

What Factors Affecting Information Disclosure? The Case of Indonesian Universities

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Abstract. Sustainability disclosure can be used as a tool for measurable impact, risk reduction, and long-term progress – potentially turning it into a competitive advantage. Meanwhile, in Indonesia, sustainability disclosures made by universities are still relatively low. Based on the legitimacy theoretical framework and previous research studies, this study aims to explain the effect of the gender of female university leaders, rector's gender, and university size and age (independent variables) on the level of university information disclosure (dependent variable). The study is based on data (such as financial reports, performance reports, annual reports, sustainability reports, and rector's reports) published by 74 universities on their websites from 2018 to 2021. Information in the financial statements was used to measure control variables – revenue growth and liquidity. Control variables are used to avoid omitted variable bias. This study's data analysis used multiple regression analysis to explain the effect of leadership gender diversity, rector gender, university size and age on university information disclosure. The results show that gender diversity in university leaders positively affects university information disclosure, but the gender of the university rector does not affect information disclosure. These results differ somewhat from those of other studies in countries such as Spain and the United Kingdom, possibly due to fewer opportunities for women to hold leadership positions in Indonesia. In addition, the variables of university size and age have a positive impact on information disclosure. Therefore, these factors contribute to the increased image and reputation of the universities. Additionally, giving women more opportunities to hold leadership positions at universities in countries like Indonesia will positively impact sustainability disclosure. The authors hope that the results of this study will encourage universities in Indonesia to actively disclose information about sustainable development to be more competitive in the educational environment.

Keywords: sustainability disclosure, gender diversity of leaders, university reporting, university reputation, Indonesian universities.

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Які фактори впливають на розкриття інформації? Приклад індонезійських університетів

Анотація. Розкриття інформації про сталий розвиток можна використовувати як інструмент вимірювання впливу організації, управління ризиками і довгостроковим прогресом, потенційно перетворюючи це на конкурентну перевагу. Натомість в Індонезії рівень розкриття інформації про сталий розвиток університетами залишається все ще відносно низьким. Базуючись на положеннях теорії легітимності та результатах попередніх досліджень, метою цієї статті є визначення впливу статі жінок, що обіймають керуючі посади в університетах, статі ректора, розміру та віку університету (незалежні змінні) на рівень розкриття інформації про сталий розвиток університетом (залежна змінна). В дослідженні використано дані (такі як фінансові звіти, звіти про ефективність, річні звіти, звіти про сталий розвиток і звіти ректорів) опубліковані 74 університетами на їх вебсайтах з 2018 по 2021 рік. Інформація з фінансових звітів використовувалася для вимірювання контрольних змінних – зростання доходів і ліквідності, щоб уникнути зміщення пропущених змінних. Для аналізу даних використано множинний регресійний аналіз. Результати показують, що наявність жінок на керівних посадах в університеті позитивно впливає на розкриття інформації про сталий розвиток, однак, жіноча стаття ректора університету не впливає на розкриття інформації. Ці результати децю відрізняються від результатів інших досліджень у таких країнах, як Іспанія та Сполучене Королівство, можливо, через те, що в Індонезії жінки мають менше можливостей обіймати керівні посади. Крім того, змінні розміру та віку університету позитивно впливають на розкриття інформації про сталий розвиток. Отже, ці фактори сприяють підвищенню іміджу та репутації університетів. Крім того, надання жінкам більше можливостей обіймати керівні посади в університетах таких країн, як Індонезія, позитивно вплине на розкриття інформації про сталий розвиток. Автори сподіваються, що результати цього дослідження спонукатимуть університети в Індонезії активно розкривати інформацію про сталий розвиток, щоб бути більш конкурентними в освітньому середовищі.

Ключові слова: розкриття інформації про сталий розвиток, гендерне різноманіття, звітність університету, репутація університету, університети Індонезії.

