

Corporate Characteristics of Predictive Accuracy of Forward Looking Information Disclosures

Yudhi Herliansyah¹⁾, Meifida Ilyas²⁾, Nia Tresnawaty³⁾, Syafnita⁴⁾

¹Universitas Mercubuana Jakarta

^{2,3} Universitas Dian Nusantara Jakarta

⁴Universitas Pekalongan

ARTICLE INFO

Received: 29 Dec 2024

Revised: 15 Feb 2025

Accepted: 24 Feb 2025

ABSTRACT

The need for information availability in capital markets, including the Indonesian capital market, has encouraged capital markets to increase various regulations on information that must be published and information published voluntarily. The publication of voluntary information is currently the focus of attention because it provides information that helps users in confirming the decisions they make. Gender issues in various previous studies, especially the important role of gender diversity in organisational performance, have been studied by Kabir et al.[1]

Using sales and production forecasts to proxy forward-looking information and using precision and accuracy to measure the quality of information disclosure, the authors investigate the impact of corporate characteristics on the precision and accuracy of sales and production forecasts made by listed Indonesian firms in their 2019 to annual reports, using logistics regressions.

The results suggest that high of Company ROA propensity to disclose more precise sales forecasts, and the the caharacteristics of Independent boards more precise of production forecast

Keywords: Information Availability, Gender issues, organisational performance, forward-looking information, precision and accuracy of sales and production forecasts.

INTRODUCTION

In the dynamic corporate reporting landscape, the role of forward-looking information disclosure has gained significant attention from academic researchers and industry practitioners. Existing literature suggests that the disclosure of forward-looking information is critical for investors in making informed decisions regarding future company performance.[2], Prior research examined the relationship between gender diversity on the board and FLI disclosure (forward Looking Information), the results showed that at 5% alpha the independent board was not related to FLI disclosure but was significant at 10% alpha, while gender diversity was related to FLI disclosure at 5% alpha.[3] Other reseach also found that forward-looking information is significantly associated with stock liquidity, indicating the importance of such disclosures in influencing market sentiment and behaviour. [4]

In addition, previous studies have highlighted that factors such as firm size, leverage, profitability, and auditor type can shape the level of forward disclosure.[2] Previous literature has also examined the synergistic relationship between accounting disclosures and the decision usefulness of stock price reactions, meanwhile the prediction of precise accounting information can help in better interpreting the forward signals embedded in stock prices, which in turn incentivises firms to improve the precision of their disclosures.[5]

Information disclosure is a voluntary activity on the Indonesian stock exchange that refers to the provision of corporate performance and governance information to external investors, and when various stakeholders can closely analyse the same financial information, efficiency will increase in the capital market.[6]

Previous research on the persistence of predictions about company performance (sales and product costs) has been carried out in the Chinese stock exchange, but the Chinese stock exchange requires forecasting disclosures about sales performance, and the results of the study show that sales performance predictions are correct after one year of

sales performance disclosure. However, the study did not reveal the organisational characteristics of the quality of these estimates.

Based on this understanding, this study aims to empirically investigate the organisational characteristics that determine the accuracy of forward-looking information disclosure predictions in public companies on the Indonesia Stock Exchange. This study will use a disclosure index methodology, where a score of 1 will be given for each correct prediction one year after the forward-looking information disclosure item and 0 for each incorrect item. The predictor variables to be investigated include corporate governance including independent board, board size and board gender diversity, profitability, and company stock performance. The findings of this study will contribute to the ongoing academic discourse on the determinants of forward-looking information disclosure persistence and provide valuable insights for policy makers, regulators, and corporate managers in improving the quality and appropriateness of such disclosures.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Various arguments about the importance of forward-looking information in contributing to making investment forecasts and aiding decision-making by stakeholders have resulted in the use of many theories to explain firms' voluntary disclosure of such information in annual reports. Theories such as agency, stakeholder, signalling and legitimacy have been used in the literature to explain the reasons for disclosure.[7][8][9][10]. Following the existing literature [11][12][13], this study is supported by agency theory to explain the relationship between board characteristics and forward disclosure. Specifically, this study adopts agency theory as the theoretical basis due to the role that corporate boards can play in aligning the interests of management and shareholders. In addition, diversity in the board room can enhance a company's forward-looking information disclosure, reduce agency problems and positively influence stakeholder decisions.

