

Financial Ratio Homogeneity and Its Implications for Reporting Risk in the Hotel Industry

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Abstract. This study examines the homogeneity of financial ratios and its implications for reporting risk in the hotel industry. Rather than treating financial ratios solely as performance indicators, this study adopts a structural perspective that interprets ratio homogeneity as a reflection of consistency in financial reporting structures. Using a quantitative descriptive-exploratory approach, the analysis focuses on publicly listed companies in Indonesia with differing levels of hotel revenue exposure. Financial data are obtained from annual financial statements for the year 2024, a period selected to represent post-pandemic normal economic conditions. A total of 39 financial statement accounts are identified and combined to form 1,482 financial ratios for each company. Companies are grouped based on the proportion of hotel revenue to enable a more comparable reading of reporting structures. The level of ratio homogeneity within each group is measured using the Coefficient of Mean Absolute Deviation. The results indicate that financial ratio homogeneity does not occur uniformly across all dimensions. Profit-related ratios, particularly those linking profit after income tax, comprehensive income, and profit attributable to owners, exhibit high and consistent homogeneity across groups, suggesting a relatively standardized profit reporting structure within the industry. In contrast, ratios related to taxation and receivables display greater heterogeneity, indicating higher sensitivity to accounting judgments and firm-specific reporting practices. For companies with full hotel revenue exposure, a strong alignment between operating revenue and cash receipts is also observed, reflecting the cash-oriented characteristics of pure hotel business models. These findings suggest that ratio homogeneity can serve as an analytical reading tool for identifying relatively stable reporting components as well as areas that are more vulnerable to reporting variation. This study contributes to the literature by repositioning financial ratio analysis as a structural approach to understanding reporting risk implications in the hotel industry without directly measuring risk.

Keywords: Financial Ratios, Hotel Industry, Ratio Homogeneity, Reporting Risk

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Introduction

The global expansion of the service industry has increased the complexity of business structures and corporate financial reporting. Business models that are increasingly service-oriented, characterized by relatively rapid transaction flows and the dominance of contract-based revenue, have positioned financial statements not merely as summaries of historical performance, but also as primary instruments for assessing information stability and potential reporting risk. In service industries that are intensive in revenue recognition, this complexity is particularly reflected in the high reliance on accrual practices, estimates, and professional judgment in determining the timing and magnitude of recognized revenue. The implementation of principle-based revenue recognition standards, such as IFRS 15, has been empirically shown to expand managerial discretion through the use of discretionary accruals, which in turn has implications for the quality and consistency of financial reporting (Ogunode & Salawu, 2021; Darabee & Mousa, 2025).

Conceptually, financial ratios represent relationships among accounts in the financial statements formed through systematic comparisons between specific accounting items (Harinuridin, 2022), such that financial ratios can in fact be read as indicators of a firm's economic structure, accounting policies, and reporting practices. The degree of uniformity or homogeneity of financial ratios across firms is often associated with similarities in business models and consistency in the application of accounting principles, which in turn enhances the comparability of financial information across entities (Barth, 2013; De Franco *et al.*, 2011). Conversely, variation or dispersion in ratios reflects the presence of accrual flexibility, differences in transactional complexity, and potential heterogeneity in reporting practices arising from the account structures that form the ratios. Within this framework, financial ratio homogeneity is not interpreted as a direct measure of firm performance, but rather as a structural indicator of financial information characteristics, which may provide early signals regarding reporting stability and the potential reporting risk inherent in a firm's accounting structure (Thanh Liem, 2021).

The hotel industry in Indonesia presents an empirical context that is structurally distinct from many other jurisdictions. Although operating under a common set of accounting standards, hotel companies face variations in business environments, revenue

structures, and demand patterns across regions, which collectively shape a heterogeneous financial reporting landscape. Campos *et al.* (2022) demonstrate that accounting and reporting practices in the hotel industry are contextual and sensitive to operational characteristics and the environments in which entities operate. In developing country settings, the application of global reporting standards also interacts with institutional factors and local business practices, resulting in variation in reporting structures and consistency across entities (Ikpor *et al.*, 2022). Empirical evidence from the Indonesian hotel industry further indicates that local dynamics play a role in shaping managerial behavior and corporate reporting practices (Amar *et al.*, 2021), making Indonesia a relevant context for understanding the formation of financial reporting structures in the hotel industry within an emerging market environment integrated with global practices.