1. INTRODUCTION

Sustainability disclosure is an excellent tool for achieving sustainability and improving the performance of universities around the world (Huang & Do, 2021), as well as the image and reputation of the organization (Sousa et al., 2021). Universities also use information disclosure to gain sustainability (Ahmad et al., 2020). The low disclosure of university information in Indonesia is possible because this disclosure is still voluntary (Sassen & Azizi, 2018).

From the legitimacy theory perspective, when universities make voluntary disclosures, it is used as a strategic means to demonstrate that their goals and norms align with the goals and norms of society at large and to enhance institutional reputation and organizational image (Ntim et al., 2017). In addition, organizational governance is also an important concern for universities in terms of managing and enhancing legitimacy. Many studies have shown that female gender on boards and female CEOs have a positive effect on transparency and information quality, including in the university context (Helfaya & Moussa, 2017; Liao et al., 2015; Fernandez et al., 2019; Garde Sanchez et al., 2020; Andrades et al., 2021; Ntim et al., 2017). In addition to gender, the size of

larger universities and the age of older universities will be more in the spotlight of stakeholders compared to smaller universities and younger universities (Nicolo et al., 2020; Larran Jorge et al., 2019; Nicolo et al., 2021), so older universities may disclose more information.

Based on the legitimacy theoretical framework and previous research studies, this study aims to explain the influence of gender variables of female university leaders, female rectors, size and age of universities on the level of university information disclosure. This research is relatively new in Indonesia, which is different from Pujiningsih & Helianti's (2022) research on the effect of university rankings on the level of information disclosure. This research also differs from Yasbi and Barokah's (2018) study on university sustainability disclosure in Indonesia. This research is expected to add to the literature on legitimacy theory studies in explaining the relationship between gender, size and age variables of universities on information disclosure (Helfaya & Moussa, 2017; Liao et al., 2015; Fernandez et al., 2019; Garde Sanchez et al., 2020; Andrades et al., 2021; Ntim et al., 2017; Nicolo et al., 2020; Larran Jorge et al., 2019; Nicolo et al., 2021).

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1 Legitimacy Theory, Governance and University Information Disclosure

Legitimacy theory was developed by Dowling and Pfeffer (1975). Legitimacy theory explains that organizations try to ensure that the organization operates within the boundaries and norms that exist in society and that organizational activities are considered legitimate or legitimized by parties outside the organization. In other words, legitimacy is when the organization's actions or activities follow the system of norms, values, and beliefs built by society. Legitimacy theory is based on the assumption of a social contract between business organizations and society. In accounting research, this theory is used to analyze the relationship of university information disclosure with its social environment. From the perspective of this theory, university information disclosure is a fulfilment of the organization's contract with society.

Universities are government- and community-funded entities, so they are required to provide services to the community and services to other stakeholders (Jongbloed et al., 2008). In its three pillars of higher education activities, stakeholders will widely scrutinize the university (Sassen & Azizi, 2018). This reason has led to a discourse on the search for legitimacy by universities to stakeholders because of the social contract between universities and society (Adam, 2013). Today's more mature society will be sensitive to university activities (Trireksani et al., 2021). Therefore, university information disclosure becomes a medium to gain and increase their legitimacy in front of stakeholders (An et al., 2019).

Disclosure of sustainability information allows universities to meet stakeholder needs (Gamage & Sciulli, 2017). Disclosure of sustainability information is also useful to reduce information asymmetry between universities and stakeholders (Shan et al., 2021). In addition, sustainability disclosure by universities also shows their contribution to achieving sustainable development (Gori et al., 2022). This will certainly improve the university's reputation (An et al., 2019). Thus, disclosure of sustainability information allows universities to legitimize their position in society, demonstrating that they act according to the norms, values, and expectations set by the stakeholder community and the general public (Sassen & Azizi, 2018).

