

# Attention Profitability, Leverage, Managerial Ownership and Firm Size Effect on Big Bath Accounting

Scherrgyo Agung Rhyo Dermawan\* Nengzih Nengzih  
Faculty of Economic and Business, Universitas Mercu Buana, Jakarta, Indonesia

\* E-mail of the corresponding author: [scherrgyoagung95@gmail.com](mailto:scherrgyoagung95@gmail.com)

## Abstract

This research examines the impact of big bath accounting on profitability, leverage, managerial ownership, and firm size. The study used thirty-three firms published on Indonesia Stock Exchange from 2016 to 2020 with 165 observational data. The pattern was analyzed using a logistic regression pattern of variable relationships with SPSS Version 26 software. The result indicates that profitability and leverage significantly influence big bath's accounting treatment so that managers will tend to consider doing big bath accounting at an unfavorable level of profitability and leverage. However, managerial ownership and firm size have no significant impact on big bath accounting. Managers will not continue undertaking extensive bath accounting to maintain the firm's impression among the public. Next research could enhance sample firms and the number of observation periods. Subsequent analysis should find a dependent variable that is not binomial or dichotomy better to reflect the recognition of big bath accounting in firms. The research give suggestions for investor to predict indication of big bath accounting in mining firm at Indonesian Stock Exchange.

**Keywords:** Profitability, Leverage, Managerial Ownership

**DOI:** 10.7176/RJFA/14-4-03

**Publication date:** February 28<sup>th</sup> 2023

## 1. Introduction

The Covid 19 pandemic altered Indonesia's economic structure. These changes resulted in a lack of management and operations, which disrupted the sustainability of the firm, so the firm would need more capital (Ahmad et al., 2021). According to Nasucha and Moenawar (2020), information asymmetry during a pandemic is widening, making managers need to protect their interests. Such conditions will provide gaps and opportunities for managers to practice earnings management (Kustono et al., 2021; Cindy and Rizky, 2022; Ari et al., 2021)

The Covid-19 pandemic has impacted decreasing mining supplies, such as coal. This condition directly affects the results of the realization of coal commodity production. In the first 11 months of 2020, national coal production decreased by 11% (Herry, 2020). Data from the Ministry of Energy and Mineral Resources stated that during the pandemic, firms in the coal production sector, especially with quality coal calories below 4,000 kcal, and mining firms with temporary licenses (Herry, 2020). Therefore, researchers are interested in researching mining sector firms.

Public mining firms are required to prepare financial reports that are relevant, reliable, and comparable in accordance with PSAK. Financial reports cannot be separated from the possibility of earnings management using various methods such as window dressing, income smoothing, big bath accounting, and income minimization (Scott, 2021). For example, managers will influence firm performance to maximize personal gain with earnings management in the form of big bath (Erik, 2021).

Big bath accounting could be done by utilizing the asset impairment approach. Therefore the reported profit will be smaller or perhaps harmful. (Co and Rodiel, 2015). Previous research by Panjaitan and Muslih (2019) found that profitability, leverage and firm size, and managerial ownership significantly affect big bath accounting. This supports the conducted studies by Agustia & Suryani (2018), Hasty & Herawaty (2017), and Kusumawardani & Dewi (2016). Big bath accounting is also found in conducted studies by Kustono et al. (2021). Firms that employ big bath accounting will acknowledge decreases in asset values.

However, the result is different from the research of Athanasakou et al. (2010) and Siggelkow and Zuelch (2010), who argued that managers no longer perform extensive bath accounting due to management's anxiety about the ramifications or impacts if big bath accounting is proven.

According to the phenomenon and various research findings, the author aims to research Profitability, Leverage, Managerial Ownership and Firm Size Effect on Big Bath Accounting (Case Studies of Mining Firms on the Indonesia Stock Exchange from 2016-2020).

## 2. Literature Review and Hypothesis Development

### 2.1 Agency Theory

Jensen & Meckling (1976) states both parties either have rights and obligations in a work agreement that are binding and mutually beneficial for a certain period. Scott (2021), agency theory depicts a type of contract between both the shareholder with manager whose acts in managing the firm, which causes differences in

interests between the two parties. Belkaoui's (2015:34) explain that the contract between the agent and the principal to provide management services so that the principal gets a return, including the granting of power or delegation is called agency theory. Managers want compensation in the form of rewards. The principal, as owner, wants a capital return that has been invested..

