

Corporate Governance Mechanism, Underwriter Reputation and IPOs Underpricing: Evidence from Indonesia Capital Market

Gusni^a, Hesty Juni Tambuati Subing^b, Winda Lestari^c, ^{a,c}Business and Management Faculty, Widyatama University, ^bFaculty of Economic, Universitas Widyatama, Indonesia Email: gusni.tanjung@widyatama.ac.id

Indonesia is a country experiencing a high initial public offering (IPO) underpricing. The question is, what are the determinants of the IPO underpricing in Indonesia's capital market? This study examines the effect of good corporate governance and underwriter reputation on the IPO underpricing. To achieve the aims of this study, a total of 46 IPO firms in Indonesia's Stock Exchange were selected using purposive sampling technique from the period of 2013 to 2017. Multiple linear regression analysis was conducted to explain the impact of corporate governance mechanisms and underwriter reputation on the IPO underpricing. The results show that corporate governance mechanisms consisting of a boards of commissioners, independent boards of commissioners, managerial ownership, and institutional ownership, had no effect to the IPO underpricing. Meanwhile underwriter reputation had a negative effect on the IPO underpricing.

Introduction

One important financing method in corporate finance is through the capital market by conducting an initial public offering (IPO). Firms use IPOs as a place to increase firm capital and reduce costs. High IPOs initial return is not a new phenomenon in Indonesia. Almost every capital market in the world run into high IPO initial returns (Agrawal, 2009). High IPO underpricing is also a common phenomenon that occurs in various stock markets, in both developing countries and in developed countries. It is evidence of market efficiency that can harm companies which are trying to raise funds to expand and meet other needs. IPO underpricing is caused by different interests of the parties involved in the IPO, namely companies (issuers), underwriters (underwriters) and investors, that arise due to asymmetry

of information (Baron, 1982; Rock, 1986). Beatty and Ritter (1986), mention that asymmetry of information can lead to company uncertainty on the denomination of IPO before it is registered; the greater the firms uncertainty then the greater the level of IPO underpricing (Dimovski, Philavanh, & Brooks, 2011). One way to reduce asymmetry of information is by implementing corporate governance mechanisms. Jensen & Meckling (1976), mention that corporate governance mechanisms can be implemented through monitoring both internally and externally (Irawan & Pangestuti, 2015).

Barnhart & Rosenstein (1998), mention that corporate governance mechanisms include domestic and outer mechanisms such as board structures (boards of commissioners, independent boards of commissioners, boards of director), managerial ownership, managing compensation, institutional ownership and debt financing level (Hidayat & Kusumastuti, 2014). This research focus is on boards of commissioners, independent boards of commissioners, managerial ownership, and institutional ownership. Corporate governance provides protection for investors and creditors, while also producing a favorable atmosphere for streamlined and sustainable growth of the firms.

Underwriter reputation is believed to have a relationship with IPO underpricing. Underwriters have an important role in firms IPO process, especially in assisting in determining the price of a new share and in the selling-off of it. This is the beginning of the emergence of a conflict of interest. That is, the company wants to maximize the capital receipt by selling-off its shares at a high price, whereas investors want to buy the stock at a degraded price so they shall get a high IPO initial return (Dimovski, Philavanh, & Brooks, 2011). It is impossible to make companies and investors equally satisfied. An underwriter will suggest an IPO firm give "hot" (more highly underpriced) IPOs and investors shall have access to higher underpriced IPO.

The main objective of this research is to re-examine the effect of corporate governance mechanisms and underwriter reputation on IPO underpricing by referring to theory and prior empirical studies that can redound to IPO underpricing sparring in the world and fix our view regarding IPO underpricing. To achieve this, this research examines 46 IPO firms during 2013 - 2017. Indonesia has higher underpricing compared to overpricing and balance pricing each year, therefore a correlation between corporate governance mechanisms and underwriter reputation, as predictive factors with IPO underpricing, offers appealing discussion.