This study is restricted to companies with differing levels of hotel revenue exposure. This restriction is important to enable a clearer and more comparable reading of reporting structures. Zhang & Chen (2025) show that variation in revenue structure reflects fundamental differences in how firms create and capture value, and therefore can be treated as a proxy for differences in underlying business models that shape operational and financial reporting practices. In the context of financial reporting, segment-based approaches have long been viewed as more informative than aggregation across heterogeneous activities, as they are better able to capture differences in transaction characteristics and economically relevant revenue sources (Song, 2020). Consistent with this view, studies on segment disclosure indicate that focusing analysis on segments or groups of firms with relatively similar business characteristics enhances the clarity of reporting structure interpretation and reduces distortions arising from non-comparable activity variation (Abdelhak & Hussainey, 2025; Sule & Moloi, 2025). Accordingly, the use of hotel revenue exposure as a distinguishing axis enables the identification of financial ratio homogeneity patterns that more accurately reflect the reporting structure of the hotel industry itself, rather than artificial differences across sectors.

To date, studies on financial ratios in the hotel industry have predominantly focused on performance and efficiency analysis, whether to assess financial health or operational effectiveness. Numerous studies employ liquidity, profitability, leverage, and activity ratios as primary instruments for evaluating financial performance and resource management efficiency

within this sector (Santoso & Supatmi, 2021; Poldrugovac *et al.*, 2016). Even when financial ratios are used to examine financial vulnerability or default risk, the analytical focus generally remains on performance implications and corporate resilience, rather than on their structural consequences for financial reporting risk (Metaxas & Romanopoulos, 2023; Crespi-Cladera *et al.*, 2021). In this context, limited attention has been given to how differences in revenue exposure within the same industry shape variation in financial ratio structures and, implicitly, influence potential reporting vulnerability. This study positions itself to address this gap through a descriptive and structural approach that is non-confrontational in nature, with the aim of complementing a discourse that has been dominated by performance and efficiency perspectives.

Within this framework, revenue exposure, financial ratio structures, and potential reporting risk are understood as conceptually interrelated elements. Differences in the proportion of hotel revenue reflect variations in business models that have implications for differences in account relationships within financial statements. Financial ratios formed from these relationships do not merely represent performance, but also reflect the degree of consistency in reporting structures produced by accounting practices and the judgments embedded within them. Mlawu *et al.* (2025) and Elsiddig Ahmed (2020) show that ratio structures, particularly those based on accruals, are sensitive to accounting decisions and specific reporting events, such that their variation may indicate differences in reporting quality and characteristics without necessarily assuming direct causal relationships. Consistent with this view, ratio patterns and financial attributes are also understood as early signals related to disclosure levels and reporting risk vulnerability, rather than as risk measures per se (Dey *et al.*, 2018). Therefore, the approach adopted in this study is not intended to measure reporting risk directly, but rather to provide a conceptual reading framework for understanding how financial ratio structures may reveal reporting areas that are relatively stable as well as areas that are more sensitive to judgment and accounting dynamics within the hotel industry context.

Based on this framework, this study aims to identify and map the level of homogeneity of financial ratios among public companies in Indonesia with differing levels of hotel revenue exposure, and to interpret its implications in the context of reporting risk. This study does not seek to measure or quantitatively classify reporting risk, but instead employs patterns of

ratio homogeneity as an analytical reading tool to understand the stability and potential vulnerability of financial reporting structures.

This study does not propose new risk metrics or disruptive causal claims, but rather extends the perspective on financial ratios by positioning ratio homogeneity as a conceptual bridge between reporting structures and the discourse on reporting risk. Through a descriptive exploratory approach and a broad coverage of ratios, this study provides an initial empirical foundation for a more contextual reading of reporting risk, particularly in the hotel industry, which is often assumed to be operationally homogeneous but not necessarily homogeneous in its reporting structure.

This study is important as it provides an alternative analytical lens to identify potentially vulnerable reporting areas through ratio homogeneity patterns, particularly in a post-pandemic context where financial stability is often assumed rather than critically examined. Despite the increasing reliance on financial ratios in evaluating firm performance, limited attention has been given to how these ratios reflect underlying reporting structures and their potential implications for reporting risk. This gap becomes particularly critical in the hotel industry, where high reliance on accrual-based revenue recognition and managerial judgment may obscure structural inconsistencies in financial reporting. Without a structural understanding of ratio behavior, stakeholders may misinterpret stable financial indicators as signs of reporting reliability, while underlying reporting risks remain undetected.