The complex nature of business administration, diverse stakeholder needs and ownership has given rise to many issues of great concern that translate into the agency relationship described by [14] The relationship in which principals, also known as shareholders, use agents (managers) to manage resources on their behalf. Hypothetically, for these agents to effectively manage the entity, they must act on behalf of the shareholders in making all organisational decisions. Nonetheless, agency problems exist because managers' interests differ from those of shareholders and may result in managerial decisions that maximise managers' wealth at the expense of shareholders .[14] Similarly, agency problems occur when the interests of the board and managers are not aligned because the board consists of people who are expected to be accountable to the chief executive officer (CEO)[15].

In addition, a consequence of the separation of ownership and control is the creation of information asymmetries between management and shareholders due to the superiority of information on the part of managers and the possession of enormous information regarding the current and future performance of the company. [15] indicate that corporate boards may struggle to reduce agency conflicts between boards and managers because boards have substantial choices in monitoring, which positions them to take sudden action when new information is received. Nonetheless, agency problems can be controlled when agency costs such as monitoring costs, bonding and residual losses are incurred to reduce the divergence of interests between managers and shareholders. Berger and Bonaccorsi tested the agency cost hypothesis. They found that higher leverage reduces the agency costs of outside equity and increases the value of the firm because it encourages managers to act more responsibly.[16]

When making forecast disclosures, companies need to make choices about the type of information they want to provide to investors through forecast accuracy. Performance estimates or predictions are voluntary disclosures in annual reports for companies listed on the Indonesia Stock Exchange, the financial services authority regulations only require companies to outline the reporting of both financial and non-financial information therefore management has the discretion to choose between more precise detailed disclosures that include financial and non-financial estimates such as general discussions or descriptions of financial performance such as production plans or targets, sales plans or targets and others.

1. Board Gender Diversity and Predictive Persistence on FLI Disclosure

There has been much discussion about the contribution of boardroom diversity in corporate decision-making and why diversity is important in enhancing transparency and increasing firm value. Board diversity is the difference among board members in terms of age, gender, ethnicity, education, expertise and skills [9]. Among these, gender diversity has been extensively debated in the corporate governance literature [17] [18] [19] [20], especially regarding the role of female directors as board members. Although the boardroom is largely a male consortium, women are gradually mixing with their male counterparts in the boardroom, more female directors on the board can inspire participatory communication among members as it is assumed that there are gender differences in leadership roles and decision-making approaches.[21]. Most studies have found positive, negative, or insignificant relationships between gender diversity and forward disclosure. [22] found no statistically significant difference between the two countries studied regarding female director underrepresentation and disclosure.[12] surprisingly find that female boardroom representation negatively affects forward-looking information disclosure, indicating that accommodating more women on the board will reduce disclosure. They attribute this negative effect on disclosure to the concentration of family-led boards in their context. In contrast, [23] report a positive relationship between gender diversity and FLID levels. From the reviewed literature, the following hypotheses will be tested:

H1. There is a significant relationship between board gender diversity and the predictive persistence of FLI disclosures.

2. Independent Board and Predictive Persistence on FLI Disclosure

The importance of including independent directors on the board cannot be overlooked. Agency theory states that a supervisory board composed of independent directors can effectively control and monitor the actions of agents. [12] argue that a board composed of non-executive and independent directors can enhance the board's openness and accountability to stakeholders and improve the maximisation of organisational resources. Outside directors typically consist of experts and executives of other companies who occupy political, academic, administrative, and entrepreneurial positions who have extensive expertise and possess a certain degree of objectivity in decision-making and monitoring managerial behaviour.[15]. Moreover, outside or non-executive directors assist in transparent reporting and disclosure of information when shareholders identify their role in provoking transparent reporting from managers. Thus, board composition with more non-executive directors may serve as a mechanism for financial transparency.

Board independence, measured as the proportion of non-executive directors to total board size, has been reported in the existing literature to reduce information asymmetry and improve overall corporate disclosure.[10][13] Companies tend to release more information if independent directors perform their oversight role.[15] state that due to the high costs incurred by outside directors to obtain information essential for effective managerial monitoring, firms with greater information asymmetry between managers and outsiders may have a higher proportion of inside directors.