Literature review and hypothesis development

Corporate governance mechanism and IPO underpricing

IPO underpricing is related to corporate governance that covers mechanisms, processes and correlations in organization structure. Corporate governance is a system designed to direct

and control companies in order to achieve company success and corporate accountability by directing attention to the interests of stakeholders and making rules and procedures for making decisions based on laws and ethical values (Sutedi, 2012). Each firm makes corporate governance an important pillar in the company's business activities. Firms with good corporate governance will reduce not only agency conflicts but also asymmetry of information (Maurya & Singh, 2018). Best practice of corporate governance mechanisms will increase firm value, firm competitiveness, and give better access to the capital market (Shleifer & Vishny, 1997). While there are various domestic and outer corporate governance mechanisms, variables used in this research include only boards of commissioners, independent boards of commissioners, managerial ownership, and institutional ownership.

Board of commissioners and IPO underpricing

Boards of commissioners have the function of overseeing and setting up counsel to the managers as well as making sure that companies enforce the corporate governance mechanism well. The size of the board of commissioners in the company will increase effective supervision of firm performance which can reduce agency problems between agents and principals (Sasongko dan Juliarto, 2014). A large size board of commissioners is an effective corporate governance practice because larger board size can improve management performance through the distribution of tasks in accordance with the expertise of each board, which intern can reduce IPO underpricing. Rustami & Yuyetta state that a large board size can improve management performance because the division of tasks is more dispersed and in accordance with the expertise of each board, which can reduce IPO underpricing. Mnif (2013), found the positive relationship between boards of commissioners with underpricing. Darmadi & Gunawan (2013); Sasongko and Julianto (2014); and Hidayat & Kusumastuti, (2014), however, mention boards of commissioners as having a negative effect on IPOs underpricing. Based on the above illustrations and theories, formulation of the first hypothesis of this study is as below:

H₁: Board of commissioners has a negative effect on the IPO underpricing.

Independent board of commissioners and IPO underpricing

Independent boards of commissioners are often measured by the proportion of outside commissioners on the board. The higher the amount of independent board of commissioners, the more likely that the standard of financial information would be observed effectively (Mnif, 2013). Rustami & Yuyetta state that firm supervisory function is better when carried out not only internally by the firm, but also from outside of the company. In a poor institutional neighbourhood, such as Indonesia, independant boards of commissioner are intended to carry out efficacious supervision and secure the interests of minority

shareholders, while also being imperative in reducing agency problems between supervising shareholders and other shareholders (Darmadi & Gunawan, 2013). A number of researchers have attempted to discuss the relation between independent boards of commissioners and IPOs underpricing such as research conduct by Lin and Chuang (2011). Darmadi & Gunawan (2013), found a negative effect of independent boards of commissioners on IPOs underpricing, which means that independent commissioners of Indonesia's IPOs firms fail to present a notable part in lessening asymmetry of information among imminent and potentially new investors. Different results are, however, shown by Hidayat & Kusumastuti (2014). Likewise, Rustami, & Yuyetta (2017), showed that independent boards of commissioners had no effect on the IPOs underpricing. Based on the description above, formulation of the second hypothesis as follow:

H₂: Independent boards of commissioners have a negative effect on the IPO underpricing.

Managerial ownership and IPO underpricing

Managerial ownership shows the proportion of securities kept by managers. Managerial ownership structure is used as an instrument to bring down agency conflict among managers and shareholders. Managerial ownership will motivate manager to act in accordance with the shareholders interests, rather than acting for personal gain. The existence of managerial share ownership will align the position between shareholders and managers, so that managers indirectly work in the interests of shareholders (Sasongko & Juliarto, 2014). Rustami and Yuyetta (2017) states that the double managerial role, as a manager and shareholder, will make the manager feel that they have responsibility as a part of the firm owners to improve the company's performance.