Literature Review

Business Characteristics of the Hotel Industry and Reporting Dynamics

The hotel industry exhibits business characteristics that differ from those of manufacturing and other service sectors. A service-based revenue structure, dependence on occupancy rates, and high sensitivity to seasonality and external conditions render the financial performance of hotel companies inherently volatile. In addition, limited cost flexibility, particularly with respect to fixed operational costs, makes this industry highly vulnerable even to relatively minor changes in the economic environment (Santoso & Supatmi, 2021; Metaxas & Romanopoulos, 2023).

These characteristics have direct implications for how financial information is presented and

interpreted. Within the context of the hotel industry, financial statements do not merely function as summaries of operational performance, but may also reflect firms' structural responses to the business uncertainty they face. The literature indicates that the financial vulnerability of hotel companies is often manifested in financial ratios and an increased risk of financial distress, particularly when external pressures such as economic crises or demand disruptions occur (Crespí-Cladera *et al.*, 2021).

Furthermore, the application of principle-based accounting standards in the hotel industry provides relatively wide discretion for management in presenting financial information. Under such conditions, financial reporting may function as a managerial adaptation mechanism to business environment pressures, rather than solely as a mechanical reflection of operational activities. Accordingly, an understanding of the business characteristics of the hotel industry constitutes an important foundation for a more critical reading of financial reporting dynamics (Dimitropoulos, 2025).

Segment Disclosure and Business Models

Segment disclosure emphasizes the importance of disaggregating financial information based on economic activities as a means of enhancing the relevance and transparency of financial statements. Segment-based disclosure enables users of financial statements to obtain a deeper understanding of a firm's sources of revenue, risk, and performance that may not be visible in aggregated financial reports (Song, 2020).

In firms with complex business models, particularly in the service sector, aggregated information often obscures the heterogeneity of underlying economic activities. The literature shows that segment disclosure based on industry or specific business characteristics provides higher informational value because it captures differences in revenue patterns and risk across business segments (Song, 2020; Abdelhak & Hussainey, 2025). Accordingly, segmentation is not merely viewed as a compliance obligation under accounting standards, but rather as a mechanism for improving the quality of financial information.

The quality of segment disclosure is also influenced by corporate governance factors and audit quality. Prior studies find that more informative segment disclosure practices are associated with higher market efficiency and lower cost of capital (Abdelhak & Hussainey, 2025; Sule & Moloi, 2025). In the context

of the hotel industry, differentiating firms based on hotel revenue exposure is theoretically and methodologically relevant, as it allows for a sharper analysis of differences in business structures and reporting risk across companies.

Accounting Flexibility and Accrual Discretion

The application of principle-based accounting standards provides management with flexibility in exercising professional judgment, particularly in the recognition and measurement of complex transactions. In revenue-intensive service industries such as hospitality, this flexibility becomes increasingly significant due to the high reliance on accounting estimates and revenue recognition policies (Ogunode & Salawu, 2021).

The earnings management literature suggests that accrual discretion is often used as a means of stabilizing earnings or adjusting financial reports in response to external pressures. The implementation of revenue recognition standards such as IFRS 15 introduces reporting dilemmas that may affect earnings quality and the consistency of financial figures across firms (Darabee & Mousa, 2025). In this context, variation in financial reports does not necessarily reflect fundamental differences in economic performance, but may instead arise from differing accounting policy choices (Thanh Liem, 2021).

In addition, managerial incentives and fiscal considerations further expand the scope of discretion in financial reporting. Tax planning and the trade-off between tax and non-tax costs constitute channels through which management can influence reported accounting figures (Lee & Yoon, 2020; Krieg & Li, 2025). Reclassification practices within financial statement components, including items of other comprehensive income, also contribute to the heterogeneity of reported figures that does not always align with fundamental changes in firm performance (Kusuma, 2023; Mlawu *et al.*, 2025).

Repositioning Financial Ratios: From Performance to a Structural Perspective

Financial ratio analysis has traditionally been used to assess efficiency, profitability, and firm performance within a given period. This approach positions ratios as outcome indicators that are dynamic in nature and oriented toward short-term evaluation. However, developments in the related literature

indicate a shift in this paradigm toward viewing financial ratios as representations of relatively stable reporting structures over the long term (Laitinen, 2018).