At the same time, the literature records mixed results regarding the relationship between board independence and forward disclosure. [7][8][12] noted no significant relationship between board independence and FLID. However, [13][24]report a positive and significant relationship between board independence and FLID. [25] also find that board independence and other governance characteristics are positive and significant predictors of sales forecast errors. Based on the findings in the previous literature, the following hypothesis is formulated:

H2. There is a significant relationship between board independence and the predictive persistence of FLI disclosure.

3. Board Size and Predictive Persistence on FLI Disclosure

Overseeing and controlling management actions is one of the prominent functions among several functions of the board of directors. Moreover, expanding the capacity of the board of directors contributes to the improvement in monitoring and control due to the different views and pool of expertise of a large board of directors. A relatively large board size results in better transparency by disclosing more information. In contrast, some studies suggest that smaller boards are much more effective and less likely to be influenced by management. This makes the discussion on the impact of board size on FLID diverse, although board size depends on the industry and complexity of the company. [11][13] find no relationship between board size and FLID, while [26] find that board size is positively

associated with sustainability reporting, an aspect of forward disclosure. Based on the literature, the following hypotheses will be tested:

H3. There is a significant relationship between board size and the predicted persistence of FLI disclosure.

4. Financial Performance and Predictive Persistence on FLI Disclosure

The relationship between financial performance and the disclosure of forward-looking information has been a topic of significant interest in the academic literature. Previous studies have examined the complex dynamics between mandatory and voluntary disclosures, and have also investigated how the volatility of a firm's earnings can influence the market's response to these different types of disclosures.[27] One key aspect of this relationship is the concept of "persistence" - the extent to which a firm's forward-looking information disclosures are viewed as credible and reliable by investors over time. Legitimacy theory suggests that firms may use disclosure as a tool to manage public perceptions of their sustainability performance, even if their actual performance does not fully justify such disclosures.[28]

In this paper, we aim to shed light on the relationship between a firm's financial performance, as measured by its return on assets and price-to-book value ratio, and the persistence of its forward-looking information disclosures. We hypothesise that:

H4: Firms with higher financial performance, as measured by ROA and PBV, will exhibit greater persistence in their forward-looking information disclosures.

H5: The persistence of forward-looking information disclosures will be positively associated with the volatility of the firm's earnings.

The findings of this study will contribute to our understanding of the complex interplay between a firm's financial position, its voluntary disclosure practices, and the market's perception of the credibility of its forward-looking statements.[29][24]

METHODS

1. Research Design.

The research method in this study is causal (causation research). Causal research is a study to determine the effect of one or more independent variables on the dependent variable. The dependent variable in this study is precise predicting in forward looking information disclosure, and control variables. While the independent variables in this study are gender diversity on boards and audit committee.

2. Operationalisation of Variables

The table below shows the operationalisation of research variables:

Table 1. Operational Variables

Variables	Measurement	Scale
Precise Forward-Looking Information Disclosure	Score One If actual is higher than forecasted/ estimated, and score 0 for otherwise	nominal
Conservative Forward-Looking Information Disclosure	Score 1If actual between actual production is higher than forecast.estimated, and score 0 for otherwise	nominal
Board variables -BODSIZE (Board size) -INDEPENDENT	The number of Board of Directors	ratio

(Independent boards)	The number of independent directors on a board	
Performance variables -ROA (return on Assets) -TOBINSQ (Tobins q)	Total net profits divided by total assets Logarithm of the ratio of market value of equity and net debt to the difference between total assets and net intangible assets	ratio

3. Data Analysis

The analytical method used in this study is multiple linear regression with the equation of the regression formula as follows:

1. Model-1

$$FLID-f = \alpha + \beta_1 BODGENDIV + \beta_1 BODSIZE + \beta_1 INDEPENDENT + \beta_1 ROA + \beta_1 TOBINSQ + \varepsilon$$

2. Model-2

$$FLID-p = \alpha + \beta_1 BODGENDIV + \beta_1 BODSIZE + \beta_1 INDEPENDENT + \beta_1 ROA + \beta_1 TOBINSQ + \varepsilon$$

where

FLID-f; Precise sales forecast Forward-Looking Information Disclosure

FLID-c; Precise of production Forward-Looking Information Disclosure

β the regression intercept;

β_1, \dots, β_7 the regression coefficients; and

ε ; the error term.