Managers as shareholders do not want a loss on the sale of the firm's new shares to the public, so in setting the offer price, managers will focus on minimizing investment risks that will be borne by the shareholders later. This mechanism will reduce agency problems between agents and principals, thus providing a positive signal that the company is of good quality. Therefore, the company does not need to set the initial share price with the underpricing policy to achieve the success of the IPO (Sasongko & Juliarto, 2014). This perspective is supported by a study which indicated that managerial ownership has a positive effect on the IPO underpricing (Kang1, et. al., 2015). Research conduct by Elston & Yang (2013) found that managerial ownership has a negative effect on the IPO underpricing. Different results were, however, mentioned by Kurniasih and Santoso (2008); Sasongko & Juliarto (2014); and Rustami & Yuyetta (2017), who found that there was no effect of managerial ownership on IPO underpricing. Based on the explanation above, the third hypothesis of this study is as below:

H₃: Managerial ownership has a negative effect on the IPO underpricing.

Institutional ownership and IPO underpricing

Shares owned by institutional investors plays an important role in increasing a company's value because of more effective monitoring, collection of information, and the influence on the firm's policies and achievements by deterring managers from creating sub-optimal decision and acting opportunistically with the resources and skills they have (Shleifer and Vishny, 1986; Tihanyi et al., 2003; Velury and Jenkins, 2006). Investor institutional participation in the firm's ownership structure can also reduce agency problems between large shareholders and minority shareholders to reduce underpricing (Sasongko & Juliarto, 2014). Gilland and Starks (2003), highlight that institutional investors, especially outside institutional investors, have an important part in reforming corporate governance worldwide. Claessens & Fan (2002), argues that in East Asia institutional investors participate in fixing firms corporate governance practices, particularly in relation to reducing conflicts of interest among insider and outsider investors that occur due to the upper ownership structure. However, large share ownership by institutional investors can be a greater opportunity to obtain personal information and prioritize personal interests (Darmadi & Gunawan, 2013). As mention by Lin and Chuang (2011), institutional ownership maybe is used as a tool for cross-ownership of shares which can worsen agency problems and information asymmetry in emerging economies.

A number of studies found a positive effect of institutional ownership on IPOs underpricing, such as research conduct by Bird & Yeung (2010) and Lin & Chuang (2011) through examination of Australian and Taiwan data. Differing research result were, however, found by Kiyamaz (2000); Darmadi & Gunawan (2013); and Sasongko & Juliarto (2014), who mention a negative correlation among institutional ownership and IPOs underpricing. In contrast, Rustami & Yuyetta (2017), found that institutional ownership had no effect on the level of IPO underpricing. Based on this examination of the literature, formulation of the fourth hypothesis of this study is as follow:

H₄: Institutional ownership has a negative effect on the IPO underpricing.

Underwriter reputation and IPO underpricing

Underwriter reputations are believed to have a relationship with the level of IPOs underpricing. Ruud (1993), mentions that underwriters support arrangement of new stock prices, generally intentionally underpricing as a strategy to ensure the success of new issues. A number of studies have focused on the implications of underwriters reputations for both

previous and after listing phases. Underwriter reputation is frequently connected with lower asymmetry of information, better long-term performance, upgrade in analyst scope, and favourable information collection (Booth & Smith, 1986; Dong et al., 2011; Wang and Yung, 2011). Baron (1982), states that the underwriters have better information about stock requests of the issuing firm and stock market shapes. Through this knowledge, the issuer is coaxed by the underwriters to give a price that encourages underpricing in order to avoid issues of unsold shares and reduced marketing costs. Baron (1982) also mentions that the level of underpricing is associated with the issues of uncertain demand for the new shares. Baron's statement is support by Chen et al., (2010). Beatty and Ritter (1986), also mentions that the higher the uncertainty level of new issues, the greater the level of underpricing required by the underwriter to attract investors who are uninformed. Underwriters will provide more stocks to minority issues to particular clients who would profit from the underpricing (Chalk and Peavy, 1987). Carter et al., (1998), states that a higher reputation of underwriters would supply an upper certification advantage and be associated with a lower level of underpricing. Studies conducted by Beatty & Welch (1996); Cooney et al., (2001); and Loughran & Ritter (2004), found a negative correlation among underwriter reputation and IPOs underpricing. In contrast, Dimovski, Philavanh, & Brooks (2011), mention that underwriters reputation has a positive effect on the IPO underpricing. That is, underwriters embroiled in a bigger proportion of capital needs at IPOs are palpably connected with higher underpricing, particularly in bigger IPOs where underwriters are proposed options and where big five accountants are embroiled. Based on this description, the fifth hypothesis of this study can be formularized as follow:

