



Article

Related Party Sales and Earnings Management: The Moderating Role of Institutional Ownership—Single and Dispersed

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Abstract

This study aims to examine the relationship between related party sales (RPS) and earnings management (EMN), as well as to investigate the moderating effects of institutional ownership (IO), single institutional ownership (SIO), and dispersed institutional ownership (DIO) on this relationship. This study examines non-service and non-financial firms listed on the Indonesia Stock Exchange during the 2016–2024 period. The sample selection included firms with IO and RPS. The final sample consisted of 68 firms (585 firm-year observations) out of a total of 601 firms and was analyzed using moderated regression with unbalanced panel data. The findings indicate that RPS has a positive effect on EMN. IO weakens the positive effect of RPS on EMN. However, in the group consisting only of SIO, the positive effect of RPS on EMN becomes stronger. In contrast, in the DIO group, DIO is unable to moderate the relationship. Furthermore, EMN in firms engaging in RPS with parent firms does not differ from EMN in firms engaging in RPS with non-parent related parties. Finally, we conclude that, in the Indonesian context, RPS provides opportunities for management to engage in opportunistic behavior. The presence of SIO may increase earnings management, whereas DIO is unable to mitigate earnings management.

Keywords: earnings management; related party sales; institutional ownership

1. Introduction

Earnings is one of the most important indicators for evaluating company performance and shaping stakeholders' economic decisions. Since financial reporting influences investment decisions, access to financing, and market valuation, management is often under pressure to present stable or favorable financial results. Under such circumstances, earnings management (EMN) may arise as a managerial practice intended to influence reported earnings through discretion in accounting choices and operational decisions.

EMN can occur through accrual-based adjustments as well as through real business activities designed to achieve short-term reporting objectives (Dechow et al., 2010; Jha, 2013; Perotti & Wagenhofer, 2014; Baskaran et al., 2020; Makarem & Roberts, 2020). Although financial reporting standards continue to evolve to improve reporting quality, empirical evidence remains inconclusive regarding whether stronger accounting standards alone are sufficient to reduce EMN, as reporting outcomes are also shaped by the institutional environment and monitoring mechanisms (van Tendeloo & Vanstraelen, 2005; Barth et al., 2008; Callao & Jarne, 2010).



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The importance of understanding EMN is reflected in various corporate scandals and financial reporting controversies across different jurisdictions (Benston & Hartgraves, 2002; Alsultan & Hussainey, 2024). Cases involving financial statement manipulation demonstrate that EMN can reduce the credibility of financial reporting, distort resource allocation, and weaken investor confidence. In Indonesia, concerns regarding financial reporting quality continue to attract the attention of regulators, investors, and researchers, particularly in relation to corporate governance mechanisms and transactions conducted within business groups (Utami & Kartikasari, 2020). These concerns underscore the importance of identifying organizational conditions and governance arrangements that may either encourage or constrain EMN.

One corporate activity that has attracted increasing attention in this context is related party sales (RPS), which refer to transactions conducted between entities that maintain economic relationships. Based on accounting regulations in Indonesia, related party transactions refer to the transfer of resources, services, or obligations between related entities, regardless of whether consideration is charged (PSAK No. 224). Among these transactions, RPS is particularly important because sales activities directly affect reported revenue and earnings. Therefore, RPS may create opportunities for management to exercise discretion in financial reporting (Gordon & Henry, 2004; Kohlbeck & Mayhew, 2010; J. J. Chen et al., 2011).

The relationship between RPS and EMN remains theoretically ambiguous. From the perspective of agency theory, RPS may be used for opportunistic purposes because management can exploit information asymmetry to influence earnings through transfer pricing arrangements, revenue recognition timing decisions, or transaction structures that do not fully reflect economic substance (Gordon & Henry, 2004; Ge et al., 2010). Such conditions may increase the likelihood of EMN and undermine reporting quality. In contrast, the efficient contracting perspective suggests that RPS can improve operational efficiency, reduce transaction costs, facilitate coordination within business groups, and ultimately reduce incentives to engage in earnings management (Gordon & Henry, 2004; Ryngaert & Thomas, 2012; Alhadab et al., 2020). These differing perspectives indicate that the effect of RPS on EMN cannot be uniformly assumed to be either positive or negative.

