Journal of Economics, Finance and Management Studies

ISSN(print): 2644-0490, ISSN(online): 2644-0504

Volume 3 Issue 08 August 2020

Article DOI: 10.47191/jefms/v3-i8-02

Page No.- 117-125

The Determinant of Underpricing Towards IPO Company at Indonesia Stock Exchange in 2019

Ario Hestu Utomo¹, Augustina Kurniasih²

¹Master of Management, Mercu Buana University, Jakarta Indonesia ²Lecturer of Postgraduate, Mercu Buana University, Jakarta, Indonesia

Abstract: This research aim to examine the influence from leverage, profitability, company size, and underwriter reputation towards level of underpricing on initial shares at Indonesia Stock Exchange in 2019. The population from this research was company who did IPO in 2019. The sample chosen by purposive sampling technique. So it was selected of 51 companies. Data collection was carried out by took data from company's financial statements from its official Indonesia Stock Exchange website. This analytical method used multiple linear regression analysis with Assist of Eviews program version 10. The results showed that leverage, profitability and underwriter reputation had no significant impact on underpricing of initial shares at Indonesia Stock Exchange in 2019, company size had significant and negative impact on underpricing of initial shares at Indonesia Stock Exchange in 2019.

Keywords: Leverage, profitability, company size, underwriter reputation and underpricing.

I. INTRODUCTION

In globalization era, business competition has becoming increasingly tight, alongside with developments in technology and information. Relate to this competition, the company seeks to continue to maintain its business by expanding, whereas this expansion requires more funds. One of funding source for expansion could be obtained from capital market.

The initial public offering from company in capital market to raise funds are known as an initial public offering (IPO). IPO took place in primary market. Furthermore, shares could be traded in secondary market.

While a company did initial public offering, underpricing conditions often occur, which is a condition whereas the price from shares offered on primary market is lower than the price on first day trading on secondary market. Kunz and Aggarwal (1994).

Year	IPO Company	Underpricing	Percentage
2015	18	16	88,89
2016	15	14	93,33
2017	35	32	91,43
2018	55	52	94,55
2019	55	51	92,73
Total	178	165	92,7

Table 1. Underpricing on IPO Companies in 2015–2019

Source: Processed Data (2020)

Based on Table 1, shows that in 2015-2019 period there were 178 IPOs at Indonesia Stock Exchange (BEI). Data that provide at the time said most of companies had experienced underpricing, that reached an average of 92.70%. Underpricing is an unfavorable condition for companies who engaged with IPOs, because it won't get maximum. In the other hand, underpricing is advantageous for investors because it would increase their opportunity to get benefit from price difference between primary market and secondary market.

Underpricing phenomenon occurs due to asymmetric information. One of efforts to reduce the asymmetric information was a prospectus which contained company's financial and non-financial information. The company provides information about level

of debt (leverage), level of sales, profit generated (profitability), company size and underwriters who could assist in IPO process.

This research aims to gained empirical evidence from the influence of leverage, profitability, company size and underwiter reputation towards underpricing that occurred on IPO that conducted at IDX in 2019. This study results were expected to be an advantage for potential investors, company management, academics and regulators.

II. LITERATURE REVIEW

A. Theoretical Review

Asymmetric information or information inequality occurs when one party part of transaction has more or better information than other party Arkelof (1970). Basically the seller (in this case those company who conducted the initial public offering) has more information about the product better than the buyer, although the opposite is also possible. In the other hand, investors, as outside party from the company, generally have less information. This condition will causing the investors would give a low value on company to reduce risks that occur in the future.

Signaling Theory was utters by Spence (1973). This theory explained that actions which took by the company by giving a signal about company condition. When conducting an IPO, the company would provides a signal of company's condition which captured through published prosepectus. This prospectus contained information about condition of company that could be used by investors, so investors would adjust their decisions according to that information.

Leverage is ratio that measures a company's ability to meet its long-term obligations. The most commonly used leverage ratio is debt to equity ratio (DER). Horne and Wachowicz (1997) stated that DER is a simple calculation that compares the company's total debt from shareholder capital. If debt to equity ratio is high enough, it would shows the high use of debt. High debt could create difficulties on company financial and increase the risk of bankruptcy.