H5: Underwriter reputation has a negative effect on the IPO underpricing

Research Method

This study applied quantitative research approaches. The research collected data from the Indonesia capital market website (www.idx.co.id). The data was secondary data in the form of documents on financial statements, company annual reports, statistic reports, and alike. This research used firms that perform IPOs during the period of 2013 –2017. The number of samples identified using purposive sampling techniques was 46 firms. Additional information was collected from various available resources, such as articles, journals, textbooks, and alike. The data used in this study were cross-section.

The purpose of this study was to analyze the effect of corporate governance mechanisms and underwriter reputation on IPOs underpricing. Dependent variables use in this research were IPOs underpricing, and independent variables uses were board of commissioners, independent board of commissioners, managerial ownership, institutional ownership, and

underwriter reputation. Explanations of the variables used in this study and their measurements can be seen in the table below:

Table 1: Research variables and measurements

| Research Variables | Symbol | Measurements |
|------------------------------------|--------|---|
| Dependent Variable | | |
| IPOs Underpricing | UNP | Initial return divided offer price in primary market |
| Independent Variables | | |
| Board of commissioner | BOC | Number of board of commissioner |
| Independent board of commissioners | IBC | Number of independent board of commissioners |
| Managerial ownership | MGO | Share owned by managerial divided number of share outstanding |
| Institutional ownership | INS | Proportion stock own by institutional divided amount of stock outstanding |
| Underwriter reputation | UNR | Dummy variable, 1 if reputable underwriter and 0 for otherwise |

Multiple regression analysis was used to examine the hypotheses submitted in this research. The regression equation model in this study is as follows (Hussain et al., 2018):

$$UNP = a + \beta_1BOC + \beta_2IBC + \beta_3MGO + \beta_4INS + \beta_5UNR + e$$
Where a is constant; β_1 , β_2 , β_3 , β_4 , β_5 are regression coefficients, and all variables are as explained in table 1.

The primary stage of analysis aimed to make sure that the regression model formed was accurate, unbiased and consistent. This was achieved through the carry out of classical assumption tests including tests of normality, multicollinearity, autocorrelation, and heteroscedasticity.

Goodness-of-fit test was used to find out if the regression model that was formed was appropriate or not by using a F-test. F-test is used to find the linier correlation among independent variables and dependent variable (Lind, Marchal, and Wathen, 2012). Next, coefficient determination test was performed to find out the capability of the independent variables to explain changes in the dependent variable. Finally, hypotheses tests were used to analysis the effect of independent variables individually on the dependent variable.

Result and discussion

Result

Descriptive statistics are shown in table 2 and give a brief summary of each variables use in this research. The results indicate that the average sample used in this study experienced high underpricing, have medium sized of boards commissioners, small sized independent boards of commissioners, low managerial ownership, high institutional ownership, and high underwriter reputations (Saudi et al., 2019).

