in the study. This study uses five factors as the independents variables to be investigated, this is the first limitation. Other signals may have effect on the ICD. These may include different industries [3], auditor [7] and profitability [10], [9]. Secondly, this study uses the primary and secondary sectors of the study population. The results would be different if it uses other sectors as the study population.

IV.CONCLUSION

This study examines the effect of ownership retention, leverage, company size, company age and underwriter reputation on ICD in primary and secondary sector that do an IPO period 2008-2017. There are 65 company are selected as a samples. The regression analysis was used to test the hypotheses. The conclusion base on the result and discussion are as follows. There are three variables affect ICD, namely ownership retention, company age, and underwriter reputation. However, leverage and company size do not have significant effect on ICD.

According to the results of hypotheses testing, discussion, and limitations, the following is proposed. The next researchers are advised to use more proxies such as fundamental analysis for example ROA, ROE, or EPS [10], [9] and external factor such as

auditor [7] to examine the determinants of ICD. Researchers can conduct similar research with a narrower object to get more accurate results of research on a particular sector company or can also perform comparison between sectors.

REFERENCES

[1]   I. Singh and J. L. W. M. Van Der Zahn, "Determinants of intellectual capital disclosure in prospectuses of initial public offerings," *Account. Bus. Res.*, vol. 38, no. 5, pp. 409–431, 2008, doi: 10.1080/00014788.2008.9665774.

[2]   A. Pulic, "Measuring the Performance of Intellectual Potential in Knowledge Economy," 1998. [Online]. Available: http://www.measuringip.at/OPapers/Pulic/Vaictxt.vactxt.html. [Accessed: 04-Aug-2017].

[3]   P. Nikolaj Bukh, C. Nielsen, P. Gormsen, and J. Mouritsen, "Disclosure of information on intellectual capital in Danish IPO prospectuses," *Accounting, Audit. Account. J.*, vol. 18, no. 6, pp. 713–732, 2005, doi: 10.1108/09513570510627685.

[4]   G. Rimmel, C. Nielsen, and T. Yosano, "Intellectual capital disclosures in Japanese IPO prospectuses," *J. Hum. Resour. Costing Account.*, vol. 13, no. 4, pp. 316–337, 2009, doi: 10.1108/14013381011010150.

[5]   M. Cordazzo and P. G. M. C. Vergauwen, "Intellectual capital disclosure in the UK biotechnology IPO prospectuses," *J. Hum. Resour. Costing Account.*, vol. 16, no. 1, pp. 4–19, 2012, doi: 10.1108/14013381211272617.

[6]   R. Y. H. K. Sari, "Pengaruh Ownership Retention, Reputasi Underwriter, Umur, dan Komisaris Independen Terhadap Pengungkapan Intellectual Capital Dalam Prospektus IPO Dengan Proprietary Cost Sebagai Variabel Pemoderasi," Universitas Sebelas Maret, 2011.

[7]   G. R. Septiana, E. Nur, and A. Yuyetta, "Analisis Faktor-Faktor Yang Mempengaruhi Pengungkapan Intellectual Capital Pada Prospektus Ipo," *Diponegoro J. Account.*, vol. 2, no. 3, pp. 335–349, 2013.

[8]   S. Faradina, "Faktor-Faktor yang Mempengaruhi Pengungkapan Intelectual Capital pada Perusahaan Property dan Real Estate yang Terdaftar di Bursa Efek Indonesia Tahun 2010-2014," Universitas Islam Negeri Syarif Hidayatullah, 2015.

[9]   C. Nishak, "Pengaruh Profitabilitas, Leverage, Ownership Retention, dan Ukuran Perusahaan terhadap ICD pada Perusahaan yang Melakukan Initial Public Offering," Sekolah Tinggi Ekonomi Perbanas Surabaya, 2017.

[10]   H. Oktavianti, "Faktor-Faktor yang Mempengaruhi Pengungkapan Intellectual Capital," *J. Ilmu Ris. Akunt.*, vol. 3, no. 5, pp. 1–18, 2014.

[11]   K. Kumala and M. Sari, "Pengaruh Ownership Retention, Leverage, Tipe Auditor, Jenis Industri Terhadap Pengungkapan Intellectual Capital," *E-Jurnal Akunt. Univ. Udayana*, vol. 14, no. 1, pp. 1–18, 2016.

[12]   D. Leonard and I. Trisnawati, "Pengaruh Karakteristik dan Fundamental Perusahaan terhadap Pengungkapan Modal Intelektual," *J. Bisnis dan Akunt.*, vol. 17, no. 2, pp. 168–177, 2015.

[13]   A. A. Rashid, M. K. Ibrahim, R. Othman, and K. F. See, "IC disclosures in IPO prospectuses: Evidence from Malaysia," *J. Intellect. Cap.*, vol. 13, no. 1, pp. 57–80, 2012, doi: 10.1108/14691931211196213.

[14]   Wasim-ul-Rehman, N. Asghar, and H. ur Rehman, "Intellectual capital efficiency and financial performance of insurance sector in Pakistan: A panel data analysis," *Middle East J. Sci. Res.*, vol. 17, no. 9, pp. 1251–1259, 2013, doi: 10.5829/idosi.mejsr.2013.17.09.12285.

[15]   A. Rahardian, "Analisis Pengaruh Intellectual Capital Terhadap Kinerja Perusahaan; Suatu Analisis Dengan Pendekatan Partial Least Squares," Universitas Diponegoro, 2011.

[16]   B. Boekestein, "The relation between intellectual capital and intangible assets of pharmaceutical companies," *J. Intellect. Cap.*, vol. 7, no. 2, pp. 241–253, 2006, doi: 10.1108/14691930610661881.

[17]   A. Pulic, "Intellectual capital – does it create or destroy value?," *Meas. Bus. Excell.*, vol. 8, no. 1, pp. 62–68, 2004, doi: 10.1108/13683040410524757.

[18]   S. Dwie Lestari, H. Paramu, and H. Sukarno, "Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perbankan Syari'Ah Di Indonesia," *EKUITAS (Jurnal Ekon. dan Keuangan)*, vol. 20, no. 3, p. 346, 2017, doi: 10.24034/j25485024.y2016.v20.i3.1838.

[19]   H. E. Leland and D. H. Pyle, "Informational Asymetries Financial Structure and Financial Intermediation," *J. Finance*, vol. XXXII, no. 2, pp. 371–387, 1977.

[20]   L. M. Portela de Lima Rodrigues, L. Oliveira, and R. Craig, "Applying Voluntary Disclosure Theories to Intangibles Reporting: Evidence from the Portuguese Stock Market," *SSRN Electron. J.*, 2005, doi: 10.2139/ssrn.825764.

[21]   M. C. Jensen and W. H. Meckling, "Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure," *J. financ. econ.*, vol. V.3, no. 4, pp. 305–360, 1976.

[22]   S. Bozzolan, F. Favotto, and F. Ricceri, "Italian annual intellectual capital disclosure:An empirical analysis," *J. Intellect. Cap.*, vol. 4, no. 4, pp. 543–558, 2003, doi: 10.1108/14691930310504554.