The company aims to earned lots of profit. The higher ability to earned profits, the more attractive shares from company are. Profitability is the company's ability to get profit (profit) in certain period Kurniasih and Heliantono (2016). One of the ratios could be used to measure profitability is Return on Assets (ROA). The higher of ROA level from a company, the lower risk inability to pay on the company and the better ranks given to the company.

Assets are a measure of the scale or size from a company. In general, large companies are better known by public and information would be easier to obtained. Theoretically, a larger company has greater certainty than a small company so it will reduce the level of uncertainty regarding the company's future prospects. It would help investors to predict about risks that might occur when investing in company. Yolana and Martani (2005).

The issuer and underwriters are the parties that could determine the share price on IPO. An underwriter is a party who knows or has a lot of information about capital market, while the issuer is a party who did not recognize about Rock's capital market (1986). In IPO underwriter process had responsible to the sale of issuer's shares. The initial share turn over requires the ability to determine the initial shares price. The more precise the determination of initial share price, the easier company's initial shares will be sold. Underwriters who are able to determine an optimal initial price usually called reputable underwriters. The higher underwriter's reputation is believed would set the good price on initial price . The method that commonly used to measure underwriter's reputation is the use of 10 most active brokerage in total frequency indicator on IDX, which is by measuring the underwriter's reputation variable using a dummy variable which gave a value of 1 for a reputable underwriter and 0 for unreputable underwriter. Khin et al. (2016).

B. Hypothesis

The influence of leverage on underpricing

Capital structure theory stated that the higher of debt a company would create higher of risk to the company. The higher of risk of company, the higher return that would expect from investors towards its company's shares. The higher expected yield, the greater difference between shares price in primary market to initial shares price in secondary market. Research from Srifatmawati (2018), Kartika and Putra (2017), Banerjee (2015) and Rani and Kaushik (2015) found that the higher Debt to Equty Ratio of company, the higher level of underpricing.

H1: Therefore It was suspected that Debt to Equity Ratio had positive influence towards underpricing.

The influence of profitability to underpricing

Companies which capable to generate high profits will shows good performance. The higher profitability performance of company, the greater sign that company gives. The stronger signal earned, the smaller asymmetry of information that investors have with the company's internal parties. The smaller asymmetry information ,the smaller gap between shares price in primary market and secondary market. Research by Srifatmawati (2018), Banerjee (2015) and Rani and Kaushik (2015) found that the

higher company's ROA, the lower the underpricing.

H2: Therefore It was suspected that Return on Assets had negative impact towards underpricing.

The influence of company size towards underpricing

Large companies have more information and could be accessed by investors. The more information is available, the lower asymmetry information between investors and company's internal parties. Thus, the smaller gap between the share price in primary market and secondary market. Research by Khan and Chowdhury (2017) and Kartika and Putra (2017) found that company size was indicated by total assets owned from the company. The bigger company assets, the bigger company size would be. The bigger size of the company, the clearer information regards the company, thereby it would reducing the level of uncertainty and minimizing level of risk and underpricing.

H3: Therefore It was suspected that company size had negative influence on underpricing.

The influence of underwriter's reputation on underpricing

Research by Mandasari, Wijayanti, Masitoh (2018) and Zouari, Boudriga and Taktak (2011) stated that underwriters with high reputations are willing to give high prices as a consequence for quality of the guarantee, therefore it would reducing the level of underpricing. Underwriters with high reputations have more confidence in success of shares offered which absorbed by the market and a good underwriter's reputation will give a good signal to the market.

H4: Therefore It was suspected that underwriter's reputation had negative influence on underpricing.