Empirical evidence also presents mixed findings. Several studies report that related party transactions—including RPS—are associated with higher levels of EMN, increased information asymmetry, tunneling incentives, and reduced reporting transparency (Haji-Abdullah & Wan-Hussin, 2015; Lo & Wong, 2016; Marchini et al., 2018; Rahmat et al., 2020; Gavana et al., 2022; Li et al., 2022; Alsultan & Hussainey, 2024). Prior research suggests that firms may use related party transaction arrangements to facilitate earnings management, particularly when external monitoring mechanisms are weak (Jian & Wong, 2010; Marchini et al., 2018). However, other studies indicate that related party transactions may function as efficient internal arrangements that reduce uncertainty and serve as substitutes for opportunistic accounting practices (Alhadab et al., 2020; Alhadab & El Diri, 2024). These inconsistent findings suggest that the relationship between RPS and EMN remains unresolved and may depend on the governance conditions surrounding the firm.

One governance mechanism frequently proposed to explain these differences is institutional ownership (IO). Corporate governance theory suggests that institutional investors possess the incentives, resources, and monitoring capacity to constrain opportunistic managerial behavior and reduce EMN (Shleifer & Vishny, 1986, 1997). Through stronger oversight and monitoring activities, institutional investors may discourage the opportunistic use of RPS and promote transactions that reflect operational efficiency rather than managerial discretion (S. Chen et al., 2012; Bansal & Thenmozhi, 2020; Qi & Sun, 2023). Nevertheless,

institutional ownership should not be treated as homogeneous, as differences in ownership concentration may affect the effectiveness of monitoring and managerial discipline.

Recent literature increasingly suggests that ownership structure deserves greater attention in explaining corporate behavior (Zhang et al., 2024; M. Chen & Ye, 2025; Ermad et al., 2026). Specifically, firms may exhibit single institutional ownership (SIO), in which ownership is concentrated in a dominant institutional investor, or dispersed institutional ownership (DIO), in which monitoring authority is distributed across multiple institutional investors. These differences may create distinct incentives and monitoring outcomes, potentially influencing how RPS affects EMN (S. Chen et al., 2012; Bansal & Thenmozhi, 2020; Qi & Sun, 2023). Although attention to institutional monitoring continues to increase, evidence on whether ownership concentration moderates the relationship between RPS and EMN remains limited, particularly in emerging markets such as Indonesia.

Although prior studies have acknowledged the importance of ownership mechanisms in explaining the relationship between RPS and EMN, several important limitations remain. First, existing studies generally treat institutional ownership as a homogeneous governance mechanism and pay limited attention to whether monitoring effectiveness differs across concentrated and dispersed institutional ownership structures (Alhadab et al., 2020; C.-L. Chen et al., 2020; Jalan et al., 2020). This assumption may obscure important differences in monitoring incentives and institutional investors' ability to influence managerial behavior (El-Helaly et al., 2018; Marchini et al., 2018; Gavana et al., 2022, 2024; Li et al., 2022; Alhadab & El Diri, 2024; Alsultan & Hussainey, 2024).

Second, prior studies rarely distinguish between firms with single institutional ownership (SIO) and firms with dispersed institutional ownership (DIO) when examining the role of ownership governance in related party transactions (Alhadab et al., 2020; Alsultan & Hussainey, 2024). This distinction is important because ownership concentration may affect both monitoring intensity and managerial incentives. Under SIO conditions, a dominant institutional investor may possess stronger monitoring capacity; however, it may also create opportunities for the alignment of interests with management or controlling shareholders. In contrast, DIO may promote collective monitoring that reduces the influence of any single institutional investor and constrains opportunistic managerial behavior (R. Chung et al., 2002; Hashim & Devi, 2012; Kałdoński et al., 2020; Ali et al., 2024; C. Y. Chung et al., 2024). Therefore, the moderating effect of institutional ownership on the relationship between RPS and EMN may vary depending on the degree of ownership dispersion.

Third, prior literature has paid limited attention to differences in the characteristics of RPS itself. Most studies treat related party transactions as a single category and overlook whether the counterparty is a parent company or a non-parent related entity (Haji-Abdullah & Wan-Hussin, 2015; Li et al., 2022). This distinction may be important because transactions involving parent entities may reflect stronger economic influence and greater incentives to affect reported performance (Y. Chen et al., 2009). Therefore, the likelihood of EMN may vary depending on the type of related party involved in the transaction.