## 2.2 Hypothesis Development

Agency theory is when a firm's performance is at the desired level. Study by Kustono et al. (2021), Agustia & Suryani (2018), Hasty & Herawaty (2018), Dian (2014), and Jordan & Clark (2004), when firm performance is below the desired level, management will do big bath accounting by recognition of impairment of assets.

In contrast to the results carried out by Athanasakou et al. (2010) and Siggelkow and Zuelch (2010), Laskariou (2014) states profitability does not affect big bath accounting recognition due to bad impact on society impression. Hence, the hypothesis build is:

H1: Profitability significantly affects the big bath accounting of mining firms.

Agency theory by Scott (2021) aims to describe and explain the accounting process presented so that it can be communicated to other parties outside the firm. Firm managers who approach accounting violations will tend to choose accounting methods that can increase profits, including managing funds from leverage.

According to the presentation of Shoai and Siddique (2020), when operating leverage is too high, the profits become unstable because even the slightest change in sales will significantly affect the profit amount, so it triggers managers to carry out earnings management using big bath accounting.

However, this is different from the research results of Hasty and Herawaty (2017) and Agustia (2013), which found that when operating leverage is too low, the firm still has to pay employee salaries and build rent so that leverage does not affect on big bath accounting. Therefore the hypothesis made is:

H2: Leverage significantly affects the big bath accounting of mining firms.

This agency relationship can lead to conflict when there is a difference in the concern of management and investor. But if there is no separation of ownership between managers and shareholders, it will create a situation that does not allow managers to act in their interests (Horme & Wachowicz, 2014).

According to Panjaitan and Muslih (2019), Hasty and Herawaty (2017) found that shares owned by manager significantly influencing earnings management by using big bath accounting. It shows when the greater the managerial ownership, the less the tendency of earnings management to use big bath accounting.

However, this is different from research conducted by Ahmad et al., Oktavia (2017), Dian (2014), Amabrita & Nuswantara (2009), which found that share of management insignificant affecting earnings management using big bath accounting. The existence of managerial ownership has not succeeded in minimizing earnings management practices through big bath accounting. Therefore, the hypothesis developed is as follows:

H3: Managerial ownership significantly affects the big bath accounting of mining firms.

Kustono et al. (2021) firm size can be determined by the ease with which a firm obtains funds from the capital market. The effect of scale on costs and returns may make larger firms earn more profits. This happens because managers are opportunistic. Managers will delay opportunistic actions by using earnings management through impairment losses.

This supports the research conducted by Shoai and Siddique (2020), Dominico (2019), Muslih (2019), Agustian and Suryani (2018), Dian (2014), Cheng and Warfield (2005), Jordan and Clark (2004) conclude firm size significant on earnings management by doing big bath accounting with asset impairment. When firms experiences better performance, managers will get compensation.

Kuo et al. (2021) and Octavia (2017), in contrast with previous research, found that firm size is insignificant relation to earnings management using the big bath accounting technique. Managers prefer not doing this technique to maintain the firm's impression among the public. Based on this, the hypothesis that has been prepared is:

H4: Firm size significantly affects the big bath accounting of mining sector firms.

## 3. Method

### 3.1 Research Design

This study uses quantitative research. Logistic regression from SPSS version 26 used to analyse the phenomom the effect of profitability, leverage, managerial ownership, and firm size on big bath accounting. The study uses secondary data from financial reports of mining sector firms on the Indonesian Stock Exchange from 2016 until 2020.

Research's samples were selected using purposive sampling with the criteria for firms publishing audited financial reports consecutively from 2016 to 2020 on [www.idx.co.id](http://www.idx.co.id). Financial statements are presented in dollars. The firm offers complete annual financial information. The variables observed are available in the 2016-2020 financial reports.

### 3.2 Dependent Variables (Y)

This section relates to the data output stage. In order to labour redundancy besides negating the adverse The dependent variable (Y) is big bath accounting which uses an indication of impaired assets. Indication of big bath accounting is measured by a dummy variable based on data on the disclosure of impairment losses on investments.

Measurement of big bath accounting through impairment loss refers to research conducted by Kustono et al. (2021), Co & Rodiel (2015), and Laskaridou et al. (2014) using the following model:

0: The firm does not recognize an impairment loss

1: The firm recognizes an impairment loss.