III. RESEARCH METHODS

The population of this research was companies that carry out IPOs on IDX in 2019, with total companies of 55. The sample chosen by purposive sampling technique. Samples that meet the criteria of 51 companies, because 3 companies experienced overpricing and 1 company did not experience changes in shares prices. The data used secondary data which obtained from company's financial statements from official IDX website. According to research purpose which namely to find the influence from independent variables (leverage, profitability, company size, and underwriter's reputation) towards dependent variable (underpricing), therefore it used multiple linear regression approach. Regression approach needs proved if the regression model result is BLUE (Best Linear UnPure Estimator) thats why its necessary to test this classical assumptions, including tests of normality, multicollinearity, heteroscedasticity and autocorrelation. Data processed has been carried out by the help of Eviews program version 10.

IV. RESEARCH RESULT AND DISCUSSIONS

The total IPO fundraising on IDX in 2019 reached IDR 20,940 Trillion. Table 2 shows the details of the number of companies that carried out IPOs and the amount of funds raised by business sector. It could be seen that business sector that managed to get biggest data collection was the Financial Services, Investment and Insurance sector.

Meanwhile, the lowest sector for raised funds was telecommunications and transportation sector.

Table 2. IPO on IDX in 2019

No.	Business Sector	Number of Issuers	Fundraising (IDR)	Percentage
1	Property, Real Estate and Construction	9	2,853,168,135,000	13.63
2	Mining, Plantation and Animal Husbandry	8	2,361,277,316,000	11.28
3	Food & Beverage	8	4,181,231,500,000	19.97
4	Electronics, Textiles and Wood	6	2,153,176,488,000	10.28
5	Financial Services, Investment and Insurance	4	5,726,109,110,000	27.34
6	Telecommunication and Transportation	4	242,353,665,600	1.16
7	Advertising, Printing & Media	2	1,552,730,463,600	7.41
8	Chemical Basic Industry and Heavy Equipment Machiner	y 2	402,232,000,000	1.92
9	Other Industries	12	1,468,332,737,000	7.01
	Total	55	20,940,611,415,200	100

Source: Indonesia Stock Exchange (2020)

Descriptive analysis from research variables in table 3 shows that in 2019, the average value of Underpricing reached 53.82% with the lowest (minimum) value was 0.75% and the highest (maximum) value was 70%. This underpricing phenomenon presumed had supported most academic theories which underpricing was done on purpose (Baron, 1982; Rock, 1986; Allen and Faulahaber,

1989). The initial public offered price which set as an "inviting" price level that has excessive demand from potential investors. High demand from potential investors will result a better level of welfare, both of issuers and investors. According to Allen and Faulhaber (1989), companies that have good investment projects will provide a good signal to potential investors by offering shares at a low price (underpricing), this situation wont happened by companies which have less good investment projects. Description of Debt to Equity variable Ratio from table 3 could be seen that average DER variable from 51 sample companies that had been studied in 2019 was 2.82. It was indicated that average debt value on IPO company in 2019 was greater than capital. The lowest value was 0.00 and the highest one was 56.41. The highest DER value was PT Arkha Jayanti Persada Tbk (ARKA) by DER value was 56.41. The lowest DER value came from PT Fuji Finance Indonesia Tbk (FUJI) with DER value of 0.00. The description from Return on Assets variable in table 3 could be seen that mean value of ROA from 51 sample companies that studied in 2019 was 2.70%, meaning that average value of company's ability to generate profits from the use of its total assets was 2.70%. The lowest value was - 35.16% because company experienced a loss at the end of the year before the IPO and for the highest value was 60.59%. The highest ROA value came from PT Bima Sakti Pertiwi Tbk (PAMG) with ROA value of 60.59%. And the lowest ROA value was from PT Bliss Properti Indonesia Tbk (POSA) with ROA value of -35.16%. The description from company size variables in table 3 could be seen that average company size variable from 51 sample companies that been studied in 2019 was 26.56. The lowest value was 24.40 and highest value was 30.38. The highest value of Company Size was PT Gunung Raja Paksi Tbk (GGRP) with Company Size Value of IDR 15,559,701,718,365 and the lowest Company Size value was from PT Krida Network Nusantara Tbk (KJEN) with Company Size value of IDR 39,342,424,864