The disclosure of sustainability information is also inseparable from university governance, particularly about university leaders/boards of directors and top directors/rectors. Many studies prove that female CEOs and the presence of women on boards of directors can improve the quality of accounting information, including sustainability disclosures (Helfaya & Moussa, 2017; Liao et al., 2015; Fernandez et al., 2019; Garde Sanchez et al., 2020; Andrades et al., 2021; Ntim et al., 2017). This governance involves gender, which will try to explain its influence on university information disclosure in Indonesia. In addition, from the legitimacy theory perspective, the university's age and size will also affect

the level of university disclosure. Universities that are older and larger will receive more stakeholder attention, so they need media in the form of disclosure of sustainability information so that their legitimacy is maintained and even increased (Larran Jorge et al., 2019; Nicolo et al., 2021).

2.2 Hypothesis Development Female Gender and University Information Disclosure

The presence of women on the board of directors benefits the company. Research shows that female directors correlate positively with organizational transparency, performance, and sustainability information (Helfaya & Moussa, 2017). From the perspective of legitimacy theory, the presence of women on an organization's board will have a positive impact and be an important factor in improving the legitimacy and reputation of the organization (Liao et al., 2015) because women tend to prioritize long-term non-financial performance over short-term economic performance (Fernandez et al., 2019). Women directors are also deeply concerned about the welfare of the community environment and maintaining stakeholder interests (Helfaya & Moussa, 2017).

In the context of universities, the presence of women, including female rectors, is assumed to be able to manage and facilitate universities, as they deal with many key stakeholders, such as central and local governments, businesses and industries. They will manage legitimacy by increasing information transparency, including sustainability information as a form of accountability (Garde Sanchez et al., 2020). Andrades et al. (2021) found that female university managers in Spain positively affect online financial disclosure. Ntim et al. (2017) also found that the gender diversity of university boards in the UK positively affects the level of voluntary disclosure. Based on the legitimacy theory argument and previous empirical research, this research hypothesizes that:

H0a. The gender diversity of university leaders has no positive effect on the level of university information disclosure.

H1a. The gender diversity of university leaders positively affects the level of university information disclosure.

H0b. The gender of the university rector does not positively affect the level of university information disclosure.

H1b. The gender of the university rector positively affects the level of university information disclosure.

University Size and Information Disclosure

Larger universities have to deal with more stakeholders, and their activities are subject to greater public and societal scrutiny (Nicolo et al., 2021). They are also assumed to have more financial and human resources for disclosure practices (Larran Jorge et al., 2019). Greater universities disclose sustainability information voluntarily to cope with the public spotlight

and enhance legitimacy (Nicolo et al., 2021). Therefore, based on legitimacy theory and previous empirical research reviews, this study hypothesizes that:

H0: The university size has no positive effect on information disclosure.

H2: The university size has a positive effect on information disclosure.

University Age and Information Disclosure

Scholars argue that older universities tend to show more achievements in accountability practices than younger universities, as they have been in the process internally longer and have more solid relationships with stakeholders (Nicolo et al., 2021). Older universities are more likely to maintain their reputation and legitimacy in the eyes of stakeholders and to attract financial resources transferred from the central government (Nicolo et al., 2021) through voluntary disclosure. Therefore, based on legitimacy theory and a review of previous empirical research, this study hypothesizes that:

H0: The university age does not have a positive effect on information disclosure.

H3: The university age has a positive effect on information disclosure.

3. RESEARCH METHOD

3.1 Data

Data is information universities publish on their website, such as financial reports, performance reports, annual reports, sustainability reports, and rector's reports. The observation year used in this study is 2018 to 2021, with a sample size of 74 universities. The universities selected as samples are universities that disclose their financial reports. Information in the financial statements is used to measure control variables – revenue growth and liquidity. Control variables are used to avoid omitted variable bias.

3.2 Research Variables

The dependent variable in this study is the level of information disclosure, which refers to the research of Yasbi and Barokah (2018). University information disclosure comprises 6 items: performance reports, financial reports, annual reports, sustainability reports, rector reports, and websites (Yasbi & Barokah, 2018). The independent variables in this study consist of the gender diversity of university leaders, gender rector, university size and university age, which were adapted from Nicolo et al. (2021). The control variables in this study are revenue growth and liquidity, adapted from Adhikariparajuli et al. (2020). The variable measurements can be seen in Table 1.