These limitations become increasingly relevant in the Indonesian context. Firms listed on the Indonesia Stock Exchange (IDX) exhibit heterogeneous ownership structures, with some firms dominated by a single institutional investor and others monitored by multiple institutional investors (Habib et al., 2017). Preliminary observations suggest that both ownership structures are commonly observed, indicating that ownership configuration may influence managerial decisions regarding RPS and financial reporting outcomes. However, empirical evidence from Indonesia remains limited regarding whether ownership concentration moderates the relationship between RPS and EMN.

This study addresses these gaps by examining whether institutional ownership moderates the relationship between RPS and EMN and whether this moderating effect dif-

fers between firms with SIO and DIO. In addition, this study extends prior literature by distinguishing RPS involving parent companies from transactions involving non-parent related parties. By simultaneously incorporating ownership heterogeneity and transaction characteristics, this study provides a more nuanced understanding of how governance mechanisms influence reporting incentives.

To achieve these objectives, this study investigates non-service and non-financial firms listed on the Indonesia Stock Exchange (IDX) over the 2016–2024 period. The analysis includes 585 firm-year observations from 68 firms and employs moderated regression analysis with unbalanced panel data to examine the relationship between RPS and EMN, as well as the moderating roles of IO, SIO, and DIO.

The findings indicate that RPS is positively associated with EMN. Institutional ownership weakens this positive relationship, suggesting that monitoring by institutional investors can constrain the opportunistic use of related party transactions. However, this moderating effect differs across ownership structures. In firms characterized by SIO, the positive relationship between RPS and EMN becomes stronger, whereas DIO does not significantly moderate this relationship. These findings contribute to the literature in several ways. Theoretically, this study extends the corporate governance literature by demonstrating that institutional ownership should not be treated as a uniform monitoring mechanism. Empirically, this study provides evidence from Indonesia by distinguishing between SIO and DIO and incorporating the characteristics of RPS counterparties. Practically, the findings highlight the importance of enhancing transparency, strengthening monitoring mechanisms, and improving governance practices related to related party transactions to reduce incentives for EMN.

2. Literature Review and Hypothesis Development

2.1. Literature Review

2.1.1. Earnings Management

Earnings management (EMN) refers to managerial actions that influence the financial reporting process, particularly reported earnings, by exploiting the flexibility of accounting standards or through operational decisions to achieve specific objectives. Such practices may be undertaken to enhance the firm's performance image, meet earnings targets, obtain bonuses, maintain investor and creditor confidence, or reduce political and contractual pressures. This behavior is commonly referred to as opportunistic earnings management (J. J. Chen et al., 2011; Haji-Abdullah & Wan-Hussin, 2015; Lo & Wong, 2016; Marchini et al., 2018; C.-L. Chen et al., 2020; Gavana et al., 2022; Li et al., 2022; Alsultan & Hussainey, 2024).

2.1.2. Related Party Sales

Related party sales (RPS) is a type of transaction in which firms sell products to parties that have a related relationship with the firm. It refers to the transfer of resources, services, or obligations between a reporting entity and its related parties (PSAK No. 224). A related party is defined as a person or entity that has a relationship with the reporting entity through control, significant influence, or involvement as key management personnel (PSAK No. 224). Related parties include not only individuals but also entities within the same business group, associates, joint ventures, and post-employment benefit plans associated with the reporting entity. Thus, related party relationships may arise from ownership, control, business collaboration, or employment relationships.

2.1.3. Institutional Ownership

Institutional ownership (IO) refers to the ownership of a company's shares by institutions such as investment firms, pension funds, banks, insurance firms, mutual funds,

and other financial institutions. It reflects the proportion of shares held by institutional investors relative to individual investors. In corporate governance, IO is widely viewed as an effective monitoring mechanism, as institutional investors generally possess the resources, expertise, and capability to actively oversee managerial actions (R. Chung et al., 2002; Velury & Jenkins, 2006; Hashim & Devi, 2012; Njah & Jarboui, 2013; I. Kim et al., 2016; Kałdoński et al., 2020; Potharla et al., 2021; Ramalingegowda et al., 2021; Wilson et al., 2022; Wu & Lo, 2022; Trinh et al., 2023; Mian et al., 2023; Ali et al., 2024; C. Y. Chung et al., 2024). Institutional ownership can be classified into two subtypes: institutional ownership concentrated in a single institution (single institutional ownership/SIO) and institutional ownership dispersed across multiple institutions (dispersed institutional ownership/DIO).