Variable Deviation	Mean	Maximum	Minimum	Std.
Underpricing %	53,82	70	0,75	18,78
Leverage (DER)	2,82	56,41	0	8,25
Profitability (ROA) %	2,7	60,59	-35,16	13,05
Size (SIZE)	26,56	30,38	24,4	1,3

Table 3. Descriptive Statistics from Research Variables

Source: Processed Data (2020)

ι

Description of reputation from underwriters that used from 51 companies based on Figure 1 with issuers that use underwriters which included in the top 10 most active underwriters (56% or 29 issuers) than issuers that use underwriters outside the last 10 (44% or 22 issuers). The underwriter will become a consultant of company in carry out shares offered so asymmetric information could be minimized. Issuers choose reputable underwriters with the hope that they will set prices which close to the true value from company, so as not to harm the issuer.

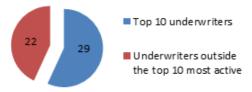


Figure 1. The issuers based on under writer reputation Source: Processed Data (2020)

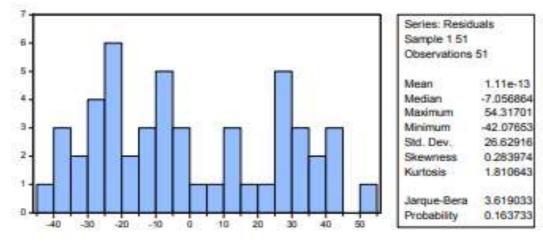
A. Multiple Linear Regression

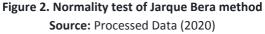
This regression analysis aims to discover the influence of independent variable to dependent variable. To examine those hypothesis in this research, the regression equation model will be used as follows.

If the β coefficient was positive (+) then there had unidirectional influence between independent and dependent variables and conversely, if the β coefficient was negative (-) this was indicated negative influence whereas an increase in value of independent variable will result in decrease of value from dependent variable.

B. Results and Discussions

The results from normality test in Figure 2 show the Jarque-Bera value of 3.619 with probability of 0.1637, while the Chi Square value for independent variable was 4 with significance value of 0.05 is 9.487. The JB value was smaller than the Chi Square table value (3,619 <9,487), so it could be concluded that residual data in this research was normally distributed.





Multicollinearity test results in Table 4 show that the Centered VIF value for this four independent research variables has less than 10. It could be said that regression model was free from multicollinearity problems.

Table 4. Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
С	2.760.310	40.29	NA
DER	0.103617	1.130	1.0099
ROA	0.047072	1.197	1.1468
SIZE	3.392859	41.11	1.0419
RUW	33.16477	2.752	1.1874

Source: Processed Data (2020)

The results from heteroscedasticity test by Glejser method in table 5 show that the prob. value of each independent variable was greater than 0.05. Thus it could be concluded that there were no symptoms of heteroscedasticity in this research model.

Table 5. Heteroscedasticity Test Results

Variable	Coefficient	Stand-Error	t-	Prob.
			Statistic	
С	-14.84	33.63	-0.441	0.661
DER	-0.225	0.206	-1.093	0.279
ROA	0.004	0.138	0.326	0.745
SIZE	0.977	1.277	0.765	0.448
RUW	4.657	3.686	1.263	0.212

Source: Processed Data (2020)

Durbin Watson value could be seen in table 6 of Regression output was 2.002. DW table with a significance level of 0.05 and number of data (n) = 51, and k = 4 (k is number of independent variables) produced a DU value of 1.72. It could be stated that the 4-DU value was 2.28. It could be concluded that there had no autocorrelation problem because DU < DW < 4-DU equation had fulfilled (1.72 < 2.002 < 2.28)

Table 6. Autocorrelation Test Results

S.E. of regression	1.909.282	Akaike info criterion	8.863.376
Sum squared resid	16039.58	Schwarz criterion	9.128.528
Loglikelihood	-2.190.161	Hannan-Quinn criter.	8.964.698
F-statistic	0.014855	Durbin-Watson stat	2.002.485
Prob(F-statistic)	0.999984		

Source: Processed Data (2020)

All classical assumption tests met the requires. Furthermore, the results from data processing on regression model were arranged to produce the output as presented in Table 7.