Table 2: Descriptive statistic of IPOs underpricing

| Variables | Mean | Standard Dev. | Min. | Max. |
|-----------|------|---------------|------|------|
| UNP | 0.32 | 0.26 | 0.00 | 0.70 |
| BOC | 3.35 | 1.25 | 2.00 | 8.00 |
| IBC | 0.44 | 0.14 | 0.25 | 1.00 |
| MGO | 0.12 | 0.20 | 0.00 | 0.77 |
| INS | 0.68 | 0.21 | 0.00 | 1.00 |
| UNR | 0.57 | 0.50 | 0.00 | 1.00 |

Sources: Financial statement, annual report, statistic idx

The result of the classical assumptions tests show that there were no serious problem in the data. The regression model in this research did not experience problems with normality, multicollinearity, autocorrelation, or heteroscedasticity (Sinaga et al., 2019).

Table 3: Multiple regression result

| Variables | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|------------|-------------|--------|
| BOC | -0.018135 | 0.031619 | -0.573563 | 0.5695 |
| IBC | -0.153917 | 0.262989 | -0.585260 | 0.5617 |
| MGO | 0.480928 | 0.308936 | 1.556721 | 0.1274 |
| INS | 0.169846 | 0.287272 | 0.591239 | 0.5577 |
| UNR | -0.216461 | 0.076344 | -2.835328 | 0.0071 |
| C | 0.397251 | 0.274481 | 1.447280 | 0.1556 |
| R-squared | 0.253867 | | | |
| Adjusted R-squared | 0.160601 | | | |
| F-statistic | 2.721955 | | | |
| Prob(F-statistic) | 0.032965 | | | |
| Durbin-Watson stat | 2.063240 | | | |

Sources: Financial statement, annual report, statistic idx

Multiple regression result, as shown in table 3 above, denote that coefficient variations (β) of BOC, IBC, and UNR are negative, which mean there is an inverse relationship between BOC, IBC, and UNR and IPOs underpricing. Meanwhile, MGO and INS are positive, which means there is a direct connection between managerial and institutional ownership with IPOs underpricing.

Results from model tests, known as ANOVA, explain that the regression model used in this research has goodness of fit or there is a linier association among independent variables and dependent variable used in this research.

The value of coefficient of determination was 0.1606, which show that variation of IPOs underpricing in Indonesia capital market for the period of 2013 - 2017 may be affected by corporate governance mechanism and underwriter reputations of 16.06%, while the remaining of 83.94% may be affected by other variables which were not used in this model.

Hypothesis testing results indicate that UNR negatively influenced UNP, therefore the formulated research hypothesis was accepted. Meanwhile, corporate governance mechanism consist of BOC, IBC, MGO, and INS showed no effect on UNP, as indicated in table 3 above, hence, the formulated study hypotheses were not accepted.

Discussion

Corporate governance mechanism plays an important role to direct and control companies in order to achieve company success and corporate accountability by directing attention to the interests of stakeholders and making rules and procedures for making decisions based on laws and ethical values (Sutedi, 2012). Corporate governance mechanism variables, measured by BOC and IBC, were shown not to affect IPOs underpricing, therefore the first and second hypothesis in this research were not accepted. This research denotes the important role of boards of commissioners in ensuring that corporate governance mechanisms currently implemented, are not well proven. The large number of BOC and IBC in the firms has not been competent to gain external capital opportunities due to the BOC policy being limited to supervision and approval based on submissions from the board of directors that are not assessed by investors as being able to overcome uncertainty when the company performs an IPO. This condition shows that the function of the board to oversee and supply counsel to the directors, as well as make sure that the firm has enforced corporate governance mechanism, is in the way of reducing underpricing. This research result is in line with Dolvin & Kirby (2016), who mention that BOC size has no effect on UNP. Hidayat & Kusumastuti (2014); Rustami & Yuyetta (2017) also state that IBC not significant in influencing the IPOs underpricing. This result is in contrast, however, with research conduct by Mnif (2013);

Darmadi & Gunawan (2013); Sasongko and Juliarto (2014); Hidayat & Kusumastuti (2014); Lin and Chuang (2011); Darmadi & Gunawan (2013).