A structural approach to financial ratios emphasizes that ratios do not stand alone, but rather form an interconnected system that reflects the configuration of financial statement accounts. This perspective is reinforced by the compositional data approach, which views ratios as outcomes of proportional relationships among financial statement components, such that changes or stability in ratios reflect structural adjustments in financial reporting (Linares-Mustarós *et al.*, 2022).

Under certain conditions, the stability of financial ratios may conceal reporting risk dynamics that are not directly observable through conventional performance analysis. Accordingly, repositioning financial ratios from performance evaluation tools to instruments for reading reporting structures opens a deeper analytical space, particularly in the hotel industry, which is characterized by complex business and reporting environments (Seretidou *et al.*, 2025).

Comparability, Numerical Consistency, and the Ambiguity of Reporting Risk

Comparability of financial statements is widely regarded as an important qualitative characteristic of information, as it facilitates cross-firm analysis and enhances the usefulness of financial reports for stakeholders. Accounting literature emphasizes that higher levels of comparability enable financial statement users to identify similarities and differences in performance more efficiently and support economic decision-making processes (Barth, 2013; De Franco *et al.*, 2011). Within this framework, numerical consistency and relatively uniform ratio patterns are often associated with stable and comparable reporting practices.

However, the literature also suggests that high numerical consistency does not always carry a singular meaning. Under certain conditions, uniformity in financial information presentation may obscure underlying risk variation and differences in reporting practices. The stability of accounting figures, including profit components and other comprehensive income, may coexist with risk volatility that is not directly reflected in aggregated financial statements (Lucchese *et al.*, 2020). These findings indicate that the relationship between

numerical consistency and reporting quality is neither linear nor context-free.

Accordingly, comparability and numerical consistency in financial statements should be understood as ambivalent phenomena. On the one hand, they enhance readability and analytical convenience; on the other hand, excessive consistency may conceal more complex reporting risk dynamics. It is this ambiguity that opens empirical space for questioning how seemingly uniform numerical patterns should be interpreted in the context of reporting risk, particularly in the hotel industry, which is characterized by distinctive business features and relatively high reporting flexibility.

Research Methods

This study employs a quantitative descriptive-exploratory research design with a cross-sectional analytical framework. The approach is structured to identify patterns of financial ratio homogeneity as a representation of reporting structure consistency rather than to test causal relationships. Unlike conventional inferential studies, this research emphasizes structural pattern recognition across firms based on grouped revenue exposure, allowing for a comparative interpretation of reporting characteristics within similar business contexts.

Company identification was carried out through a stepwise screening process based on the 2024 IDX sector classification, focusing on the Consumer Cyclical and Properties & Real Estate sectors, which are sectors empirically found to contain companies with hotel activities. Companies were then grouped into four groups based on the percentage of revenue derived from the hotel business, namely companies with proportions of 100%, 52-99%, 17-45%, and 0.3-15%. The unit of analysis in this study is the financial ratios formed from the 2024 financial statement accounts of each issuer, which are then analyzed to identify the level of ratio homogeneity within each company class.

Table 1
Distribution of Groups by Hotel Revenue Proportion

Group	Proportion of Hotel Business Revenue	Number of Listed Companies
1	100%	17
2	52-99%	14
3	17-45%	18
4	0.3-15%	15

Research data were obtained from the annual financial statements of companies published by the Indonesia Stock Exchange (IDX) for the 2024 period. From these financial statements, this study identified 39 financial statement accounts that are generally available in hotel companies and are used as the basis for forming financial ratios. Financial ratios were systematically generated by pairing each account with every other account using a division-based approach. As the ratios are directional (i.e., A/B is treated as distinct from B/A) and self-pairing is excluded, the total number of possible ratios is determined as $n \times (n - 1)$. With $n = 39$, this yields a maximum of 1,482 potential financial ratios per firm. If a company does not have a particular account, then the ratio involving that account does not yield a value and is treated as unavailable data; however, that ratio is still included in the homogeneity calculation based on the available values within each respective group.