### 3.3 Independent Variable (X)

The independent variables in this study composed of profitability, leverage, managerial ownership, and firm size.

The research uses ROE as a proxy for profitability that affects impairment losses, according to a study by Kustono et al. (2021), Agustia and Suryani (2018), and Hasty and Herawaty (2018). According to Harahap and Syafri (2018), ROE is a measurement tool of income available to owners of invested capital.

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Average Total Equity}} \times 100\%$$

There is a ratio used as an indicator to measure leverage based on Kasmir in his book (2017:155), such as DER:

$$\text{DER} = \frac{\text{total debt}}{\text{total equity}}$$

A firm's management can have shares or ownership of the firm. According to (Mowen et al., 2018), the calculation model is as follows:

$$\text{Manj} = \frac{\text{Shares hold by}}{\text{outstanding management shares}}$$

The larger the firm's size, the greater the total assets owned. Measuring firm size refers to the research of Co and Rodiel (2015) and Erik (2021), which use total assets.

### 3.4 Method

The data processing analysis used in this observation is logistic regression using SPSS version 26, 2022. Logistic regression predicts the likelihood of an event happen by comparing data to the logit function of logistic curve. These method is a common linear model conducted for binomial regression (Ghozali, 2018).

### 3.5 General Equation of Logistic Regression

Based on Ghozali (2018) when a research apply logistic regression technique, there is no test of normality and definitive assumption required for independent variables. Regression model for this reserach are.

$$\text{BB}_{\text{IM}} = \ln \left( \frac{P1}{(1-P1)} \right) = \alpha + \beta_1 P + \beta_2 L + \beta_3 \text{KM} + \beta_4 \text{UP} + e$$

## 4. Results and Discussion

### 4.1 Descriptive Statistics Analysis

Descriptive statistics proceeds 165 observational data were obtained from a total sample of 33 firms for five years from 2016 to 2020.

Table 1. Results of Descriptive Statistics Analysis

Variable	Minimum	Maximum	Average	Std. Dev
BB	0	1	0,20	0,4012
P	-749,41%	125,16%	1,03%	0,7209
L	-161,20%	1567,87%	127,95%	2,0261
KM	0,00%	23,98%	1,94%	0,0441
UP	33.585.560	26.052.070.0000	8.105.766.462	39.685.022.990
Observation	165	165	165	165

Source: Secondary data processed with SPSS 26.0 in 2022

One hundred thirty-two firm observation data do not recognize big bath accounting from assets impairment with a percentage of 80%. Only 33 firm observation data recognize big bath accounting with a percentage of

20%. The average of all samples is 0.20 or 20%, which explain average utilities of an impairment asset is far from maximum value. Hence, the firm's awareness of recognizing an impairment asset is low. Standard deviation is 0.4012, higher than mean value concludes that data diverse over study period.

Profitability has minimum value of -749.41% by PT Energi Mega Persada Tbk in 2016 and maximum value of 125,16% from PT Pelayaran Nasional Bina Buana Raya Tbk in 2017. The average profitability value is 1.03%. The variation in profitability based on standard deviation amounted 0.7209. The standard deviation value profitability is greater than the average values shows variable data varies during research period.

Minimum value of leverage is -161.20% by PT. Bumi Resources Tbk in 2016 and maximum value of 1567.87% from PT. J Resources Asia Pacific Tbk in 2020. The middle mining sector firms have very high leverage. The standard deviation of 202.61% shows the variation contained in the firm's leverage. The standard deviation value of leverage is greater than the average value, which means firm size variable data diverse during the study period.

Managerial ownership of the firm shows a minimum value of 0% and a maximum value of 23.98%. Managerial ownership of the firm is at least 0% in the sample firm. The following details the managerial ownership of 0%, namely PT. Bumi Resources Tbk, PT Dian Swastatika Sentosa Tbk, PT Golden Energy Mines Tbk, PT TBS Energi Utama Tbk, PT Rig Tenders Indonesia Tbk, PT Astrindo Nusantara Infrastructure Tbk, PT Darma Henwa Tbk, PT. Samindo Resources Tbk, PT Petrosea Tbk, PT Bumi Resources Minerals Tbk, and PT Vale Indonesia Tbk.

The highest managerial ownership of 23.98% is PT. Surya Esa Perkasa Tbk. The average value of firm managerial ownership in the sample is 1.94% (low managerial ownership portion). The standard deviation of 0.0441 is smaller than the average value, which means that managerial ownership variable data varies less during the study period.

