

Published by: Institute of Computer Science (IOCS)

Jurnal Mantik





The influence of board and firm characteristics on the implementation of integrated reporting in financial services companies registered in BEI

Dewa Ayu Intan Maheswari 1 , Sufiyati 2 1,2 Faculty of Economics and Business, Universitas Tarumanagara, Indonesia

ARTICLE EI NFO

ABSTRACT

Article history:

Accepted Jul 30, 2023 Revised Aug 08, 2023 Accepted Aug 15, 2023

Keywords:

Characteristic Board; Firm Characteristic; Integrated Reporting.

The integrated reporting framework is a framework that is used in the implementation of an integrated reporting. This framework consists of a number of financial reports, management records, corporate governance and remuneration, as well as a sustainability report. This conceptual framework is able to explain how companies create value for themselves. This study aims to analyze the factors that influence the implementation of integrated reporting of a company. Through non-probability sampling technique with purposive sampling method, 21 companies were obtained as samples and 42 data were used for observation. Then, the data was processed using SPSS 25 version for panel data regression analysis. The results of the study indicated that the projected board size, as measured by the total number of directors, and the projected board meetings, as measured by the number of combined board members' meetings in one year, have a positive and significant influence on the implementation of integrated reporting. Board independence and leverage have a positive and insignificant influence on the implementation of integrated reporting. Meanwhile, firm size has a negative and insignificant influence on the implementation of integrated reporting. Further research is expected to add other variables to improve previous studies.

This is an open access article under the CC BY- NC license.



Corresponding Author:

Dewa Ayu Intan Maheswari , Faculty of Economics and Business, Universitas Tarumanagara, Tanjung Duren Utara 1, West Jakarta 11470, Indonesia. Email: gekintan2@gmail.com

1. INTRODUCTION

The company communicates information on financial transactions and activities that has been collected through accounting reports known as financial statements (Daniela et al., 2022; Posavec et al., 2021; Shofiyah & Wilujeng Suryani, 2020). However, since the issue of triple bottom line reporting proposed by John Elkington in 1994, the company's performance measurement no longer only refers to the profit and loss dimension, but also takes into account the social and environmental dimensions or often referred to as profit, people, planet (3P) (Hameed & Rahman Ahmed, 2020; Kurniawan & Akbar, 2021). Furthermore, companies display information related to their non-financial activities through accounting reports known as sustainability reports. These two reporting models

are used as parameters by internal and external users regarding the effectiveness and success of a company (Chouaibi et al., 2022; Drakic-Grgur, 2020; Luomaranta & Martinsuo, 2022).

Recognizing the high level of concern of stakeholders regarding financial performance and the impact arising from company activities, a new form of corporate reporting emerged (Elani et al., 2021; Fuis Sukma Ayu & Dian Filianti, 2022; Hughes & Rog, 2008), namely integrated reporting or often called integrated reporting. Integrated reporting was developed by the International Integrated Reporting Committee in 2011. The integrated reporting framework is the framework used in implementing an integrated reporting. This framework consists of a number of financial reports, management records, corporate governance and remuneration, and a sustainability report. This framework of thinking can explain how companies create value for themselves. In this study, board characteristics are represented by board size, board independence, and board meeting, while firm characteristics are represented by firm size and leverage. Integrated reporting also displays material information about corporate strategy, corporate governance, remuneration, performance, risks and prospects of an organization. The theories used as the basis for this research are agency theory, stakeholder theory, and letimigacy theory. Vitolla et al. (2020) in his research stated that board size has a significant positive effect regarding the application of integrated reporting, this research is in line with research conducted by (Chouaibi et al., 2022; Cooray et al., 2020; Fayad et al., 2022; Suttipun & Bomlai, 2019) . In a study by Omran et al. (2021) found that board independence has a significant positive effect on the implementation of integrated reporting. This research is in line with research conducted by (Anojan & Ramesh, nd; Qaderi et al., 2022). Furthermore, research (Vitolla et al., 2020) states that board meetings are positively significant in influencing the implementation of integrated reporting . These results are in line with research conducted (Qaderi et al., 2022) . In research (Vitolla et al., 2020) Firm size is positively significant in influencing the application of integrated reporting. These results are in line with research conducted (Al Amosh et al., 2022; Kılıç & Kuzey, 2018; Nguyen et al., 2022) . In research (Qaderi et al., 2022) states that leverage has a significant positive effect on exposure integrated reporting. This is in line with research conducted (Vitolla et al., 2020), (Al Amosh et al., 2022) and (Hameed & Rahman Ahmed, 2020).