Table 2
List of 39 Financial Statement Accounts Used in Ratio Formation

No.	Code	Description
1	D5	Cash and Cash Equivalents
2	D6	Trade Receivables from Third Parties
3	D7	Current Inventories
4	D8	Total Current Assets
5	D9	Property, Plant and Equipment
6	D10	Total Non-current Assets
7	D11	Total Assets
8	D12	Current Accrued Expenses
9	D13	Tax Payables
10	D14	Total Current Liabilities
11	D15	Long-Term Post-Employment Benefit Obligations
12	D16	Total Non-Current Liabilities
13	D17	Total Liabilities
14	D18	Ordinary Shares
15	D19	Additional Paid-in Capital
16	D20	Unappropriated Retained Earnings
17	D21	Total Equity Attributable to Owners of The Parent
18	D22	Total Equity
19	D23	Sales and Operating Revenue
20	D24	Cost of Sales and Operating Expenses
21	D25	Gross Profit (Loss)
22	D26	General and Administrative Expenses
23	D27	Interest and Finance Costs
24	D28	Profit (Loss) Before Income Tax
25	D29	Profit (Loss) After Income Tax Including Discontinued Operations
26	D30	Total Other Comprehensive Income
27	D31	Total Comprehensive Income
28	D32	Profit (Loss) Attributable to Owners of The Parent
29	D33	Total Comprehensive Income Attributable to Owners of The Parent
30	D34	Opening Equity Balance Before Restatement
31	D35	Cash Receipts from Customers

No.	Code	Description
32	D36	Payments to Suppliers for Goods and Services
33	D37	Payments for Salaries and Employee Benefits
34	D38	Cash Generated from (Used in) Operations
35	D39	Net Cash Flows from (Used in) Operating Activities
36	D40	Net Cash Flows from (Used in) Investing Activities
37	D41	Net Cash Flows from (Used in) Financing Activities
38	D42	Net Increase (Decrease) in Cash and Cash Equivalents
39	D43	Cash and Cash Equivalents at Beginning of Period

This study deliberately restricts the observation period to the year 2024 only. This restriction is based on the consideration that 2024 represents the first period in which the COVID-19 pandemic status was officially no longer in effect, both at the national level (Cabinet Secretariat of the Republic of Indonesia, 2023) and at the global level (WHO, 2023), such that economic activities concurrently began to operate under relatively normal conditions. Accordingly, the use of 2024 data is considered the most representative and fair period for conducting a comparative analysis of financial ratio structures across companies with different levels of hotel revenue exposure, ranging from companies that are fully dependent on the hotel business to those with very minimal hotel revenue contributions. This temporal restriction is intended to minimize structural distortions arising from non-economic shocks, so that the identified patterns of ratio homogeneity more accurately reflect reporting characteristics and business structures, rather than transitional effects resulting from crisis conditions.

The level of homogeneity of financial ratios within each group of companies is measured using the Coefficient of Mean Absolute Deviation (CMAD). This measure is constructed by normalizing the mean absolute deviation (MAD) with respect to the mean, enabling comparability across ratios with different scales. The MAD is defined as the average of absolute deviations from the mean (Elamir, 2015), and its normalization follows the concept of relative dispersion, analogous to the coefficient of variation (Arachchige et al., 2020).

The use of MAD-based measures is supported by their robustness properties, as they rely on absolute deviations, making them less sensitive to outliers compared to variance-based measures (Pinsky & Klawansky, 2023). In addition, MAD has been widely applied in financial contexts as a measure of risk and

variability, particularly in portfolio analysis (Fatoni & Kusumawati, 2022).

The CMAD is calculated as follows:

$$CMAD = \frac{\left(\frac{1}{n} \sum |X_i - \bar{X}|\right)}{\bar{X}}$$

where X_i represents individual ratio values within a group, \bar{X} denotes the mean of the ratio, and n is the number of observations.

In this study, CMAD is computed for each of the 1,482 financial ratios within each group of companies classified based on the proportion of hotel revenue. For each ratio, the mean value across companies in the same group is first calculated, followed by the computation of the average absolute deviation from that mean. The resulting MAD is then normalized by dividing it by the mean to obtain the CMAD value. Lower CMAD values indicate higher homogeneity (i.e., greater similarity of ratio values across companies), while higher CMAD values reflect greater dispersion.