The firm's size showing a minimum value of US\$33,585,560 is PT. Indo Straits Tbk and a maximum value of US\$260,520,700,000 is PT. Mitrabahtera Segara Sejati Tbk. The average value of firm size in the sample firms is US\$ 8,105,766,462. The average mining industry has substantial assets. The standard deviation of US\$39,685,022,990 indicates the variation that exists in firm size. The standard deviation value in this study is greater than average, which means the firm size variable data varies during the study period.

#### 4.2 Results of General Equation of Logistic Regression

Table 2. Logistic Regression Results

Variable	B	S.E.	Wald	df	Sig.
P	-0,022	0,009	6,570	1	0,010
L	0,003	0,001	3,275	1	0,040
KM	0,011	0,047	0,055	1	0,814
UP	0,001	0,000	0,953	1	0,329
Constant	-1,745	0,300	33,906	1	0,000

Source: Secondary data processed with SPSS 26 in 2022

Based on the regression test results, profitability is significant at 0.010, leverage is substantial at 0.070, managerial ownership is not effective at 0.814, and firm size is not adequate at 0.329. The regression equation can be stated as follows:

The substantial value in profitability below 0.05 is 0.010, indicating that profitability significantly influences the recognition of big bath accounting. Based on the logistic regression equation, the profitability coefficient value is negative, which means it will have a negative effect on the firm's big bath accounting recognition. With every increase in the profitability value, the big bath accounting recognition variable will decrease by the profitability value. Conversely, if the profitability value decreases, the big bath accounting recognition variable will increase by the profitability value.

The significant leverage value below 0.05 is 0.040, indicating that leverage significantly affects the recognition of big bath accounting. Based on the logistic regression equation, the leverage coefficient value is positive, impacting the firm's big bath accounting recognition. With every increase in the leverage value, the big bath accounting recognition variable will decrease by the leverage value. Conversely, if the leverage value decreases, the big bath accounting recognition variable will increase by the leverage value.

The significant value of shares by managers above 0.05 is 0.814, indicating that shares of managers insignificant effecting recognition of big bath accounting. In accordance the logistic regression equation, the shares by managers coefficient is positive, which means it will positively affect big bath's accounting recognition. With each increase in the value of managerial ownership, the variable big bath accounting will increase. If the value of managerial ownership decreases, the big bath accounting recognition variable will decrease by the value of managerial ownership.

The significant value of firm size above 0.05 is 0.329, indicating that firm size is not significant affect recognition of big bath accounting. Based on the logistic regression equation, the firm size coefficient is positive,

which means it will positively affect big bath accounting recognition. With every increase in the value of firm size, the variable of big bath accounting also increase. When the profitability value decrease, the big bath accounting recognition variable will decrease also.

#### *4.3 Effect of Profitability on Big Bath Accounting*

The results of testing the hypothesis stated that the profitability variable had a significant negative effect on big bath accounting, so that H1 was accepted. Every increase in the profitability value, the big bath accounting recognition variable will decrease by the profitability value. Conversely, if the profitability value decreases, the big bath accounting recognition variable will increase by the profitability value. This research can prove that managers will tend to consider doing big bath accounting at a certain level of profitability.

Achieving profitability at a certain level causes managers to make every effort to get compensation for their hard work. When the company records the desired profit it will tend to delay big bath accounting. But if profits cannot be achieved and even losses, the manager uses accounting treatment in the form of big bath accounting to make deeper losses so that in the coming year performance improvements will be seen.

The results of this study support research by Kustono et al., (2021), Agustia and Suryani (2018), Hasty and Herawaty (2018), Dian (2014), Jordan and Clark (2004) which conclude that profitability has a significant effect on big bath accounting. This explains that when the company's performance is below the desired level, management will do more big bath accounting by acknowledging impairment of assets.

#### *4.4 Effect of Leverage on Big Bath Accounting*

The results of testing the hypothesis stated that the leverage variable had a significant positive effect on big bath accounting, so that H2 was accepted. Every increase in the leverage value, the big bath accounting recognition variable will decrease by the leverage value. Conversely, if the leverage value decreases, the big bath accounting recognition variable will increase by the leverage value. This study can prove that when a company's leverage is high, managers will do big bath accounting.