 Table 7. Regression Model from influence of Leverage, Profitability, Company Size and Underwritter Reputation towards underpricing IPO o BEI 2019

Variable	Coefficient	t-Statistic	Prob.
С	54.428	2.939	0.005
DER	0.060	0.186	0.852
ROA	0.021	0.097	0.922
SIZE	-3.731	-2.869	0.067
RUW	-3.050	-0.529	0.598
R ²	0.461		
Adj-R ²	0.384		
F-statistic	5,991		

Source: Processed Data (2020)

Based on Table 7, shows that regression model which prepared is a fit model. The result from simultaneous test showed that probability of F-count was 5.991. The value of Adj-R2 was 38.4%. This means that leverage, profitability, company size and underwriter reputation were capable to explained underpricing variability which occurs of 38.4%. The rest, as much as 61.6% was influenced by other factors which not included in this research model. While the resulting of regression equation is:

UP = 54,428 + 0,060DER + 0,021ROA - 3,731SIZE - 3,050RUW

The constant has value of 54,428 with t-count value of 2.939. The t-table value for research data was 2.012. Because this value of t-count > t-table which means that the constant had significant (has meaning). When independent variables (DER, ROA, Company Size and Underwriter Reputation) were zero, the underpricing that occurs was 54.428%.

DER variable had coefficient value of 0.060 with t-count value of 0.186. The value of t-count < t-table (0.186 < 2.012) means that the influence from leverage to underpricing was not significant.

ROA variable had regression coefficient value of 0.021 with t-count value of 0.097. The value of t-count < t-table (0.097 < 2.012) it was indicated that the influence of profitability to underpricing was not significant.

The SIZE variable had regression coefficient value of - 3,731 with t-count value of -2,869. The value of t-count > t- table (2.869 > 2.012) it shows that the influence of company size towards underpricing was significant. When the size of company increased by 1%, the underpricing will decreased by 3.731%.

The RUW variable had regression coefficient value of -3.050 with t-count value of -0.529. The value of t-count < t- table (0.529 < 2.012) shows that the influence from underwiter reputation on underpricing was not significant.

Impact of DER (Debt Equity Ratio) on Underpricing

The first hypothesis which states that DER had positive influence towards underpricing was not proven. It was found that DER had no significant impact on underpricing. The results were in line with research by Kartikawati, Yuliana, Tarmizi (2019), Mandasari, et al (2018), Retnowati (2013) that states if Debt to Equity Ratio (DER) had no significant influence over level of underpricing.

This result supports the theory from Modigliani and Miller (1958) which stated that companies which have debt are not always worse off than companies that do not have debt, because possibility of high debt levels related to getting benefits from taxation (tax shield). It caused by the fact if investors caught the signal and sent to company's prospectus, who use the funds to be received from IPO is partly intended to pay off the company's obligations, therefore in the future the company will not be burdened with high obligations and its performance will be much better which will have an impact to the rise of company and its future share price.

This is supported by empirical condition from PT. Arkha Jayanti Persada, Tbk (ARKA), which issued its first shares in 2019, had DER value of 56.41 and experienced an underpricing level of 50.00%. In the other hand, PT. Fuji Finance Indonesia, Tbk (FUJI), which issued its first shares in 2019, had a smaller DER value of 0.00 but the underpricing rate was greater, reaching 70.00%.

Based on this description, it could be concluded that in doing investment decisions, investors do not really consider the company's debt level. However, the results of this research were not in line with results of research conducted by Banerjee (2015) in India on IPO in 2007-2013, as well as research by Rodoni, Mulazid and Febriyanti (2018) in Indonesia on IPOs in 2010-2014 which stated that DER was against underpricing had positive relationship and significant impact towards underpricing.