2. RESEARCH METHOD

In this study, researchers used a descriptive research design with a quantitative approach (Sugiyono, 2019). The subjects studied in this study are integrated financial reports. Process for obtaining the data with the object of research being the application of integrated reporting as the dependent variable and board size, board independence, board meeting, firm size, and leverage as independent variables of companies in the financial services sector listed on the Stock Exchange Indonesia for the 2020 and 2021 periods. The sampling technique uses the purposive sampling method, which is a data collection method with certain considerations. This consideration uses the following criteria financial services companies listed on the IDX in 2020 and 2021, companies that have implemented integrated reporting in 2020 and 2021, companies that do not suffer losses in 2020 and 2021, and companies that do not experience suspension in 2020 and 2021. The research method used in this research is panel data regression analysis. A panel study is a study that examines a group of data bound in an activity and within a certain period of time. The stages of panel data regression analysis are by estimating the model, determining the estimation model, testing the classic assumptions, testing the feasibility of the model and testing the hypothesis using Eviews software (Econometric Views) version 12 (Riyanto & Hatmawan, 2020).

3. RESULTS AND DISCUSSIONS

Table 1. Descriptive Statistics

| | Table 1. Descriptive Statistics | | | | | |
|-------|---------------------------------|---------|-----------|--------------------|--|--|
| | Minimum | Maximum | Means | Standard deviation | | |
| ENVY | 0.605263 | 0.8158 | 0.700501 | 0.0592593 | | |
| BSIZE | 3,000000 | 10,0000 | 4.619048 | 1.7523835 | | |
| BIDP | 0.000000 | 0.3333 | 0.110369 | 0.1428393 | | |
| BMEET | 0.000000 | 14,0000 | 6.523810 | 3.8397033 | | |
| FSIZE | 25.674300 | 32.9988 | 29.570940 | 1.8763555 | | |
| Lev | 0.008100 | 9.6928 | 2.513524 | 2.2895179 | | |

Based on the analysis and results of the descriptive test in the table above, it is known that the amount of data (N) used to analyze each variable is the same, namely 42 data. The maximum value indicates the range of the largest values in the study, while the minimum value indicates the range of the smallest values in the study. The mean value shows the range of the total of each variable divided by the number of samples. The standard deviation shows the deviation of the data in the study. Based on the results of the descriptive statistical test, the dependent variable is an integrated reporting index with an unweighted disclosure index measurement with a mean value of 0.700501. Board size, as measured by the total number of directors, has a mean value of 4.619048. Board independence, as measured by the number of independent boards of directors divided by the total number of existing boards of directors, has a mean value of 0.110369. Board meetings, as measured by the total number of joint meetings between the board of directors and the board of commissioners, have a mean value of 6.523810. Firm size, as measured by the natural logarithm of total assets, has a mean value of 29.570940 for all the companies sampled in this study. And the independent variable leverage, as measured by total liability divided by shareholder equity, has a mean value of 2.513524 for all the companies sampled in this study.

| Tab | ole 2. Chow test | | |
|---------------------------|------------------|---------|--------|
| effect test | Statistics | df | Prob |
| Cross-section F | 1.783330 | (20,16) | 0.1221 |
| Chi-square cross-sections | 49.233366 | 20 | 0.0003 |

The test results in the table above show the cross section chi square value of $0.0003 < \alpha$ (0.05), so that based on the criteria taken, the Fixed Effect Model is the best model in this test. Then the test proceeds to the Hausman Test

| T | able 3. Hausman test | | |
|-----------------------|-----------------------|-----------|--------|
| Test Summary | Chi-square statistics | Chi-Sq df | Prob |
| Random cross-sections | 2.426855 | 5 | 0.7875 |