When a company has high leverage, it indicates that managers are unable to manage wealth with capital and rely on debt as a tool for conducting economic transactions or for purchasing assets. This makes managers continue to be in debt while the burden continues to grow. When this condition occurs, the manager will do big bath accounting to make deeper losses so that in the coming year there will be an improvement in performance. But if the level of leverage is low, big bath accounting is postponed because the manager wants to get compensation while the company is still able to manage its debts.

The results of this study support research by Shoai and Siddique (2020) which concluded that leverage has a significant effect on big bath accounting.

#### *4.5 Effect of Managerial Ownership on Big Bath Accounting*

The results of testing the hypothesis stated that the managerial ownership variable did not have a significant effect on big bath accounting, so H3 was rejected. This research cannot prove that when managerial ownership is high, managers will not do big bath accounting.

When a company has high managerial ownership, it shows that managers participate in company assets to generate profits. The manager will not do big bath accounting even though there is and is no share ownership because the goal is performance compensation during the current period.

The results of this study support research by Oktavia (2017), Dian (2014), Amabrita and Nuswantara (2009) which concluded that managerial ownership has no significant effect on big bath accounting. The existence of managerial ownership has not succeeded in minimizing earnings management practices through big bath accounting.

The results of testing the hypothesis stated that the company size variable had no significant effect on big bath accounting, so H2 was rejected. This research cannot prove that managers will do big bath accounting regardless of the size of the company being managed. Both large and small companies, if they have low profitability, managers will do big bath accounting to worsen performance so that in the future it will look better.

When a company has a large company size, it shows that managers will not do big bath accounting. This will also happen if the size of the company is small, so if performance is not achieved, the manager will not do big bath accounting.

The results of this study support research by Kuo et al., (2021), Octavia (2017) which concluded that company size has no significant effect on big bath accounting. Managers choose a policy of not doing this technique because to maintain the company's impression among the public.

## **5. Conclusion**

The profitability variable significantly affects big bath accounting, so H1 is accepted. This research can prove that managers will tend to consider doing big bath accounting at a low level of profitability. This research

supported by Kustono et al. (2021), Agustia and Suryani (2018), Hasty and Herawaty (2018), Dian (2014), Jordan and Clark (2004), which conclude big bath accounting significant influenced by profitability. When the firm's performance is below the desired level, management record big bath accounting by acknowledging the assets impairment. Leverage variable significantly affects big bath accounting, so H2 is accepted. This research can prove that when firm's leverage is high, managers will do big bath accounting. Shoai & Siddique (2020) also in line with this study, which concluded that leverage has a significant effect on big bath accounting.

Big bath accounting doesn't affected by managerial ownership, so H3 is rejected. This research cannot prove that when managerial ownership is high, managers will not do big bath accounting. Results of this study support research by Oktavia (2017), Dian (2014), Amabrita, and Nuswantara (2009), which concluded that managerial ownership has no significant effect on big bath accounting. The existence of managerial ownership has not succeeded in minimizing earnings management practices through big bath accounting. Firm size insignificant affecting big bath accounting, so H4 is rejected. This research cannot prove that managers will do big bath accounting regardless of the firm's size. If large firms and small firms have low profitability, managers will do big bath accounting to worsen performance so that in the future, it will look better. Study identic with research from Kuo et al. (2021), and Octavia (2017), which concludes firm size has didn't effecting on big bath accounting. Managers choose a policy of not doing this technique to maintain the firm's impression among public.

## 6. Limitations and Suggestions

This study only used samples from mining sector firms at Indonesian Stock Exchange since 2016 until 2020. Next research could enhance sample firms and the number of observation periods. Subsequent analysis should find a dependent variable that is not binomial or dichotomy better to reflect the recognition of big bath accounting in firms. Further research should add more independent variables better to understand the causes of big bath accounting practices.