2.1.4. Single Institutional Ownership

Single institutional ownership (SIO) refers to a condition in which a majority or dominant proportion of a firm's shares is held by a single institution, such as an investment firm, bank, pension fund, or parent company (Cheung et al., 2009). This concentrated ownership grants the controlling institution significant influence over corporate decision-making, including managerial oversight and strategic policies. SIO may enhance monitoring effectiveness because the dominant institutional shareholder possesses both the incentives and power to closely supervise management (Aharony et al., 2010). However, excessively concentrated ownership may also create conflicts of interest and lead to the expropriation of minority shareholders, as the controlling shareholder may use its influence to pursue private benefits (Kang et al., 2014).

2.1.5. Dispersed Institutional Ownership

Dispersed institutional ownership (DIO) refers to a condition in which a firm's shares are held by multiple institutional investors, such that no single institution dominates the ownership structure. This arrangement reflects a relatively dispersed distribution of ownership among institutional investors such as pension funds, insurance firms, banks, and investment firms (Bansal & Thenmozhi, 2020; Ermad et al., 2026). From a corporate governance perspective, DIO may create a more balanced monitoring mechanism, as institutional investors can monitor both management and one another and limit the dominance of any single party. This structure may also reduce agency conflicts and the risk of minority shareholder expropriation; however, monitoring effectiveness may be weaker if coordination among institutional investors is limited (S. Chen et al., 2012; Qi & Sun, 2023; Zhang et al., 2024).

2.2. Hypothesis Development

2.2.1. RPS and EMN

The relationship between related party sales (RPS) and earnings management (EMN) can be explained from two theoretical perspectives. The first is agency theory, particularly agency conflicts between managers and owners. This theory suggests that RPS is positively associated with EMN, because it may be used opportunistically to serve managerial interests and increase information asymmetry. From this perspective, RPS may be used as a mechanism for earnings manipulation through transfer pricing arrangements, timing of revenue recognition, and abnormal transaction volumes that deviate from normal market conditions. Such practices may distort financial statements, thereby reducing their ability to reflect the firm's true economic performance (Gordon & Henry, 2004; Ge et al., 2010).

In contrast, the second perspective, efficient contracting theory, argues that RPS is negatively associated with earnings management. This perspective suggests that RPS is undertaken for efficiency purposes, as it can reduce transaction costs, lower business uncertainty, and improve operational efficiency. In other words, consequently, both income-

increasing and income-decreasing earnings management practices tend to decline. From this perspective, RPS serves as a mechanism that facilitates access to markets, distribution channels, and resources more efficiently than transactions with external parties. Such efficiency may enhance firm performance and reduce managerial incentives to engage in EMN. Therefore, RPS is not inherently opportunistic but can also generate economic value for firms and their shareholders (Gordon & Henry, 2004; Ryngaert & Thomas, 2012; Alhadab & El Diri, 2024).

Previous studies also show that RPS can be used for opportunistic purposes, thereby increasing EMN. Haji-Abdullah and Wan-Hussin (2015), using data from firms listed on Bursa Malaysia, found that firms with potentially opportunistic related party transactions are more likely to engage in real earnings management, such as sales manipulation, overproduction, and reductions in discretionary expenses. Gavana et al. (2022), in the context of Italian firms, also document that related party transactions, including RPS, are associated with EMN, as firms may use such transactions for direct earnings manipulation, substitution of real earnings management, and other opportunistic practices. Similarly, Alsultan and Hussainey (2024) show that related party transactions reduce earnings quality due to tunneling activities, expropriation, reporting manipulation, and increased information asymmetry. In addition, RPS may facilitate transfer pricing arrangements (Lo & Wong, 2016) and can be used to recognize large trade receivables even in the absence of actual cash inflows (Rahmat et al., 2020), thereby inflating total assets and improving financial ratios. Overall, these findings indicate that RPS may serve as a mechanism for earnings manipulation (Marchini et al., 2018; Li et al., 2022). However, such practices increase financial reporting risk, particularly when they deviate from applicable accounting standards (J. J. Chen et al., 2011; C.-L. Chen et al., 2020).