RESULTS AND DISCUSSION

The following table presents the descriptive statistics of the data we collected for all variables, except the prediction variables which are nominal in nature. The table 2 below shows that the average independent board is 2 out of a total of 4.4 people in the board structure, in addition it can be seen that the average ROA reaches 14% with an EPS of 1%. The description of the number of independent 2 people concluded that the company in running its business is closely monitored.

Table 2. Discriptive statistic

	<u>INDEP</u>	<u>MCOM</u>	<u>TCOM</u>	<u>WCOM</u>	<u>ROA</u>	<u>EPS</u>
Mean	1.93846	3.89230	4.43076	0.53846	0.13884	661.23241
Median	2	4	4	0	0.07813	129.6
Maximum	4	9	9	2	0.61634	17162.11
Minimum	1	1	2	0	3.73050	0.00728
Std. Dev.	0.80771	1.70590	1.61021	0.58834	0.14914	2235.60300
Skewness	0.29056	0.30213	0.56711	0.54626	1.43540	6.55782
Kurtosis	2.06715	2.53920	2.73810	2.35460	4.55148	47.68670
Jarque-Bera	3.27138	1.56400	3.66996	4.36081	28.84008	5874.16200
Probability	0.19481	0.45748	0.15961	0.11299	5.	0
Sum	126	253	288	35	9.0246638858	42980.107281
Sum Sq. Dev.	41.75384	186.24615	165.93846	22.15384	1.42363	319866930.44
Observations	165	165	165	165	165	165

The table above shows that the average standard deviation is relatively small, indicating that the data is close to perfect zero distribution, with relatively small skewness and slightly large kurtosis, this illustrates that the sample companies have normally distributed data.

The following table illustrates the correlation between independent variables, showing that the sample companies. The correlation significance is above alpha, this indicates that the regression correlation is not correlated.

The following table is the correlation of the variables studied

Table 3. Correlation

	INDEP	MCOM	TCOM	WCOM	ROA	EPS
INDEP	1					
MCOM	0.7208668533	1				
TCOM	0.5853463757	0.9386577059	1			
WCOM	-0.4881363457	-0.3305198184	0.0152243863	1		
ROA	-0.2979926129	-0.0981887277	-0.0023001051	0.2784005647	1	-
EPS	-0.0120867833	-0.0975739393	-0.0753479514	0.0766979399	-0.0603032034	1

Correlation analysis was conducted to examine the association between the independent variables and the results are presented in table 3. As mentioned earlier, the finding suggests that there was no significant problems of collinearity. In addition, the correlation coefficients between the independent variables range from 0.002 to 0.938. In this respect, the correlation the above shows there are normally data problem because of the correlation loading is exceed 0.80 and is over the level normally deemed excessive (Gujarati, 2003).

Table 4 and 5 reports logistic regression that examine hypothesis testing the impact of company characteristics on precise of prediction sales and production.

Table 4 logistic regression

	coeff	Z-stat	prob	Ha
Panel A				
C	0.292	0.465	0.641	
WCOM	0.124	0.347	0.729	Rejected
INDEP	0.301	0.956	0.339	Rejected
TCOM	0.111	0.810	0.418	Rejected
ROA	3.923	1.643	0.030	Not Rejected
EPS	0.000	1.327	0.184	Rejected

The results suggest that the propensity to disclose more precise sales forecasts is positively associated with Company ROA are consistent with finding of [30][31]. In contrast to prior studies which show that higher state ownership is negatively associated with the quality of information disclosure [32][33], our result suggests that state ownership has a positive and significant impact on making precise sales forecasts. The possible reason contributed to such a result could be extant studies' testing periods.

Table 4 logistic regression

	coeff	Z-stat	prob	Ha
Panel B				
C	0.643	0.646	0.518	
WCOM	0.367	0.456	0.649	Rejected
INDEP	1.263	4.491	0.023	Not Rejected
TCOM	0.056	0.241	0.810	Rejected
ROA	0.212	0.097	0.922	Rejected
EPS	0.000	0.947	0.343	Rejected

From the results in column 3, we find that the propensity to disclose precise production forecasts is positively related to Independen boards. This result implies that sales forecasts errors increase with increases in the number of independent directors, higher frequency of board meetings and growth in equity concentration ratio.