## References

- Ahmad, Lukman, Munawir. (2018). Sistem Informasi Manajemen Buku. Referensi. Lembaga KITA ,Banda Aceh
- AS Kustono, AT Agustini, SAR Dermawan. (2021). Beware of the existence of a big bath with asset impairment after the COVID-19 pandemic! The Indonesian Accounting Review Perbanas Surabaya. Vol. 11, No. 1, January - June 2021, pages 21 – 31. DOI: <http://dx.doi.org/10.14414/tiar.v11i1.2243>
- Athanasakou, V., N. Strong and M. Walker. (2010). The market reward for achieving analyst earnings expectations: Does managing expectations or earnings matter? Social Science Research Network (Id=1021949).[ Diakses pada 10 November 2021].
- Ari Kuncara Widagdo, Rahmawati Rahmawati, Djuminah Djuminah, Ratnaningrum Ratnaningrum. (2021). Institutional Ownership, Family Firms, Leverage, and Earnings Management. Jurnal Akuntansi dan Bisnis. Universitas Sebelas Maret. ISSN 1412-0852.
- Ayu Dwi Hasty, Vinola Herawaty. (2017). Pengaruh Struktur Kepemilikan, Leverage, Profitabilitas dan Kebijakan Dividen Terhadap Manajemen Laba dengan Kualitas Audit Sebagai Variabel Moderasi. Jurnal Media Riset Akuntansi, Auditing & Informasi. Universitas Trisakti. Vol. 17 No.1 April 2017 : 1-16. DOI:<http://dx.doi.org/10.25105/mraai.v17i1.2023>.
- Belkaoui, Ahmed Riahi. (2015). Teori Akuntansi. Edisi Kelima. Jakarta: Salemba Empat.
- Bhandari, S. B., & Iyer, R. (2013). Predicting business failure using cash flow statement based measures. Managerial Finance, 39(7), 667-676. <https://doi.org/10.1108/03074351311323455>
- Brigham, Eugene F and Joel F.Houston. (2018). Dasar-Dasar Manajemen Keuangan, Alih Bahasa Ali Akbar Yulianto, Buku Satu. Edisi 14. Jakarta: PT. Salemba Empat.
- Charles E. Jordan, Stanley J. Clark. (2004). Big Bath Earnings Management: The Case Of Goodwill Impairment Under SFAS No. 142. Journal Of Applied Business Research. University of Southern Mississippi Volume 20, Number 2.
- Cheng, Q., Warfield, T., & Ye, M. (2011). Equity Incentives and Earnings Management Evidence from the Banking Industry. Journal of Accounting, Auditing & Finance, 26( 2): 317–349.
- Cindy Alexandra, Rizky Eriandani. (2022). Pengaruh Kekuatan Pasar dan Persaingan Industri Terhadap Hubungan Tata Kelola Perusahaan dan Manajemen Laba. Jurnal Akuntansi Dan Bisnis. Universitas Sebelas Maret. ISSN 1412-0852.
- D Agustia. (2013). Pengaruh Faktor Good Corporate Governance, Free Cash Flow, dan Leverage Terhadap Manajemen Laba. Jurnal Akuntansi dan Keuangan 15 (1), 27-42, 2013. Universitas Kristen Petra Surabaya. DOI:<https://doi.org/10.9744/jak.15.1.27-42>.
- Desri Kristianti Panjaitan, Muhamad Muslih. (2019). Manajemen Laba: Ukuran Perusahaan, Kepemilikan Manajerial dan Kompensasi Bonus. JURNAL ASET (AKUNTANSI RISET), 11 (1), 2019, 1-20