Impact of ROA (Return on Assets) on Underpricing

The second hypothesis which stated that ROA had negative impact to underpricing which not proven. It was found that ROA had no significant influence on underpricing. This results were in line with research conducted by Kartikawati, et al. (2019), Mandasari, et al (2018) and Retnowati (2013) which stated that ROA (Return on Asset) had no significant influence towards level of underpricing. ROA is one of profitability ratios to determine the rate of return on shares of assets which owned by the company. ROA used to measure the effectiveness of a company in generating profits by utilizing its assets (Subramanyam and Wild, 2011).

According to signaling theory, the level of company profitability in prospectus will provide a positive signal to investors that company could generate profits in the future. However, this did not affect investors' interest in buying shares. Statistical data shows PT. Bliss Properti Indonesia, Tbk (POSA) at the time of carrying out the IPO was experienced proven loss from ROA value of -35.16%, but investors still bought the shares and received an underpricing of 69.33%. Meanwhile, PT. Bima Sakti Pertiwi, Tbk (PAMG), when issuing its first shares in 2019 had an ROA of 60.59%, received an underpricing rate of 70.00%. The difference in profitability from these two companies is very large, but the gap in underpricing was not different. Its possible that investors did not pay attention to company's Return on Assets because the purpose of investors buying shares is to hope to get dividends in future.

This results from this research were not in line with results from Banerjee's (2015) research in India on IPOs in 2007-2013 and Thoriq, Hartoyo and Sasongko (2018) in Indonesia on IPOs in 2010-2015 which found that ROA had significant and positive influence on underpricing.

Impact of Company Size on Underpricing

The third hypothesis said that company size had negative impact towards underpricing. It was found that company size had negative and significant influence to underpricing. The results from this research was supported the asymmetric theory and signaling theory. The results from this research were in line with the research by Salfida, Dewi and Mukhtaruddin (2014), Winarsih (2018) and Kartika and Putra (2017) who found that company size had negative and significant connection to underpricing.

Company size in general could be interpreted as a ratio from scale or size from an object. Company size shows the size or scale of wealth, the number of sales and the number of employee that company has. Company measurement aims to distinguish quantitatively between large firms and small firms. The size of a company could determined the ability of management to operate and the company with various situations and conditions that it faces (Yulia and Sujana, 2009). The bigger company usually has higher level of efficiency.

Findings of this research was indicated that investors at IDX pay attention to company size in making investment decisions. Investors had confidence that companies that have a large size (through their total assets) perform better. Statistical data shows that PT. Gunung Raja Paksi, Tbk (GGRP), that issued its first shares in 2019, had high total assets of Rp. 15,559,701,718,365 and experienced an underpricing level of 12.50%. In the other hand, PT. Krida Network Nusantara, Tbk (KJEN), which issued its first shares in 2019, had a smaller total assets of Rp. 39,342,424,864 and experienced a higher level of underpricing such as 49.50%.

This finding supports the asymmetric information theory and signaling theory which theoretically states that larger companies had more information so there has less information difference between investors and company's internal parties. Large companies are also considered to give signals of greater certainty than small companies, thereby reducing the level of uncertainty regarding the company's future prospects. This could help investors predict the risks that might occur if investors invest in the company. Large companies are generally better known to the public than small companies because the information about large companies is easier to obtained by investors than small companies.

Impact of Underwriter's Reputation on Underpricing

The fourth hypothesis which said that underwriter's reputation had negative influence towards underpricing was rejected. This results showed that underwriter's reputation had no significant influence on underpricing. The underwriter's reputation did not affect underpricing because the issuer who use a underwriter which had good reputation also could not assure to the investors if

they were capable to estimate the proper (real) value of IPO company. This results were in line with Martani, Sinaga, and Syahroza (2012) and Kartika and Putra (2017) who said that reputation from underwriter had no significant influence towards level of underpricing.