The test results in the table above show that the probability value of the cross-section F is $0.7875 > \alpha$ (0.05), so that based on the criteria taken, the Random Effect Model is the best model in this test. Then the test proceeds to the Lagrange Multiplier Test

| T-1-1-4 | T | N. fr 14! - 1! | T4 |
|----------|----------|----------------|------|
| Table 4. | Lagrange | Multiplier | rest |

| Null (Non rand. Effect) | Cross-section | period | Both |
|-------------------------|---------------|-----------|----------|
| Alternative | One-sided | One-sided | |
| Breusch-Pagan | 1.723060 | 0.798769 | 2.521829 |
| | 0.1893 | 0.3715 | 0.1123 |
| | | | |

Lagrange multiplier test are the Breusch-pagan values of 0.1893 > α (0.05), so that based on the criteria taken, the Common Effects Model is the best model in this study.

| | Table 5 . Multicollinearity Test Results | | | | |
|----|--|-----------|-----------|-----------|-----------|
| | X1 | X2 | Х3 | X4 | X5 |
| X1 | 1.000000 | -0.429897 | -0.223359 | 0.646137 | 0.426891 |
| X2 | -0.429897 | 1.000000 | -0.163140 | -0.333340 | -0.226945 |
| Х3 | -0.223359 | -0.163140 | 1.000000 | -0.113314 | 0.239731 |
| X4 | 0.646137 | -0.333340 | -0.113314 | 1.000000 | 0.419219 |
| X5 | 0.426891 | -0.226945 | 0.239731 | 0.4192919 | 1.000000 |

Multicollinearity Test in the table above, there is no variable value > 0.85, it can be concluded that there is no too high correlation between the independent variables in the CEM model so that this study is free from multicollinearity symptoms .

| Table 6. Heteros | cedasticity Test Results Glejser |
|------------------|----------------------------------|
| Variable | Prob |
| С | 0.0583 |
| X1 | 0.8949 |
| X2 | 0.9588 |
| X3 | 0.9721 |
| X4 | 0.1682 |
| X5 | 0.6219 |

heteroscedasticity test above show that the sig value of each independent variable is greater than α (0.05). So it can be concluded that this study is free from symptoms of heteroscedasticity and the assumption of homoscedasticity has been fulfilled.

| Table 7. Analysis of panel data | | | | |
|---------------------------------|------|------------|-------|------|
| | В | std. Error | t | Sig |
| (Constant) | .592 | .148 | 4,007 | .000 |
| BSIZE | .020 | 006 | 3.131 | 003 |
| BIDP | .025 | 061 | .413 | .682 |
| BMEET | 007 | 002 | 2,917 | 006 |
| FSIZE | 001 | 005 | 230 | .819 |
| Lev | 003 | .004 | .632 | .532 |

Based on the results of panel data regression analysis using the Common Effect Model (CEM) in the table above, the results for panel data regression analysis are as follows:

Y = 0.592 + 0.020*X1 + 0.025*X2 + 0.007*X3 - 0.001*X4 + 0.003*X5 + e

| | Table.8 Determination Coefficient Test Results | | | |
|--|--|--------|-------|--|
| R Square Adjusted R Square Std Error of the regression Prob (f-stati | | | | |
| .434 | .355 | .047 6 | 0.001 | |

Based on the table above, the adjusted R square value is 0.355. This shows that the board size, board independence, board meeting, firm size, and leverage variables are only able to explain the integrated reporting variable by 35.5%, while 64.5% is explained by other variables not explained in this study.

Table 9. F test results

R Square Adjusted R Square Std Error of the regression Prob (f-statistic)

.434 .355 .047 6 0.001

Based on the table above, it can be seen that the Sig value is 0.001. This result is smaller than the significance level of 0.05. This shows that variable board size, board independence, board meeting, firm size, and leverage affect the implementation of integrated reporting simultaneously.

| | В | std. Error | t | Sig |
|------------|------|------------|-------|------|
| (Constant) | .592 | .148 | 4,007 | .000 |
| BSIZE | .020 | 006 | 3.131 | 003 |
| BIDP | .025 | 061 | .413 | .682 |
| BMEET | 007 | 002 | 2,917 | 006 |
| FSIZE | 001 | 005 | 230 | .819 |
| Lev | 003 | .004 | .632 | .532 |