Results and Discussion

Patterns of Financial Ratio Homogeneity

The measurement results indicate that the homogeneity of financial ratios among companies with hotel revenue exposure does not form a uniform pattern across all ratio dimensions. Some ratios exhibit relatively consistent levels of homogeneity across company groups, while other ratios demonstrate homogeneity only within certain groups or display greater variation as business structures change. This pattern indicates that financial ratio homogeneity cannot be understood as a single attribute that uniformly reflects reporting stability, but rather as a characteristic that depends on the type of accounts involved and the accounting relationships that form the ratios (Linares-Mustarós *et al.*, 2022). Within this framework, ratio homogeneity is interpreted as an initial indication of reporting structure components that are relatively stable, as well as areas that are conceptually more sensitive to variation and reporting judgment (Laitinen, 2018).

Stability and Variation in Profit and Tax Structures

Within the profit dimension, the relationships among profit after income tax, comprehensive income, and profit attributable to owners exhibit the most consistent level of homogeneity compared to other ratio dimensions. Ratios D29/D31 (profit after

income tax to comprehensive income) and D32/D33 (profit attributable to owners to comprehensive income attributable to owners) consistently appear among the most homogeneous ratios across all company groups, regardless of the level of hotel revenue exposure. These findings indicate that the structural relationships among profit after income tax, comprehensive income, and profit attributable to owners tend to be standardized across issuers. Accordingly, variations in reported profit among companies with hotel revenue exposure primarily reflect differences in performance scale rather than differences in the structure of profit formation.

The consistency of these relationships is also reflected in their inverse ratios, namely D31/D29 and D33/D32, which exhibit relatively aligned homogeneity patterns across groups. The symmetry between ratios and their inverses indicates that, under normal conditions, relationships among profit components are proportional and do not display structural imbalances across profit elements. This pattern strengthens the interpretation that profit and comprehensive income reporting practices within this industry generally follow a relatively uniform reporting framework, such that the contribution of other comprehensive income under normal conditions does not disrupt the basic structure of reported profit formation. These findings are consistent with Lucchese *et al.* (2020), who show that the relationship between net income and comprehensive income tends to remain stable when it is not dominated by extreme OCI volatility, and they reinforce the findings of Kusuma (2023), who emphasizes the role of OCI classification and reclassification in maintaining consistency in profit reporting structures.

Table 3
Profit Ratios with the Highest Level of Homogeneity Across Company Groups

Ratio	Group 1	Group 2	Group 3	Group 4
D29/D31	CMAD	CMAD	CMAD	CMAD
	0.1240 (Rank 7)	0.0303 (Rank 6)	0.0425 (Rank 3)	0.0644 (Rank 3)
D32/D33	CMAD	CMAD	CMAD	CMAD
	0.1279 (Rank 8)	0.0271 (Rank 3)	0.0399 (Rank 1)	0.0657 (Rank 4)
D31/D29	CMAD	CMAD	CMAD	CMAD
	1.3313 (Rank 529)	0.0277 (Rank 4)	0.0465 (Rank 4)	0.0478 (Rank 1)
D33/D32	CMAD	CMAD	CMAD	CMAD
	1.3861 (Rank 580)	0.0245 (Rank 1)	0.0417 (Rank 2)	0.0494 (Rank 2)

However, not all profit-related dimensions exhibit the same level of homogeneity. The tax dimension, in particular, shows greater variation. Ratios involving profit before and after income tax display higher variability, especially among companies with moderate levels of hotel revenue exposure. Ratio D29/D28 (profit after income tax to profit before income tax) exhibits relatively high heterogeneity compared to other profit ratios. This pattern indicates that taxation constitutes a reporting area that is more sensitive to variation, whether arising from differences in tax strategies, temporary accounting events, or specific transaction characteristics. Therefore, within the context of reporting risk, these findings suggest that taxation represents one dimension that can weaken profit ratio homogeneity, not due to systematic reporting inconsistency, but because of its sensitivity to particular accounting events that have a significant impact on profit after income tax (Krieg & Li, 2025; Lee & Yoon, 2020).