In theory, the underwriter's reputation provides a signal for the market to assess the quality of an issuer, in term of good or bad. A good underwriter's reputation has positive signal for investors in assessing the issuer's shares price is correct. However, there are two conditions for positive signal to be effective, which is the signal should reach potential investors and be perceived as good and not easily imitated by low-quality companies. In the other hand, the use of underwriters with a good reputation is relatively easy for all issuers to imitate, so the investors cannot distinguish the quality of good or bad issuers by only looking at underwriters who underwrite IPO shares (Aini, 2013). Asymmetric Information persists because a group of investors were able to have more information about the prospects of issuing company without paying attention to the shares price that has been calculated by underwriter. The results from this research were not in line with research that conducted by Mandasari, et al. (2018) in Indonesia on IPO time in 2014-2016 and Zouari, et al. (2011) in Tunisia on IPO time in 1992-2008 stated that underwriter's reputation had an impact towards underpricing.

V. CONCLUTION

Based on data analysis result and discussion that has been done, it could be concluded that Leverage, Profitability and Underwriter's reputation had no significant influence on underpricing. Company size found to had significant impact and negative influence towards underpricing. Any increase in company size will be followed by decreased in level of underpricing.

Investors who were going to buy shares in primary market should pay attention to the size of company. If you want to get a large initial return, you should choose a company that has IPO with relatively small size. Future research could be carried out on different IPO period. Beside that, in further research, the other non-financial institutions could be added, such as Public Accountant Firm's reputation in which behind the IPO process.

REFERENCES

- 1) Aini, Shoviyah Nur. 2013. "Faktor-faktor yang mempengaruhi underpricing saham pada perusahaan ipo di bei periode 2007-2011". Jurnal Ilmiah Manajemen. Vol. 1. No. 1. Hal. 88-102
- 2) Akerlof, George. 1970. "The Market for Lemons : Quality Uncertainly and the Market Mechanism", Quarterly Journal of Economic, Vol. 84 No. 3, pp. 488-500.
- Allen, F. and Faulhaber, G.R. 1989. "Signalling by Underpricing in the IPO Market". Journal of Financial Economics, Vol. 23, 303-323.
- 4) Banerjee, Souvik. 2015. "Do Financial Parameters Affect Under-Pricing In Graded Ipos: An Empirical Analysis From The Indian Equity Market". TMC Academic Journal, 10 (1): 20 28.
- 5) Baron, D. P. 1982. "A model of the demand for investment banking advising and distribution services for new issues". The Journal of Finance, 37, 955-976
- 6) Horne dan Wachowicz. 1997. "Fundamental of Financial Management. 9 th ed. New Jersey" Practice Hall International, Inc.
- 7) Kartika, Gusti Ayu Sri dan Putra, I Made Pande Dwiana. 2017. "Faktor-Faktor Underpricing Initial Public Offering Di Bursa Efek Indonesia". Jurnal Akuntansi Universitas Udayana Vol.19.3. Hal. 2205- 2233.
- 8) Kartikawati, Theresia Siwi; Yuliana, Elsa Sari; dan Tarmizi, Tashadi. 2019. "Underpricing Stock Level Of Sharehold In Stock Company Doing Income Smoothing Procedures At The Price Offer Of Prime Stock In Indonesia Stock Exchange". International Journal of Economics and Financial Issues, 9 (2), 105-109.
- 9) Khan, Faysal Ahmad dan Chowdhury, Tasruma Sharmeen. 2017. "Modelling Of Ipo Underpricing In Bangladesh". International Journal of Business and Social Research, Volume 07, Issue 07, 01-10.
- 10) Khin, Aye; Chau, Hong; dan Yean, Leng. 2016. "Impact of Exchange Rate Volatility on Malaysian Natural Rubber Price: Engle-Granger Causality Test". International Conference on Accounting Studies (ICAS). Pp. 15-18.
- 11) Kunz, R. M. dan R. Aggrawal. 1994. "Why initial public offering are underpriced : evidance from Switzerland". Journal of Banking and Finance : 703-723.
- 12) Kurniasih, Augustina and Heliantono. 2016. "Intellectual Capital Bank BUMN terbuka dan pengaruhnya terhadap kinerja perusahaan". Jurnal Ilmiah Manajemen, Volume VI, No. 2, 195 212.
- 13) Mandasari, Novita; Wijayanti, Anita; dan Masitoh, Endang. 2018. "Analysis Of Factors Affecting Theunderpricing Of Common Shares On Initial Public Offering (Ipo) In Indonesia Stock Exchange (Idx)". The 2ndInternational Conference on Technology, Education, and Social Science, pp. 335- 341.