In contrast, previous studies also found that RPS may reduce EMN. Alhadab et al. (2020), using data from firms in Jordan, find that related party transactions may serve as an alternative to accrual-based EMN, thereby reducing the need for accrual-based manipulation. In other words, they do not find strong evidence that related party transactions increase real EMN. Furthermore, Alhadab and El Diri (2024), in the context of UK listed firms, reported that firms in the Main Market are more likely to use related party transactions for efficiency purposes rather than opportunistic purposes. Consequently, opportunistic use of such transactions is less prevalent compared to firms listed on the AIM Market.

The existence of two theoretical perspectives on the relationship between RPS and EMN (efficient versus opportunistic) indicates that this relationship remains debated in the literature. In addition, prior empirical studies report mixed findings, with many documenting a positive association, while others find a negative association between RPS and EMN. However, this study adopts a directional hypothesis, namely a positive relationship. This is based on the view that RPS may be used opportunistically by management to influence reported earnings through pricing decisions, revenue recognition timing, and the transfer of transactions among related entities. Therefore, the proposed hypothesis is as follows:

H1. *RPS has a positive effect on EMN.*

2.2.2. The Relationship Between RPS and EMN Moderated by IO

The relationship between related party sales (RPS) and earnings management (EMN) is influenced by several factors, one of which is institutional ownership (IO), which refers to shareholding by institutions in a firm (R. Chung et al., 2002). These institutions include banks, insurance firms, pension funds, mutual funds, and other corporate entities that hold equity stakes in firms. IO typically represents a relatively large proportion of total ownership, enabling institutional investors to provide capital, perform monitoring func-

tions, and influence corporate decision-making. IO may affect RPS through its monitoring role (C. Y. Chung et al., 2024), as institutional investors can impose stricter supervision over such transactions, thereby reducing the risk of fraud and opportunistic behavior (I. Kim et al., 2016).

From the corporate governance theory perspective (Berle & Means, 1932), IO serves as an effective external monitoring mechanism in reducing agency conflicts between managers and shareholders. RPS is a type of transaction that may facilitate managerial opportunistic behavior, as it can be used to shift profits or conceal the firm's true performance, thereby encouraging EMN practices. However, the presence of IO with a significant ownership proportion can enhance the effectiveness of monitoring managerial actions and promote greater transparency in financial reporting (C.-W. Lee et al., 2023). With stronger analytical capabilities and a focus on long-term firm value, institutional investors are able to constrain the opportunistic use of related party transactions. Therefore, IO may act as a moderating variable that weakens the positive effect of RPS on EMN through increased monitoring intensity and managerial accountability within the firm (Potharla et al., 2021).

This is also consistent with previous findings showing that IO is able to constrain managerial opportunistic behavior. This condition enhances the credibility of financial reporting and provides stronger monitoring, as institutional investors are sophisticated investors who are more capable of detecting EMN. In addition, institutional investors have the opportunities, resources, and capabilities to monitor managers. Therefore, this monitoring indicates that IO is associated with better oversight of managerial activities, thereby reducing managers' ability to manipulate earnings opportunistically (R. Chung et al., 2002; Velury & Jenkins, 2006; Hashim & Devi, 2012; Njah & Jarboui, 2013; I. Kim et al., 2016; Kałdoński et al., 2020; Potharla et al., 2021; Ramalingegowda et al., 2021; Wilson et al., 2022; Wu & Lo, 2022; Trinh et al., 2023; Mian et al., 2023; Ali et al., 2024; C. Y. Chung et al., 2024).

Conversely, when IO has opportunistic incentives, it may exploit RPS to pursue its own interests. In such cases, RPS is not used solely for operational efficiency or business synergies but may serve objectives that benefit certain parties, such as manipulating financial performance, transferring resources, or creating information asymmetry for other shareholders (Burns et al., 2010; Bao & Lewellyn, 2017; Lassoued et al., 2018; Lemma et al., 2018; Hsieh et al., 2019; K. S. Kim et al., 2020; Garel et al., 2021).

Accordingly, IO may moderate the positive effect of RPS on EMN, as its presence can influence how RPS is utilized and monitored within the firm. On the one hand, IO may weaken this relationship through effective monitoring mechanisms; on the other hand, it may strengthen it when institutional investors have opportunistic incentives. Therefore, this study examines the moderating role of institutional ownership by investigating whether it weakens or strengthens the positive effect of RPS on EMN.