CONCLUSION

This study investigates the impact of corporate governance mechanisms on the quality of forward-looking information disclosure in the Indonesian stock exchange. Forwardlooking information is proxied by sales forecasts

made by listed firms in their annual reports and the quality of forward-looking information is measured by two properties of forward-looking information: precision and accuracy.

We find that the precision of sales forecasts disclosure is positively related to corporate ROA, and the precision of production forecasts disclosure is positively related to corporate ROA.

REFERENCES

- [1] A. Kabir, S. S. Ikra, P. Saona, and M. A. K. Azad, "Board gender diversity and firm performance: new evidence from cultural diversity in the boardroom," *LBS J. Manag. Res.*, vol. 21, no. 1, pp. 1–12, 2023.
- [2] K. Alkhatib, "The Determinants of Forward-looking Information Disclosure," *Procedia - Soc. Behav. Sci.*, vol. 109, pp. 858–864, 2014.
- [3] N. A. A. Effah, B. T. Kyei, G. Kyeremeh, and N. W. K. Ekor, "Boardroom characteristics and forward-looking information disclosure: evidence from Ghana," *Corp. Gov.*, vol. 22, no. 7, pp. 1444–1461, 2022.
- [4] Z. Li, J. Jia, and L. Chapple, "Board gender diversity and firm risk: international evidence," *Manag. Audit. J.*, vol. 37, no. 4, pp. 438–463, 2022.
- [5] A. Arya, B. Mittendorf, and R. N. V. Ramanan, "Synergy between accounting disclosures and forward-looking information in stock prices," *Account. Rev.*, vol. 92, no. 2, pp. 1–17, 2017.
- [6] T. Yi F and F. L., "Does XBRL Adoption Improve Information Asymmetry? Evidence from Taiwan Public Companies," *J. Glob. Econ.*, vol. 04, no. 01, pp. 1–11, 2016.
- [7] S. Abed, B. Al-Najjar, and C. Roberts, "Measuring annual report narratives disclosure: Empirical evidence from forward-looking information in the UK prior the financial crisis," *Manag. Audit. J.*, vol. 31, no. 4–5, pp. 338–361, 2016.
- [8] B. K. A. Mensah, "The effect of audit committee effectiveness and audit quality on corporate voluntary disclosure quality," *African J. Econ. Manag. Stud.*, vol. 1, no. 1, 2018.
- [9] C. Abad and F. Bravo, "Audit committee accounting expertise and forward-looking disclosures: A study of the US companies," *Manag. Res. Rev.*, vol. 41, no. 2, pp. 166–185, 2018.
- [10] M. M. Elgammal, K. Hussainey, and F. Ahmed, "Corporate governance and voluntary risk and forward-looking disclosures," *J. Appl. Account. Res.*, vol. 19, no. 4, pp. 592–607, 2018.
- [11] B. K. Agyei-Mensah, "The relationship between corporate governance, corruption and forward-looking information disclosure: a comparative study," *Corp. Gov.*, vol. 17, no. 2, pp. 284–304, 2017.
- [12] P. K. Dey, M. Roy, and M. Akter, "What determines forward-looking information disclosure in Bangladesh?," *Asian J. Account. Res.*, vol. 5, no. 2, pp. 225–239, 2020.
- [13] S. Buerter and H. Pae, "Corporate Governance and Forward-Looking Information Disclosure: Evidence from a Developing Country," *J. African Bus.*, vol. 22, no. 3, pp. 293–308, 2021.
- [14] C. Jensen and H. Meckling, "THEORY OF THE FIRM : MANAGERIAL BEHAVIOR , AGENCY COSTS AND OWNERSHIP STRUCTURE I . Introduction and summary In this paper WC draw on recent progress in the theory of (1) property rights , firm . In addition to tying together elements of the theory of e," vol. 3, pp. 305–360, 1976.
- [15] C. S. Armstrong, A. D. Jagolinzer, and D. F. Larcker, "Chief Executive Officer Equity Incentives and Accounting Irregularities," *J. Account. Res.*, vol. 48, no. 2, pp. 225–271, 2010.
- [16] A. N. Berger and E. Bonaccorsi di Patti, "Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry," *J. Bank. Financ.*, vol. 30, no. 4, pp. 1065–1102, 2006.
- [17] J. Tshipa, L. M. Brummer, H. Wolmarans, and E. du Toit, "The effect of industry nuances on the relationship between corporate governance and financial performance: evidence from South African listed companies," *South African J. Econ. Manag. Sci.*, vol. 21, no. 1, pp. 1–18, 2018.
- [18] M. Azam, M. U. Khalid, and S. Z. Zia, "Board diversity and corporate social responsibility: the moderating role of Shariah compliance," *Corp. Gov.*, vol. 19, no. 6, pp. 1274–1288, 2019.
- [19] I. Khan, I. Khan, and B. bin Saeed, "Does board diversity affect quality of corporate social responsibility disclosure? Evidence from Pakistan," *Corp. Soc. Responsib. Environ. Manag.*, vol. 26, no. 6, pp. 1371–1381, 2019.
- [20] R. Martinez-Jimenez, M. J. Hernández-Ortiz, and A. I. Cabrera Fernández, "Gender diversity influence on board effectiveness and business performance," *Corp. Gov.*, vol. 20, no. 2, pp. 307–323, 2020.
- [21] S. Bear, N. Rahman, and C. Post, "The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation," *J. Bus. Ethics*, vol. 97, no. 2, pp. 207–221, 2010.
- [22] İ. Şener and A. B. Karaye, "Board Composition and Gender Diversity: Comparison of Turkish and Nigerian Listed Companies," *Procedia - Soc. Behav. Sci.*, vol. 150, pp. 1002–1011, 2014.
- [23] R. Alqatamin, Z. A. Aribi, and T. Arun, "The effect of CEOs' characteristics on forward-looking information,"