Table 1. Variable Measurement

Research variables	Measurement
Dependent variable	
Level of information disclosure	Percentage of the number of items disclosed divided by the total number of items disclosed
Independent variables	
Gender diversity in leadership (X_1)	Percentage of women on university governing boards
Rector's gender (X_2)	Dummy variable, 1 for female rector, 0 for male rector.
Size (X_3)	Log. Total assets
Age (X_4)	Log. Age of university
Control variables	
Liquidity (Z_1)	Current assets divided by current liabilities
Revenue growth (Z_2)	Percentage of current year revenue minus previous year revenue divided by previous year revenue

3.3 Data Analysis

This study's data analysis used multiple regression analysis to explain the effect of leadership gender diversity, rector gender, university size and age on university information disclosure. The regression model formula is as follows:

$$Y = a + bX_1 + bX_2 + bX_3 + bX_4 + Z_1 + Z_2 + e$$

Where

X_1 = Gender Diversity of University Leaders,

X_2 = Rector's Gender,

X_3 = University Size,

X_4 = University Age,

Z_1 = Liquidity,

Z_2 = Revenue Growth, and

Y = University Information Disclosure.

4. RESULTS AND DISCUSSION

4.1 Results

Table 2 illustrates the descriptive statistics of the independent, dependent and control variables.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Gender Diversity	74	.00	0.5	0.15	.16881
Rector gender	74	.00	1	0	0
Size	74	21.57	31.04	28.8864	1.27508
Liquidity	74	.00	6482.04	97.0399	752.56121
Revenue growth	74	-.35	16.04	.4296	2.18536
University age	74	.90	2.00	1.7580	.17986
Information disclosure	74	.00	.71	.3996	.11463
Valid N (listwise)	74				

Source: Data processed by authors (2024).

The sample used in this study is 74 observations of information disclosed by the university. University information disclosure is measured by the total number of disclosed items such as financial statements, performance reports, annual reports, rector's reports, sustainability reports, and websites. The results in Table 1 on descriptive statistics show that the average level of disclosure is 0.3996 (40%), where only 29.73% (n=22) of the data whose information disclosure value exceeds the average, meaning that the level of university disclosure is still low.

Gender diversity is the percentage of the number of women in the rectorate divided by the total rectorate board. The descriptive statistical results show that the minimum value is 0, which means that there is no female gender in the composition of the board of directors. The maximum value is 0.50 (50%) that Universitas Indonesia held from 2018 to 2021. At the Universitas Indonesia, there are 6 board positions, and 3 of them are occupied by women as Vice Rector for Finance and Logistics, Vice Rector for Research and Innovation, and University Secretary. The average value of women on the university board is still low at 15%. Meanwhile, Rector Gender (X_2) uses a categorical variable measure. If the rector is female, it is coded as 1, and if the rector is male, it is coded as 0.

University size is an indicator of total assets (X_3). Total assets are the total assets owned by universities, both current and non-current, from 2018 to 2021. The descriptive statistics table shows the average value of assets of 28.8864 or IDR 5,900,972,446,356.65. The number of universities that have assets above the average is only 49% (n = 36), and the rest have assets that are less than the average. The results of descriptive statistics also show the minimum value and maximum value of total university assets. The minimum value of total assets is IDR 194,926,498,262 which was owned by Warmadewa University in 2018. The maximum value of total assets is owned by Surabaya State University in 2020 with a nominal value of IDR 30,149,012,752,166.00.

University Age (X_4) is the age of the university from its establishment until 2021. The average age of the university in this study is 1.7580 (in log form) or 60 years. University age is used as variable X_6 , and the results show that university age affects information disclosure. The youngest university age (minimum) is 8 years, namely Telkom University, while the university with the oldest age (maximum) is Bandung Institute of Technology with 101 years of age.