Other corporate governance mechanism variables used in this research are MGO and INS. Both variables have no effect on the IPOs underpricing, hence the third and fourth hypotheses are not accepted. Managerial ownership levels in Indonesian firms are still low, which is why they are not able to influence the decision of new issues price at the general meeting of shareholders. This research result is in line with research conduct by Kurniasih and Santoso (2008), and Sasongko & Juliarto (2014). Rustami & Yuyetta (2017), mention that there is no effect of managerial ownership on the IPOs underpricing. Institutional ownership also has no effect on the IPOs underpricing. This means, higher or low level of institutional ownership in the firm cannot reduce IPOs underpricing. Data show that institutional ownership in IPOs firms are quite high, but their ability to perform effective monitoring, collect information, and influence firm's policies and achievement by deterring managers from creating a sub-optimal decision and acting opportunistically with resources and expertise, are still questionable. The existence of institutional investors is still considered as unable to influence the underpricing level. This research result is in line with Rustami & Yuyetta (2017).

Underwriters have a significant part in the firm IPOs process, especially to assist in determining the price of new issues and in the selling-off of it. Underwriters are embroiled in a bigger proportion of capital needs at IPOs as presiding underwriters are palpably connected with higher underpricing, particularly so in bigger IPOs where underwriters are proposed options. The statistical test results show that UNR has a negative effect on the IPOs underpricing, hence the fifth hypothesis of this study was accepted, which means the higher the underwriter reputation, the lower the level of underpricing. Alternatively, the lower the underwriters reputation, the higher the level of underpricing. Underwriters who have a high reputation usually dare to give high prices as a consequence of their guaranteed quality, therefore they can reduce underpricing levels. This research result is in line with research performed by Beatty & Welch (1996); Cooney et al., (2001); and Loughran & Ritter (2004).

Conclusion

The aim of this study was to identify factors affecting IPOs underpricing by using corporate governance mechanisms (boards of commissioner, independent boards of commissioners, managerial ownership, and institutional ownership) and underwriter reputation as an independent variables, and to specify the variables that have a strong influence on the IPOs underpricing. Multiple regression results show there was no effect of corporate governance mechanisms on the IPOs underpricing. Meanwhile underwriter reputation has a negative effect on the IPOs underpricing in Indonesia's capital market for the period of 2013 -2017.

The relationship between corporate governance mechanism variables are outside of hope, due to not being in line with theory and foregoing studies, whilst underwriter reputation has a negative relationship with IPOs underpricing as expected.

This study has several limitations which should be considered when interpreting the results. Firstly, the sample used in this study was limited to 46 IPO firms in Indonesia's capital market for the period of 2013 – 2017 which fulfilled the criteria. Hence, for further researchers it is recommended to use a greater number of samples, over a longer period of time, to attain more accurate results. Secondly, the independent variables used in the study was still limited. Therefore, it is recommended to use more variables based on previous theories and studies.

REFERENCES

- Agrawal, D., 2009. IPO Underpricing: A Literature Review, SSRN Electronic Journal DOI: 10.2139/ssrn.1724762
- Barnhart, S., & Rosenstein, S. 1998. Board Compensation, Managerial Ownership, and Firm Performance: An Empirical Analysis. *The Financial Review*, Vol. 33(4), 1 - 16.
- Baron, D., P. 1982. A Model of the Demand for Investment Banking Advising and Distribution Services for New Issues. *Journal of Finance* 37, 955 - 976.
- Beatty R., P, Ritter J., R. 1986. Investment banking, reputation, and the underpricing of initial public offerings. *Journal of Finance Economic* 15, 213 - 232.
- Bird, R., & Yeung, D. 2010. Institutional ownership and IPO performance: Australian evidence. Working paper, University of Technology Sydney: Sydney.
- Booth, J.R., Smith, R.L. 1986. Capital raising, underwriting and the certification hypothesis. *Journal of Financial Economics* 15, 261 - 281.
- Carter R., B., Dark F., H., Singh A., K. 1998. Underwriter reputation, initial returns, and the long run performance of IPO stocks. *Journal of Finance* 53, 285 - 311.
- Chalk A., J., Peavy J.W. III. 1987. Initial public offerings: daily returns, offering types and the price effect. *Financial Analyst Journal* 43: 65 - 69.
- Chen H., C, Fok R., C., W., Kang S., H. 2010. Chinese IPO activity, pricing and market cycles. *Rev Quant Financ Acc* 3,: 71 - 87.