- 14) Martani, Dwi Sinaga; Ika Leony and Syahroza, Akhmad. 2012. "Analysis On Factors Affecting Ipo Underpricing And Their Effects On Earnings Persistence". World Review of Business Research, Vol. 2. No. 2. Pp. 1 15.
- 15) Modigliani, Franco and Miller, Merton H. 1958. "Source: The American Economic Review", American Economic Association, Vol. 48, No. 3 pp. 261-297.
- 16) Rani, Poonam and K. P. Kaushik. 2015. "Underpricing, Firm'S Accounting Information And Grading Of Ipos: An Empirical Analysis Of Indian Private Sector". The IUP Journal of Applied Finance, Vol.21 (1) pp. 1-17.
- 17) Retnowati, Eka. 2013. "Penyebab Underpricing Pada Penawaran Saham Perdana Di Indonesia". Accounting Analysis Journal 2 (2). Hal. 182-190.
- 18) Rock, Kevin F. 1986 "Why New Issues are Underpriced". Journal of Financial Economics, Vol. 15, Issue 1-2, p. 187-212
- 19) Rodoni, Ahmad; Mulazid, Ade Sofyan and Febriyanti, Rama. 2018. "Phenomena And Determinants Of Underpricing, Flipping Activity And Long Term Performance: An Empirical Investigation Of Sharia Ipo In Indonesia". Int. J. Monetary Economics and Finance, Vol. 11, No. 4. Pp. 395-410.
- 20) Salfida, Ririn; Kencana. Dewi dan Mukhtaruddin. 2014. "The Influence Of Underwriter Reputation, Auditor Reputation, Company Size And Company Age On Underpricing Ipo For Companies Listed In Indonesia Stock Exchange Period 2008-2013". Jurnal Penelitian dan Pengembangan Akuntansi Vol. 8 No. 2. Pp. 209-222.
- 21) Spence, Michael. 1973. "Job Market Signaling". The Quarterly Journal of Economics, Vol. 87, No. 3. pp. 355-374.
- 22) Srifatmawati. 2018. "Analisis Fenomena Underpricing Saham Perdana Di BEI". Journal Economic and Business Of Islam, Vol. 3 No. 1. Hal. 69-90.
- 23) Subramanyam, K. R. & Wild , John J. 2011. "Analisis Laporan Keuangan", Edisi 10, Salemba Empat, Jakarta.
- 24) Thoriq, Kemas Nurcholish; Hartoyo, Sri; dan Sasongko, Hendro. 2018. "Faktor Internal Dan Eksternal Yang Mempengaruhi Underpricing Pada Saat IPO Di Bursa Efek Indonesia". Jurnal Aplikasi Manajemen dan Bisnis, Vol. 4 No. 1. Pp. 19-31.
- 25) Winarsih, Sri. 2018. "Beberapa Faktor Yang Mempengaruhi Underpricing Saham Pada Perusahaan Yang Melakukan Initial Public Offering (Ipo) Di Bursa Efek Indonesia". Jurnal Riset Inspirasi Manajemen Dan Kewirausahaan Volume 2 No. 2. Hal. 102-108.
- 26) Yolana, Chastina dan Martani, Dwi. 2005. "Variabelvariabel yang mempengaruhi underpricing pada penawaran saham perdana di BEJ tahun 1994-2001". Simposium Nasional Akuntansi VIII, hal. 538-553.
- 27) Yulia, Y. & Sujana, J. G. 2009. Pengembangan koleksi. Jakarta: Univ. Terbuka.
- 28) Zouari, Sarra Ben Slama; Boudriga, Abdelkader; Taktak, Neila Boulila. 2011. "Determinants Of Ipo Underpricing: Evidence From Tunisia". The International Journal of Business and Finance Research, Volume 5, Number 1. Pp. 1-34.