Board size independent variable has a significance level of 0.003. This significance value is less than 0.05, meaning that the independent variable board size has a significant influence on the implementation of integrated reporting in a company. The regression coefficient value of the board size independent variable is positive 0.02, in other words the board size variable has a significant positive effect on the implementation of integrated reporting of a company. So it can be concluded that the first hypothesis (H1) is accepted. This significant result indicates that the more the number of the board of directors will further affect whether integrated reporting will be implemented in the company or not. The more the number of board of directors of a company, the more human resources in the top management are considered capable of paying attention to aspects related to the company which will later be reported in an integrated reporting. Of course, companies will increasingly have the power to control each component content in an integrated reporting by optimally distributing the oversight of the board of directors. In addition, with the large number of existing boards of directors, the level of ability and knowledge in a company also increases because it has a lot of availability of competent human resources. Therefore board size has an influence on the implementation of integrated reporting in a company. This positive relationship is in line with agency theory which states that the board of directors has a role to represent a control mechanism in a company to align interests related to the financial and non-financial aspects of the company. This is in line with research conducted (Chouaibi et al., 2022; Cooray et al., 2020; Fayad et al., 2022; Suttipun & Bomlai, 2019; Vitolla et al., 2020).

In the table above the board independence variable has a significance value of 0.682. This value is greater than the significance value of 0.05, so that the independent variable board independence has no significant effect on the integrated reporting dependent variable. While the value of the resulting regression coefficient is positive at 0.05. The independent variable board independence has no significant effect on integrated reporting. So it can be concluded that hypothesis 2 (H2) is rejected. This positive relationship is in line with agency theory which states that an independent board of directors has the power to control what information will be disclosed to its stakeholders. This insignificant result means that the application of integrated reporting in a company is not influenced by much or at least the independent board of directors in the company. One of the causes for this condition to occur is the lack of strict regulations in a country regarding the implementation of integrated reporting in a company, so even independent boards of directors do not make reporting in the form of integrated reporting in a company their priority. The results of this study are in line with research conducted by (Vitolla et al., 2020) and (Fayad et al., 2022).

In the table above the board meeting variable has a significance value of 0.006. This value is smaller than the significance value of 0.05, so that the board meeting independent variable has a significant effect on the integrated reporting dependent variable. While the resulting regression coefficient value is positive at 0.007. The board

meeting independent variable has a significant positive effect on integrated reporting. So it can be concluded that hypothesis 3 (H3) can be accepted. This significant result reflects that the more meetings between the boards are held, the more information about the company will be discussed and then reported in an integrated reporting. During the meeting, of course there was a lot of information exchange between the boards that occurred, so that a lot of discussions and thoughts would be generated and this would form an integrated report. In addition, the more meetings held, the more problems will be solved so that in the end this will become a company achievement that is reported in integrated reporting. This positive relationship is in line with stakeholder theory where companies have a sense of responsibility towards their stakeholders so that in the end the company will improve their coordination between managers by holding meetings to resolve existing problems and design strategies for the company's future. This research is in line with research conducted by (Vitolla et al., 2020) and (Vitolla et al., 2020).

In the table above the firm size variable has a significance value of 0.819. This value is greater than the significance value of 0.05, so that the independent variable firm size has no significant effect on the integrated reporting dependent variable. While the value of the resulting regression coefficient is negative by -0.001. The independent variable firm size has no significant effect on integrated reporting. So it can be concluded that hypothesis 4 (H4) is rejected. This negative relationship means that large companies, as reflected in their asset values, tend to provide limited information to the public. This is of course to avoid conflicts between companies and information recipients when there is a view that considers the company's ability as input to a process not in accordance with the output produced by the company. Companies also generally regulate the use of existing assets to comply with tax regulations and carry out price controls in accordance with the agreement of the players in the industry so that not all information will be included in the company's integrated reporting. In this condition the company tries to maintain the tension of its stakeholders . This is not in line with the stakeholder theory because companies do not voluntarily provide information to their stakeholders . However, the results of this study are in line with the theory of legitimacy where companies will adapt their behavior to existing norms so that companies can remain in a safe position among the surrounding community. This insignificant result can occur because the application of integrated reporting does not depend on the size of the company, but on what information is needed by its stakeholders . These results are in line with research conducted by (Manes-Rossi et al., 2020; Novaridha, 2017; Pillai &