Therefore, the proposed hypothesis is as follows:

H2. *IO moderates the positive effect of RPS on EMN.*

2.2.3. The Relationship Between RPS and EMN Moderated by SIO

The relationship between related party sales (RPS) and earnings management (EMN) is also influenced by SIO, which refers to a condition in which a single institution holds a dominant share of a company without the presence of other institutional owners. This concentrated ownership position gives SIO significant influence over corporate decisions, distinguishing it from non-dominant ownership structures. Based on this dominant ownership position, SIO can exert significant influence on corporate management (Cheung et al., 2009). Such influence may reflect the specific interests of the controlling institutional owner. One possible action is directing management to engage in RPS with parties designated

by the SIO, through which the SIO may obtain certain benefits. This creates pressure on management to meet short-term earnings expectations. Accordingly, SIO does not necessarily constrain managerial discretion in earnings management and may instead increase incentives for EMN (Aharony et al., 2010).

This is consistent with Type II agency theory, which emphasizes conflicts between controlling shareholders and minority shareholders. In this context, the controlling shareholder may take the form of a single institutional owner without other institutional co-owners. Concerns arise when ownership is highly concentrated in one institutional party, as this may generate intra-firm conflicts. SIO has the ability to influence managerial decisions in ways that serve its own interests, potentially at the expense of other shareholders.

This is also consistent with previous studies showing that firms dominated by a single controlling shareholder tend to engage in actions that serve the controlling owner's interests. Such influence is often exerted through directing management to conduct RPS, thereby creating opportunities for EMN (Cheung et al., 2009; Aharony et al., 2010; Kang et al., 2014; Bona-Sánchez et al., 2017). Previous studies also find that monitoring by dominant ownership is more likely to be associated with EMN. Such behavior is often driven by the desire to signal short-term performance, maintain stable stock prices, enhance market valuation, and present favorable financial conditions to creditors (Burns et al., 2010; Bao & Lewellyn, 2017; Lassoued et al., 2018; Lemma et al., 2018; Hsieh et al., 2019; K. S. Kim et al., 2020; Garel et al., 2021). Accordingly, SIO may encourage management to conduct RPS for opportunistic purposes. Therefore, SIO is expected to strengthen the positive effect of RPS on EMN. Therefore, the proposed hypothesis is as follows:

H3. *SIO moderates by strengthening the positive effect of RPS on EMN.*

2.2.4. The Relationship Between RPS and EMN Moderated by DIO

The relationship between related party sales (RPS) and earnings management (EMN) is also influenced by dispersed institutional ownership (DIO), which refers to an ownership structure in which a firm is held by multiple institutional investors with relatively similar ownership proportions. This reflects a relatively balanced distribution of shares among institutional investors within the firm.

Based on this relatively balanced ownership distribution among institutional investors, no single institutional owner is able to engage in opportunistic actions against corporate management, as such actions are likely to be challenged by other institutional investors (Utama et al., 2010; Ermad et al., 2026). Accordingly, DIO does not enable any single institution to direct management toward conducting abnormal RPS. Management is therefore less likely to engage in RPS with related parties without the implicit approval or oversight of other institutional investors.

Managerial monitoring by owners is an integral component of corporate governance. Such monitoring is typically conducted by institutional owners. Institutional ownership reduces information asymmetry and agency problems, while also improving firm performance (Shleifer & Vishny, 1986). Accordingly, this argument suggests that DIO constrains managerial actions related to EMN. This is also consistent with corporate governance theory (Berle & Means, 1932), which emphasizes the importance of external monitoring mechanisms in reducing agency conflicts between managers and shareholders. In this context, DIO can function as an effective monitoring mechanism of managerial actions, thereby limiting opportunities for EMN. In addition, DIO enables mutual monitoring among institutional investors, creating a balance of power in which each investor helps constrain the potential dominance of any single institutional shareholder. Overall, the DIO structure strengthens corporate governance by enhancing monitoring effectiveness and reducing opportunistic managerial behavior.