- J. Appl. Account. Res.*, vol. 18, no. 4, pp. 402–424, 2017.
- [24] V. Athanasakou and K. Hussainey, “The perceived credibility of forward-looking performance disclosures,” *Account. Bus. Res.*, vol. 44, no. 3, pp. 227–259, 2014.
- [25] W. Q. Mong, S. Ee, and L. L. V. W. P. Carey, “Corporate governance and quality of forward-looking information,” *Asian Rev. Account. Asian Rev.*, vol. 23, no. 3, pp. 232–255, 2015.
- [26] M. M. Shamil, J. M. Shaikh, P. L. Ho, and A. Krishnan, “The influence of board characteristics on sustainability reporting Empirical evidence from Sri Lankan firms,” *Asian Rev. Account.*, vol. 22, no. 2, pp. 78–97, 2014.
- [27] D. Cianciaruso and S. S. Sridhar, “Mandatory and Voluntary Disclosures: Dynamic Interactions,” *J. Account. Res.*, vol. 56, no. 4, pp. 1253–1283, 2018.
- [28] K. Hummel and C. Schlick, “The relationship between sustainability performance and sustainability disclosure – Reconciling voluntary disclosure theory and legitimacy theory,” *J. Account. Public Policy*, vol. 35, no. 5, pp. 455–476, 2016.
- [29] C. H. Cho and D. M. Patten, “The role of environmental disclosures as tools of legitimacy: A research note,” *Accounting, Organ. Soc.*, vol. 32, no. 7–8, pp. 639–647, 2007.
- [30] I. Karamanou and N. Vafeas, “The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis,” *J. Account. Res.*, vol. 43, no. 3, pp. 453–486, 2005.
- [31] B. Ajinkya, S. Bhojraj, and P. Sengupta, “The association between outside directors, institutional investors and the properties of management earnings forecasts,” *J. Account. Res.*, vol. 43, no. 3, pp. 343–376, 2005.
- [32] J. Z. Xiao, H. Yang, and C. W. Chow, “The determinants and characteristics of voluntary Internet-based disclosures by listed Chinese companies,” *J. Account. Public Policy*, vol. 23, no. 3, pp. 191–225, 2004.
- [33] X. Huafang and Y. Jianguo, “Ownership structure, board composition and corporate voluntary disclosure: Evidence from listed companies in China,” *Manag. Audit. J.*, vol. 22, no. 6, pp. 604–619, 2007.