Table 4
Tax Ratios with the Highest Level of Variation

Ratio	Group 1	Group 2	Group 3	Group 4
D29/D28	CMAD 0.1614 (Rank 9)	CMAD 0.1438 (Rank 23)	CMAD 2.2024 (Rank 1121)	CMAD 0.1384 (Rank 10)

Operational Convergence in Pure Hotel Companies: Revenue, Cash, and Receivables

Within the operational dimension, ratio D23/D35 (operating revenue to cash receipts from customers), together with its inverse, exhibits the most prominent pattern among pure hotel companies. This ratio ranks highest in the group of companies with 100 percent hotel revenue exposure, indicating a very strong alignment between recognized revenue and customer cash receipts. This pattern reflects the transactional characteristics of the pure hotel industry, which are generally cash-based or involve very short recognition lags, resulting in minimal differences between revenue and cash. In company groups with lower levels of hotel revenue exposure, the ranking of this ratio declines gradually but does not exhibit extreme degradation. This difference in patterns indicates that the alignment between revenue and cash represents a defining operational characteristic of pure hotel companies, whereas in companies with more diversified business activities, this relationship begins to be influenced by greater transactional complexity

and broader business structures. These findings are consistent with empirical studies in the hotel industry showing that operational ratios, particularly those related to revenue and cash, reflect business characteristics that are relatively distinctive compared to other sectors (Santoso & Supatmi, 2021). In this context, it is noteworthy that ratios involving receivable accounts do not appear among the ratios with comparable levels of homogeneity.

The absence of receivable-related ratios among the most homogeneous ratios indicates that the uniformity of revenue recognition and cash receipts is not automatically accompanied by uniformity in receivable recognition policies. Under accrual accounting, the formation of receivables is influenced by payment terms, contractual characteristics, and credit policies determined by management, resulting in greater variation across entities. In the hotel industry, although revenue and cash are relatively aligned, receivable policies continue to allow substantial room for judgment, particularly when companies engage with corporate customers, travel agents, or business partners under deferred payment arrangements. Accordingly, variation in receivable ratios is more appropriately understood as a consequence of the flexibility inherent in principle-based accrual practices rather than as an indication of reporting deviation (Michalski, 2008; Dimitropoulos, 2025).

Table 5
Operational Ratios with the Highest Level of Homogeneity in Pure Hotel Companies

Ratio	Group 1	Group 2	Group 3	Group 4
D23/D35	CMAD 0.0442 (Rank 1)	CMAD 0.0698 (Rank 15)	CMAD 0.4816 (Rank 59)	CMAD 0.1191 (Rank 8)
D35/D23	CMAD 0.0528 (Rank 2)	CMAD 0.0728 (Rank 16)	CMAD 0.2838 (Rank 36)	CMAD 0.1109 (Rank 7)

Implications of Homogeneity Patterns for Reporting Risk

Further examination of the results indicates that the structure of ratio homogeneity is also influenced by the sensitivity of the measurement to extreme observations. When the impact of highly extreme accounting events is neutralized through hypothetical adjustment, homogeneity patterns across groups become more coherent and symmetrical (see Fig. 1).

Core ratios retain their positions as the most homogeneous ratios, while ratios that previously exhibited sharp variation experience a narrowing of ranking gaps across groups. These findings indicate that deviation-based measures such as CMAD can be materially distorted by specific extreme observations, and therefore the interpretation of ratio homogeneity should be conducted contextually as an empirical outcome rather than as a reflection of fundamental changes in economic structure (Arachchige *et al.*, 2020).