The control variable, Liquidity Current Ratio (Z_1), is a ratio that shows the university's ability to pay off its current liabilities with its current assets. The current ratio is measured by dividing total current assets by total current liabilities. The results of descriptive statistics show that the minimum value of the current ratio is -0.35 for the universities. This is because 1 university (Tanjungpura University) in 2018 had no current liabilities. The maximum amount of current ratio is 6482.04, which is from Warmadewa University. The current ratio value of the university is high because the current liability value is small. The average value in the descriptive statistics table shows a value of 97.0399. The number of universities that have a current ratio value above the average is only 2.70% (n=2), and as many as 99.97% (n=72) have a current ratio liquidity less than the average. Meanwhile, the revenue growth variable (Z_2) is the percentage increase or decrease in university revenue compared to the previous year's revenue. The value in the descriptive statistics table shows that the minimum value of revenue growth is -0.35 or a 35% decrease, namely Malang State Polytechnic in 2020, while the maximum value of revenue growth is 16.04 (160%), namely from Malang State University in 2019. The average value of revenue growth is 0.4296, or 42%. The total sample whose revenue growth value is above 42% is only 6.67% (n = 5), and the remaining 99.93% (n = 69) have below average revenue growth.

Regression Model Test and Hypothesis Test Results

Based on the results of the regression model test, it is known that the significance value is $0.013 < 0.05$, so it can be concluded that the regression model is significant

and can be continued with hypothesis testing (attachment 1 F-test and t-test). The gender diversity variable (X_1) affects Y with a significance value of $0.014 < 0.05$. It means that this study succeeded in rejecting the null hypothesis and accepting H1a. Hypothesis H1b. The rector gender variable (X_2) has no effect on information disclosure (Y), with a significance value of $0.599 > 0.05$. It means that this study did not succeed in rejecting the null hypothesis or accepting the null hypothesis and rejecting hypothesis H1b. Company size (X_3) affects information disclosure (Y), with a significance value of $0.035 < 0.05$. This result means that this study successfully rejects the Null Hypothesis and accepts H2. University age (X_3) has an effect on information disclosure (Y) with a significance value of $0.025 < 0.05$. The results of this study successfully reject the null hypothesis and accept H4.

The control variable, Liquidity Current Ratio (Z_2), has no effect on information disclosure (Y) with a significant value of $0.323 > 0.05$. Meanwhile, the control variable revenue growth has no effect on the disclosure of University Information, with a significance value of $0.858 > 0.05$.

4.2 Discussion

The Effect of Gender Diversity on University Information Disclosure

The results explain that gender diversity in university leaders has a positive effect on university information disclosure. The p-value of $0.014 < 0.05$ indicates it. This result confirms the applicability of the legitimacy theory. This information disclosure by female leaders is considered because it is more long-term (Fernandez et al., 2019) to increase the legitimacy and reputation of the organization (Liao et al., 2015). Universities with strong legitimacy and reputations usually have good rankings in the results of certain institutions. It is also supported by previous research, which explains that the ranking of universities conducted by the Ministry of Education and Culture affects information disclosure (Pujiningsih & Helianti, 2022).

This study did not succeed in proving that female rectors affect information disclosure. This study does not confirm the results of previous studies that female rectors are positively correlated with transparency, organizational performance, and sustainability information (Helfaya & Moussa, 2017; Garde Sanchez et al., 2020). These results also differ from research in other countries; for example, Andrades et al. (2021) found that female university managers in Spain affect online financial disclosure. In addition, Ntim et al. (2017) also found that

gender diversity on university boards in the UK has a positive effect on the level of voluntary disclosure. These results indicate that there are still relatively few opportunities for women to become university rectors in Indonesia compared to other countries, such as Spain and the UK.

The Effect of University Size on University Information Disclosure

University size variable has a positive effect on university information disclosure. This means that the greater the number of assets owned by the university, the greater the information disclosure level. This study confirms the legitimacy theory that larger universities face more stakeholder interests and are subject to greater societal scrutiny (Nicolo et al., 2021), so they will make more voluntary disclosures (Larran Jorge et al., 2019). This disclosure by universities addresses public scrutiny and enhances legitimacy (Nicolo et al., 2021).