In the table above the leverage variable has a significance value of 0.632. This value is greater than the significance value of 0.05, so that the independent variable leverage has no significant effect on the integrated reporting dependent variable. While the resulting regression coefficient value is positive at 0.003. The independent variable leverage has no significant effect on integrated reporting. So it can be concluded that hypothesis 5 (H5) is rejected. This positive relationship indicates that companies that have large leverage will provide more and more information regarding company activities as a form of responsibility for the capital or financing they use in running the company. Another thing to consider is the potential for conflict that arises when a company's leverage is large, so that companies provide complex information to anticipate conflicts between users of accounting information. This is in line with the theory of legitimacy which states that companies have a responsibility to the surrounding community so they will try to show their willingness to ensure the company's operations are within safe limits and acceptable to society. Insignificant results can occur considering that the company's urgency in implementing integrated reporting is not yet high, so the company will not incur agency costs to compile integrated reporting. These results are in line with research conducted by (Herlina Rahayuningsih, 1959; Manes-Rossi et al., 2020; Novianti et al., 2022)

4. CONCLUSION

The conclusion of the research is that board size had a significant positive effect on the application of integrated reporting, board independence had a positive and not significant impact on the adoption of integrated reporting, and board meetings had a positive and not significant effect on the application of integrated reporting, firm size has a negative and insignificant impact on the application of integrated reporting, and leverage has a positive and little effect on integrated reporting. This research has limitations; namely, this research is only limited in time to 2020-2021. Future research is expected to be able to research the factors that influence integrated reporting in financial services companies registered on the IDX.

REFERENCES

- Al Amosh, H., Khatib, S. F. A., & Hussainey, K. (2022). The Financial Determinants of Integrated Reporting Disclosure by Jordanian Companies. *Journal of Risk and Financial Management*, 15(9). https://doi.org/10.3390/jrfm15090375
- Anojan, V., & Ramesh, S. (n.d.). The Impact of Board and Audit Committee Characteristics on the Adoption of Integrated Reporting of Listed Banks in Sri Lanka.
- Chouaibi, S., Chouaibi, Y., & Zouari, G. (2022). Board characteristics and integrated reporting quality: evidence from ESG European companies. *EuroMed Journal of Business*, 17(4), 425–447. https://doi.org/10.1108/EMJB-11-2020-0121
- Cooray, T., Gunarathne, A. D. N., & Senaratne, S. (2020). Does corporate governance affect the quality of integrated reporting? *Sustainability (Switzerland)*, 12(10). https://doi.org/10.3390/su12104262
- Daniela, R., Antonio, L., & Carmela, R. (2022). Digitalisation and accounting language games in organisational contexts. *Journal of Management and Governance*. https://doi.org/10.1007/s10997-022-09626-9
- Drakic-Grgur, M. (2020). Financial Management. Studies in Health Technology and Informatics, 274. https://doi.org/10.3233/SHTI200667
- Elani, E., Agustin, C. R., Sulastri, E. D., Miftah, A. S., & Hidaya, R. (2021). "The Effect of Company Size, Profitability, And Solvency on Audit Report Lag on Lq-45 Companies Listed in Indonesian Stock Exchange Period 2018-2020". Review of International Geographical Education Online, 11(5). https://doi.org/10.48047/rigeo.11.05.80
- Fayad, A. A. S., Binti Mohd Ariff, A. H., & Ooi, S. C. (2022). Dose board characteristics influence integrated reporting quality? Empirical evidence from an emerging market. Cogent Economics and Finance, 10(1). https://doi.org/10.1080/23322039.2022.2140907
- Fuis Sukma Ayu, & Dian Filianti. (2022). Determinants of Financial Inclusion Information Disclosure of Islamic Rural Banks in Indonesia. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 9(6). https://doi.org/10.20473/vol9iss20226pp923-935
- Hameed, S. M. A., & Rahman Ahmed, N. A. R. (2020). Adoption of integrated reporting in emerging economies: Evidence from bahrain. *Asian Economic and Financial Review*, 10(10), 1115–1130. https://doi.org/10.18488/journal.aefr.2020.1010.1115.1130
- Herlina Rahayuningsih, P. (1959). Pengaruh Ukuran Perusahaan, Leverage, Dan Struktur Kepemilikan Terhadap Integrated Reporting. *Nucl. Phys.*, 13(1), 104–116.
- Hughes, J. C., & Rog, E. (2008). Talent management: A strategy for improving employee recruitment, retention and engagement within hospitality organizations. *International Journal of Contemporary Hospitality Management*, 20(7), 743–757. https://doi.org/10.1108/09596110810899086
- Kılıç, M., & Kuzey, C. (2018). Determinants of forward-looking disclosures in integrated reporting. Managerial Auditing Journal, 33(1), 115–144. https://doi.org/10.1108/MAJ-12-2016-1498
- Kurniawan, D., & Akbar, R. (2021). The Evaluation of Performance Indicators Development: A Study on Indonesian Financial Transaction Report and Analysis Center (PPATK). *Journal of Accounting and Investment*, 22(3). https://doi.org/10.18196/jai.v22i3.11157
- Luomaranta, T., & Martinsuo, M. (2022). Additive manufacturing value chain adoption. *Journal of Manufacturing Technology Management*, 33(9). https://doi.org/10.1108/JMTM-07-2021-0250
 Manes-Rossi, F., Nicolò, G., Tiron Tudor, A., & Zanellato, G. (2020). Drivers of integrated reporting