- Universitas Pendidikan Indonesia. DOI: <https://doi.org/10.17509/jaset.v11i1.15726>.
- Dian Perwitasari. (2014). Struktur Kepemilikan, Karakteristik Perusahaan, dan Manajemen Laba. *Jurnal Akuntansi Multiparadigma*. Universitas Brawijaya. DOI:<http://dx.doi.org/10.18202/jamal.2014.12.5032>.
- Erik Devos, Jianning Huang, Fuzhao Zhou. (2021). The effects of the corporate name change on firm information environment and earnings management. *International Review of Financial Analysis* Volume 77, October 2021, 101849. DOI:<https://doi.org/10.1016/j.irfa.2021.101849>.
- Evi Octavia. (2017). Implikasi Corporate Governance dan Ukuran Perusahaan pada Manajemen Laba. *Jurnal Akuntansi Multiparadigma*. Universitas Brawijaya Volume 8. DOI:<http://dx.doi.org/10.18202/jamal.2017.04.7044>.
- Ghozali, Imam. (2018). "Analisis Multivariat dengan Program SPSS". Semarang: BPFE Universitas Diponegoro.
- Harahap, Sofyan Syafri. 2018. Analisis Kritis Atas Laporan Keuangan. Jakarta: Raja Grafindo Persada.
- Herry Gunawan. (2020). Pertambangan: Berlimpah fasilitas, minim kontribusi . <https://lokadata.id/artikel/pertambangan-berlimpah-fasilitas-minim-kontribusi>. [ Diakses pada 11 November 2021].
- IDX. IDX Statistik. (2021). <http://www.idx.co.id>. [ Diakses pada 9 November 2021 ].
- Ikatan Akuntan Indonesia. (2021). Standar Akuntansi Keuangan. Edisi 2021. Jakarta: Salemba Empat.
- Jensen, Michael C. and William H. Meckling. (1976). "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure." *Journal of Financial Economics*, October 1976, V. 3, No. 4, pp. 305-360. [ssrn.com/abstract=94043](http://ssrn.com/abstract=94043) ). [ Diakses pada 8 November 2021].
- Kasmir. (2017). Analisis Laporan Keuangan. Jakarta: Raja Grafindo Parsada.
- Laskaridou et al. (2014). Detecting Asset Impairment earnings management on IFRS Context: Some Evidence From Greek Listed Firms. *American Journal of Applied Sciences* 11(6):963-968. DOI:10.3844/ajassp.2014.963.968.
- Levitt, A. (1998). "The Importance of High-Quality Accounting Standards." *Accounting Horizon*, Vol. 12, No. 1, pp.79–82.
- Mowen, Maryanne M., Hansen, Don R., Heitger, Dan L.. (2018). *Managerial accounting: the cornerstone of business decision making* (7th ed.). United States: Cengage Learning.
- Nasucha, Muchammad and Moenawar, M. Ghozali. (2020). Covid-19, asimetri dan keterbukaan informasi publik. In: *Media, komunikasi dan informasi di masa pandemi Covid-19*. MBridge Press, pp. 74-93. ISBN 9786236615058.
- Novia Fitri Kusumawardani, R. Rosiyana Dewi. (2016). Motivasi Bonus, Pajak, dan Utang dalam Tindakan Manajemen Laba (Studi Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2013-2015). *Jurnal Media Riset Akuntansi, Auditing & Informasi* . Universitas Trisakti Media Riset Akuntansi, Auditing & Informasi Vol. 16 No. 1 April 2016. DOI:<http://dx.doi.org/10.25105/mraai.v16i1.2072>.
- Scott, William R. (2021). *Financial Accounting theory*. 8th Edition. Kanada: Pearson Education.
- Siggelkow, L. and H. Zuelch. (2010). Earnings management concerning the impairment decision: A quantitative empirical analysis of German listed firms between 2004 and 2009. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1709646](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1709646) ). [ Diakses pada 10 November 2021].
- Siti Sarpingah, Hasian Purba. (2019). The Effect Of Good Corporate Governance And Profit Management On Tax Aggressive (Empirical Study On Manufacturing Firms Listed On The Idx Periode 2014-2017). *International Journal of Accounting and Finance Studies* Vol. 2, No. 2, 2019. DOI:<https://doi.org/10.22158/ijafs.v2n2p95>.
- Subramanyam, K.R. (2017). Analisis Laporan Keuangan Financial statement analysis Ed.11, Jakarta : Salemba Empat
- Tandelilin, Eduardus. (2017). *Portofolio dan Investasi Teori dan Aplikasi*. Yogyakarta : Kanisius.
- Ya-Fen Kuo, Yi-Mien Lin, Hsiu-Fang Chien. (2021). Corporate social responsibility, enterprise risk management, and real earnings management: Evidence from managerial confidence. *Finance Research Letters* Volume 41, July 2021, 101805. DOI:<https://doi.org/10.1016/j.frl.2020.101805>.
- Yayan Nuryana, Dwi Asih Surjandari. (2019). The Effect of Good Corporate Governance Mechanism and Earning Management on Firm Financial Performance. *Global Journal of Management and Business Research: Accounting and Auditing* Volume 19 Issue 1 Version 1.0 the Year 2019. ISSN: 2249-4588 & Print ISSN: 0975-5853.
- Yofi Prima Agustia, Elly Suryani. (2018). Pengaruh Ukuran Perusahaan, Umur Perusahaan, Leverage, Dan Profitabilitas Terhadap Manajemen Laba (Studi Pada Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia Periode 2014-2016). *JURNAL ASET (AKUNTANSI RISET)* , 10 (1), 2018. DOI:<https://doi.org/10.17509/jaset.v10i1.12571>.