The Effect of University Age on University Information Disclosure

This study proves that older universities have a higher level of information disclosure. It supports the results of previous studies that older universities are better at accountability practices than younger universities by voluntarily presenting information because they have longer experience in governance and better relationships with stakeholders (Nicolo et al., 2021). This information disclosure is used to maintain their reputation and legitimacy in the eyes of stakeholders (Nicolo et al., 2021).

5. CONCLUSION

The results show that gender diversity in university leaders positively affects information disclosure, but for the female rector variable, it has no effect on information disclosure. Therefore, increasing the participation of women in the position of university leader can significantly improve the level of information disclosure by the university. Meanwhile, the variables of university size and age have a positive impact on information disclosure. This study contributes to the literature regarding the factors affecting information disclosure by Indonesian universities. The authors hope this research results will encourage universities in Indonesia to actively disclose information about sustainable development to increase legitimacy and reputation.

In future research, it is advisable to add other variables, such as the amount of grant funding and audit opinion, to predict the information disclosure level.

4 References

- Adams, C. A. (2013). Sustainability reporting and performance management in universities: challenges and benefits. *Sustainability Accounting, Management and Policy Journal*, 4(3), 384-392. <https://doi.org/10.1108/SAMPJ-12-2012-0044>
- Adhikariparajuli, M., Hassan, A., Fletcher, M., & Elamer, A. A. (2020). Integrated reporting in higher education: Insights from Scotland, Northern Ireland and Wales. *Social Responsibility Journal*, 17(3), 321-342. <https://doi.org/10.1108/SRJ-01-2019-0031>