- by state-owned enterprises in Europe: a longitudinal analysis. *Meditari Accountancy Research*, 29(3), 586–616. https://doi.org/10.1108/MEDAR-07-2019-0532
- Nguyen, H. C., Nguyen, P. M. H., Tran, B. H., Nguyen, T. T. N., Hoang, L. T. T., & Do, T. T. H. (2022). Integrated reporting disclosure alignment levels in annual reports by listed firms in Vietnam and influencing factors. *Meditari Accountancy Research*, 30(6), 1543–1570. https://doi.org/10.1108/MEDAR-02-2020-0710
- Novaridha, I. A. (2017). Effect of Institutional Ownership, Firm Size and Profitability on The Elements of Integrated Reporting (Study on Non-Financial Companies Listed on Indonesian Stock Exchange 2015). *JOM Fekon*, 4(1).
- Novianti, Y., Soegiarto, D., & Delima, Z. M. (2022). ... Profitabilitas (Roa), Leverage, Board Size, Gender Diversity, Dan Struktur Kepemilikan Terhadap Integrated Reporting. *Universitas Katolik Musi*
- Omran, M., Ramdhony, D., Mooneeapen, O., & Nursimloo, V. (2021). Integrated reporting and board characteristics: evidence from top Australian listed companies. *Journal of Applied Accounting Research*, 22(4), 732–758. https://doi.org/10.1108/JAAR-04-2020-0077
- Pillai, Y., & Seetah, K. (2022). Determinants of Integrated Reporting Quality of Financial Firms. *The Indonesian Journal of Accounting Research*, 25(02). https://doi.org/10.33312/ijar.611
- Posavec, S., Keča, L., Delić, S., Stojanovska, M., & Malovrh, Š. P. (2021). Comparative analysis of selected business indicators of state forest companies. *Sumarski List*, 145(1-2). https://doi.org/10.31298/SL.145.1-2.1
- Qaderi, S. A., Ghaleb, B. A. A., Hashed, A. A., Chandren, S., & Abdullah, Z. (2022). Board Characteristics and Integrated Reporting Strategy: Does Sustainability Committee Matter? Sustainability (Switzerland), 14(10). https://doi.org/10.3390/su14106092
- Riyanto, S., & Hatmawan, A. A. (2020). Metode Riset Penelitian Kuantitatif Penelitian Di Bidang Manajemen, Teknik, Pendidikan Dan Eksperimen. *Deepublish*, 373.
- Shofiyah, L., & Wilujeng Suryani, A. (2020). Audit Report Lag and Its Determinants. *KnE Social Sciences*. https://doi.org/10.18502/kss.v4i7.6853
- Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif, dan R&D (1st ed.). Penerbit Alfabeta.
- Suttipun, M., & Bomlai, A. (2019). The relationship between corporated governance and integrated reporting: Thai evidence. *International Journal of Business and Society*, 20(1), 348–364.
- Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: an agency theory perspective. *Corporate Social Responsibility and Environmental Management*, 27(2), 1152–1163. https://doi.org/10.1002/csr.1879