- Claessens, S., & Fan, J. P. H. 2002. Corporate governance in Asia: a survey. *International Review of Finance*, Vol. 3(2), 71 - 103.
- Cooney, J., W., Singh, A., K., Carter, R., B., Dark, F., H. 2001. The IPO partial-adjustment phenomenon and underwriter reputation: has the inverse relationship flipped in the 1990s?. University of Kentucky, Case Western Reserve and Iowa State University, Working Paper.
- Darmadi, S., & Gunawan, R.. 2013. Underpricing, board structure, and ownership An empirical examination of Indonesian IPO firms. *Manajerial Finance*, Vol 39(2), 181 - 200.
- Dimovski, W., Philavanh, S., & Brooks, R. 2011. Underwriter reputation and underpricing: evidence from the Australian IPO market. *Rev Quant Finan Acc.* 37, 409–426.
- Dolvin, S. D, Kirby, J. E. 2016. The Impact of Board Structure on IPO Underpricing. *Jurnal of Private Equity Spring*, Vol. 19(2), 15 - 21.
- Dong, M., Michel, J.S., Pandes, J.A., 2011. Underwriter Quality and Long-Run IPO Performance. *Financial Management* 40, 219 - 251.
- Elston, J. A., & Yang, J. 2010. Venture capital, ownership structure, accounting standards and IPO underpricing: Evidence from Germany. *Jurnal of Economics and Business*, Vol. 62(6), 517 - 536.
- Gillan, S. L., & Starks, L. T. 2003. Corporate governance, corporate ownership, and the role of institutional investors: a global perspective. *Journal of Applied Finance*, Vol. 13, 4 - 22.
- Hidayat, A. W., & Kusumastuti, R. 2014. The Influence of Corporate Governance Structure Towards Underpricing. *International Journal of Administrative Science & Organization*, Vol. 21(2), 90 - 96.
- Hussain, H.I., Shamsudin, M.F., Anwar, N.A.M., Salem. M.A. & Jabarullah, N.H. (2018). The Impact of Shari'ah Compliance on the Adjustment to Target Debt Maturity of Malaysian Firms, *European Research Studies Journal*, 21 (2), 48 – 61.
- Irawan, P., & Pangestuti, I. R. D. 2015. Effects of Ownership Structure, Corporate Governance, and Underwriter Reputation on IPO Underpricing's [*Pengaruh Struktur Kepemilikan, Corporate Governance, dan Underwriter Reputation Terhadap IPO Underpricing*]. *Diponegoro Journal of Management*, Vo. 4 (4), 1 - 12.