- Ahmad, R., Ahmad, S., Islam, T., & Kaleem, A. (2020). The nexus of corporate social responsibility (CSR), affective commitment and organisational citizenship behaviour in academia: a model of trust. *Employee Relations*, 42(1), 232-247. <https://dx.doi.org/10.1108/ER-04-2018-0105>
- An, Y., Davey, H., Harun, H., Jin, Z., Qiao, X., & Yu, Q. (2020). Online sustainability reporting at universities: the case of Hong Kong. *Sustainability Accounting, Management and Policy Journal*, 11(5), 887-901. <https://doi.org/10.1108/SAMPJ-06-2018-0161>
- Andrades, J., Martinez-Martinez, D., & Larran Jorge, M. (2021). Corporate governance disclosures by Spanish universities: how different variables can affect the level of such disclosures?. *Meditari Accountancy Research*, 29(1), 86-109. <https://doi.org/10.1108/MEDAR-02-2020-0766>
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: social values and organizational behaviour. *The Pacific Sociological Review*, 18(1), 122-136. <https://doi.org/10.2307/1388226>
- Fernandez, W. D., Burnett, M. F., & Gomez, C. B. (2019). Women in the boardroom and corporate social performance: negotiating the double bind. *Management Decision*, 57(9), 2201-2222. <https://doi.org/10.1108/md-08-2017-0738>
- Gamage, P., & Sciuilli, N. (2017). Sustainability reporting by Australian universities. *Australian Journal of Public Administration*, 76(2), 187-203. <https://doi.org/10.1111/1467-8500.12215>
- Garde Sanchez, R., Flórez-Parra, J. M., López-Pérez, M. V., & López-Hernández, A. M. (2020). Corporate governance and disclosure of information on corporate social responsibility: An analysis of the top 200 universities in the shanghai ranking. *Sustainability*, 12(4), 1549-1571. <https://doi.org/10.3390/su12041549>
- Gori, E., Romolini, A., Fissi, S., & Contri, M. (2022). Sustainability reporting in higher education institutions: evidence from an Italian case. *Non-Financial Disclosure and Integrated Reporting*, Springer, Cham, pp. 139-152. https://doi.org/10.1007/978-3-030-90355-8_6
- Helfaya, A., & Moussa, T. (2017). Do board's corporate social responsibility strategy and orientation influence environmental sustainability disclosure? UK evidence. *Business Strategy and the Environment*, 26(8), 1061-1077. <https://doi.org/10.1002/bse.1960>
- Huang, Y. F., & Do, M. H. (2021). Review of empirical research on university social responsibility. *International Journal of Educational Management*, 35(3), 549-563. <https://doi.org/10.1108/ijem-10-2020-0449>
- Jongbloed, B., Enders, J., & Salerno, C. (2008). Higher education and its communities: interconnections, interdependencies and a research agenda. *Higher Education*, 56(3), 303-324. <https://doi.org/10.1007/s10734-008-9128-2>
- Larrán Jorge, M., Andrades Peña, F. J., & Herrera Madueño, J. (2019). An analysis of university sustainability reports from the GRI database: an examination of influential variables. *Journal of Environmental Planning and Management*, 62(6), 1019-1044. <https://doi.org/10.1080/09640568.2018.1457952>
- Liao, L., Luo, L., & Tang, Q. (2015). Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *The British Accounting Review*, 47(4), 409-424. <https://doi.org/10.1016/j.bar.2014.01.002>
- Nicolo, G., Aversano, N., Sannino, G., & Tartaglia Polcini, P. (2021). Investigating web-based sustainability reporting in Italian public universities in the era of Covid-19. *Sustainability*, 13(6), 3468. <https://doi.org/10.3390/su13063468>
- Nicolo, G., Manes-Rossi, F., Christiaens, J., & Aversano, N. (2020). Accountability through intellectual capital disclosure in Italian universities. *Journal of Management and Governance*, 24(4), 1055-1087. <https://doi.org/10.1007/s10997-019-09497-7>
- Ntim, C. G., Soobaroyen, T., & Broad, M. J. (2017). Governance structures, voluntary disclosures and public accountability: the case of UK higher education institutions. *Accounting, Auditing & Accountability Journal*, 30(1), 65-118. <https://doi.org/10.1108/AAAJ-10-2014-1842>
- Pujiningsih, S., & Utami, H., (2022). University Ranking and Information Disclosure: The Case of Indonesia. *Jurnal Dinamika Akuntansi dan Bisnis*, 9(1), 37-50. <https://dx.doi.org/10.24815/JDAB.V9I1.23583>
- Rodriguez Bolivar, M. P., Garde Sanchez, R., & Lopez Hernandez, A. M. (2013). Online disclosure of corporate social responsibility information in leading Anglo-American universities. *Journal of Environmental Policy & Planning*, 15(4), 551-575. <https://doi.org/10.1080/1523908X.2013.817945>
- Sassen, R., & Azizi, L. (2018). Voluntary disclosure of sustainability reports by Canadian universities. *Journal of Business Economics*, 88(1), 97-137. <https://doi.org/10.1007/s11573-017-0869-1>
- Shan, Y. G., Zhang, J., Alam, M., & Hancock, P. (2021). Does sustainability reporting promote university ranking? Australian and New Zealand evidence. *Meditari Accountancy Research*, 30(6), 1393-1418. <https://doi.org/10.1108/MEDAR-11-2020-1060>
- Sousa, J. C. R. D., Siqueira, E. S., Binotto, E., & Nobre, L. H. N. (2021). University social responsibility: perceptions and advances. *Social Responsibility Journal*, 17(2), 263-281. <https://doi.org/10.1108/SRJ-10-2017-0199>
- Trireksani, T., Zeng, Y. T., & Djajadikerta, H. G. (2021). Extent of sustainability disclosure by Australian public universities: inclusive analysis of key reporting media. *Australian Journal of Public Administration*, 80(4), 830-848. <https://doi.org/10.1111/1467-8500.12469>
- Yasbie, B., & Barokah, Z. (2018). Sustainability Reporting by Universities in Indonesia. *The Indonesian Journal of Accounting Research*, 21(03). <https://doi.org/10.33312/ijar.400>