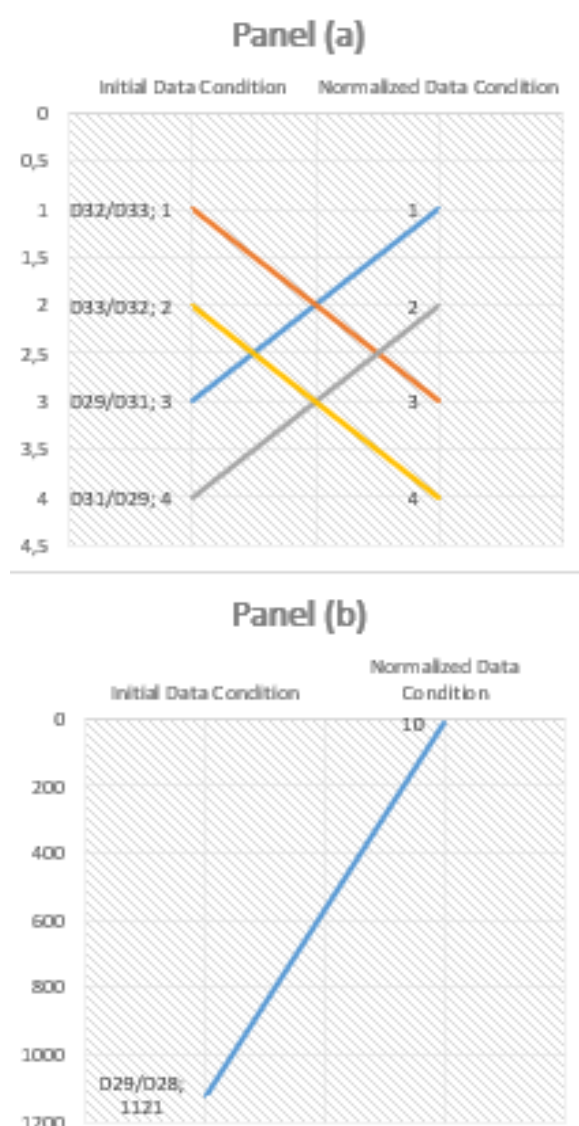


Fig. 1. Changes in ratio homogeneity rankings under different data conditions for companies in Group 3. Panel (a) presents core profit ratios, while Panel (b) presents the tax ratio (D29/D28), which is displayed separately due to its substantially different ranking scale.

In this study, reporting risk is not measured as an independent numerical variable or indicator, but is instead understood as a structural implication derived from observed patterns of financial ratio homogeneity. By examining ratios that exhibit high levels of homogeneity, it becomes possible to identify financial statement components that are relatively stable and standardized, whereas ratios that display greater variation indicate reporting areas that are more sensitive to extreme events and managerial judgment. Accordingly, reporting risk in this context is not positioned as an inherent characteristic of specific companies, but as a consequence of the account structures and reporting mechanisms that form the financial ratios. Therefore, ratio homogeneity and heterogeneity are employed as analytical reading tools to understand potential reporting vulnerabilities, rather than as explicitly calculated risk measures, consistent with literature that emphasizes the role of financial ratios in signaling informational stability and vulnerability without positioning them as formal risk metrics (Seretidou *et al.*, 2025).

Conclusion

This study concludes that the homogeneity of financial ratios among hotel companies in Indonesia is not uniform across all dimensions, but varies substantially depending on the account relationships involved. The results indicate that profit-related ratios, particularly the relationship between net income and comprehensive income, exhibit a high level of consistency, reflecting a standardized reporting structure within the industry. In contrast, ratios involving taxation and receivables display greater heterogeneity, indicating that these areas are highly sensitive to managerial judgment and firm-specific accounting policies. Furthermore, for companies with 100 percent hotel revenue exposure, the study finds a strong alignment between operating revenue and cash receipts, confirming the cash-based characteristics of pure hotel business models.

From a theoretical perspective, these findings support and extend the structural view of financial ratios articulated by Laitinen (2018) and Linares-Mustarós *et al.* (2022). This study confirms that ratio homogeneity functions as a proxy for reporting stability, whereby high consistency in profit components reflects adherence to structural norms, while variation in tax and receivable accounts confirms the presence of discretion inherent in accrual

accounting. This research contributes to the literature by repositioning financial ratios not merely as performance indicators, but as a conceptual bridge for identifying potential reporting risk embedded within firms' accounting structures.

From a practical standpoint, the findings provide a diagnostic framework for auditors and investors in assessing reporting quality. Auditors and investors are encouraged to enhance scrutiny over areas characterized by "high heterogeneity," particularly taxation and trade receivables, as these dimensions are identified as primary channels for discretionary behavior and potential reporting risk in the hotel industry. For hotel management, maintaining transparency in these sensitive accounts is essential to reduce information asymmetry in hotel financial reporting. In addition, the study encourages regulators to monitor differences in tax reporting patterns to ensure that the flexibility afforded by accounting standards remains aligned with economic reality rather than opportunistic behavior.

Despite achieving its objectives, this study has several limitations. First, the observation period is restricted to the year 2024 in order to minimize pandemic-related distortions, which limits the assessment of longitudinal structural stability. Second, the study employs a descriptive-exploratory approach using CMAD, which identifies variation patterns but does not statistically test the underlying drivers of heterogeneity. Future research should address these limitations by extending the observation period to capture structural shifts over time and by adopting mixed-method approaches to explore managerial motivations behind reporting variation. In addition, future studies are encouraged to examine other specific variables, such as deferred tax assets, discretionary accruals, or non-financial performance metrics, to provide a more comprehensive understanding of reporting risk in the hotel sector.

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