- Kang1, S. K., Kang2, H. C., Kim3, J., & Kim, N. 2015. Insiders' Pre-IPO Ownership, Underpricing, and Share-Selling Behavior: Evidence from Korean IPOs. *Jurnal Emerging Markets Finance & Trade*, *VI*. 51(3), 66 - 84.
- Kiyamaz, H. 2000. The initial and aftermarket performance of IPOs in an emerging market: evidence from Istanbul stock exchange. *Journal of Multinational Financial Management*, Vol. 10(2), 213 - 227.
- Kurniasih, L., & Santoso, A., L. 2008. Empirical Evidence of Underpricing Phenomenon and Effect of Corporate Governance Mechanism [*Bukti Empiris Fenomena Underpricing dan Pengaruh Mekanisme Corporate Governance*]. *Jurnal Ekonomi dan Kewirausahaan*, Vol. 8(1), 1 – 15.
- Lin, C. P., & Chuang, C. M. 2011. Principal-principal conflicts and IPO pricing in an emerging economy. *Corporate Governance: An International Review*, Vol. 19(6), 585 - 600.
- Lind, D., A., Marchal, W., G., & Wathen, S., A. 2017. *Statistical Technique in Business & Economics*. Seventh Edition. New York: McGraw-Hill Education.
- Loughran, T., Ritter, J., R. 2004. Why has IPO underpricing changed over time? *Financial Management*. Autumn 5 - 37.
- Maurya, S., & Singh, A. K. 2018. Corporate Governance, Ownership Structure, and IPO Underpricing: Evidence from the Indian New Issue Market. University of Delhi. <https://www.researchgate.net/publication/324540932>.
- Mnif, A. 2010. Board of Directors and The Pricing of Initial Public Offerings (IPOS): Does The Existence of A Properly Structured Board Matter? Evidence From France. *La place de la dimension européenne dans la Comptabilité Contrôle Audit, France*.
- Rock, K. 1986. Why new issues are underpriced. *J Financ Econ* 15:187–212.
- Rustami, O., & Yuyetta, E., N., A. 2017. The Analysis of the Effects of Audit Costs, Corporate Governance Practices, and Ownership Structure on IPO Underpricing's [*Analisis Pengaruh Biaya Audit, Praktik Tata Kelola Perusahaan, dan Struktur Kepemilikan Terhadap IPO Underpricing*]. *Diponegoro Journal of Accounting*, Vol. 6(3), 1 - 14.
- Ruud, J. S. 1993. Underwriter price support and the IPO underpricing puzzle. *J Financ Econ* 34:135 - 151.



- Sasongko, B., & Juliarto, A. 2014. Analysis of the Effect of Corporate Governance on the Initial Public Offering Underpricing Level [*Analisis Pengaruh Tata Kelola Perusahaan Terhadap Tingkat Underpricing Penawaran Umum Perdana Saham*]. *Diponegoro Journal of Accounting*, Vol. 3(2), 1 - 10.
- Saudi, M. H. M., Sinaga, O., Roespinoedji, D., & Razimi, M. S. A. (2019). The role of renewable, non-renewable electricity consumption and carbon emission in development in Indonesia: Evidence from Distributed Lag Tests. *International Journal of Energy Economics and Policy*, 9(3), 46-52.
- Shleifer, A. & Vishny, R., W. 1986. Large shareholders and corporate control. *Journal of Political Economy*, Vol. 94 No. 3, 461-488.
- Shleifer, A., & Vishny, R., W. 1997. A survey of corporate governance. *The Journal of Finance*, 52(2), 737-83.
- Sinaga, O., Saudi, M. H. M., Roespinoedji, D., & Razimi, M. S. A. (2019). The Dynamic Relationship between Natural Gas and Economic Growth: Evidence from Indonesia. *International Journal of Energy Economics and Policy*, 9(3), 388-394.
- Sutedi, Adrian. 2012. Good Corporate Governance. First Edition. Jakarta: Sinar Grafika.
- Tihanyi, L., Johnson, R. A., Hoskisson, R. E., and Hitt, M. A. 2003. Institutional ownership differences and international diversification: the effects of boards of directors and technological opportunity. *The Academy of Management Journal*, Vol. 46(2), 195-211.
- Velury, U. and Jenkins, D. S. 2006. Institutional ownership and the quality of earnings. *Journal of Business Research*, Vol. 59(9), 1043-1051.
- Wang, W., Yung, C. 2011. IPO information aggregation and underwriter quality. *Review of Finance* 15, 301.
- Welch I. 1996. Sequential sales, learning, and cascades. *Journal of Finance* 47:695–732.