Previous studies also find that DIO can constrain managerial opportunistic actions in conducting RPS. In other words, DIO tends to encourage management to use RPS for efficiency purposes rather than opportunistic objectives (S. Chen et al., 2012; Bansal & Thenmozhi, 2020; Qi & Sun, 2023; Zhang et al., 2024). Moreover, prior studies also show that DIO is less likely to be involved in EMN. This is because dispersed institutional investors tend to adopt a long-term investment horizon and therefore are less willing to sacrifice future performance. In addition, DIO also seeks to maintain a good reputation, prefers more conservative accounting practices, and aims to strengthen corporate governance, which leads them to avoid earnings management practices (R. Chung et al., 2002; Velury & Jenkins, 2006; Hashim & Devi, 2012; Njah & Jarboui, 2013; I. Kim et al., 2016; Kałdoński et al., 2020; Potharla et al., 2021; Ramalingegowda et al., 2021; Wilson et al., 2022; Wu & Lo, 2022; Trinh et al., 2023; Mian et al., 2023; Ali et al., 2024; C. Y. Chung et al., 2024). Thus, DIO encourages management to conduct RPS for efficiency purposes. Therefore, DIO moderates by reducing the positive effect of RPS on EMN. Therefore, the proposed hypothesis is as follows:

H4. *DIO moderates by weakening the positive effect of RPS on EMN.*

2.2.5. EMN of Companies Conducting RPS with Parent Companies and Non-Parent Companies

Related party sales (RPS) to parent firms are part of internal business activities within a business group that has a vertical ownership relationship. In many corporate structures, parent and subsidiary firms operate within an integrated business ecosystem in which they support one another. Sales from subsidiaries to parent firms may be conducted to fulfill the need for raw materials, components, or services required by the parent company to continue its production or distribution processes. Such practices are common in integrated business structures because they can accelerate business processes and strengthen coordination across business units within the group (Jian & Wong, 2010).

RPS to parent firms also reflects functional division and specialization within the firm's operational chain. Subsidiaries may be focused on specific functions such as production, logistics, or information technology, and their outputs are then supplied to the parent company. This approach allows the parent company to leverage the competitive advantages of its subsidiaries in supporting the overall strategic objectives of the business group. Thus, internal sales to parent firms become part of an efficiency strategy and the strengthening of business synergy.

Related party sales (RPS) to parent firms are one form of transaction that has the potential to be misused by firms in the context of earnings management (EMN). Within a business group structure, the parent company has the ability to control the operations of its subsidiaries and determine financial policies, including transfer pricing arrangements between entities. This control allows the parent company to unilaterally regulate the volume, timing, and pricing of sales transactions from subsidiaries to the parent, in line with the interests of the business group. When such control is used to manage reported earnings through income manipulation or cost shifting between entities, EMN practices can become more pronounced. For example, subsidiaries may be instructed to recognize revenue earlier through fictitious or inappropriate sales to the parent company, solely to improve short-term financial reporting performance.

RPS to parent firms can also be used to manage the earnings level of subsidiary firms, for example by selling products or services to the parent company at prices below market value to reduce subsidiary profits, or conversely by artificially increasing profits in line with financial reporting needs (Y. Chen et al., 2009; Jian & Wong, 2010; Bona-Sánchez et al., 2017). This is consistent with Type II agency theory, which highlights agency conflicts between controlling shareholders and minority shareholders. In a pyramidal ownership

structure, the parent company as the controlling shareholder has the power to intervene in the operational policies of its subsidiaries, including determining RPS policies. As a result, subsidiaries are often required to sell products to the parent company according to the parent's directives, for example at prices below market value. Such conditions may lead to a reduction in reported subsidiary earnings. To maintain favorable performance in the eyes of investors and other stakeholders, subsidiary management may engage in EMN to offset the impact of RPS conducted at low prices. Thus, RPS to parent firms increases the likelihood of EMN practices as a consequence of the controlling party's influence and intervention over subsidiaries.

This is consistent with previous studies, which suggest that sales to parent firms may be used opportunistically through the structuring of related party transactions, particularly to influence the earnings of specific firms within a business group (Y. Chen et al., 2009; Jian & Wong, 2010; Bona-Sánchez et al., 2017). RPS from subsidiaries to parent firms is often not conducted based on arm's-length pricing principles, but rather adjusted to achieve specific objectives, such as manipulating reported earnings, avoiding taxes, or maintaining cash flow stability within the group. This raises concerns regarding potential financial reporting manipulation through RPS.

This phenomenon is explained by Type II agency theory, which focuses on conflicts of interest between majority shareholders and minority shareholders. Type II agency theory suggests that in firms with concentrated ownership structures, conflicts often arise because majority shareholders, such as parent firms, hold dominant control over subsidiaries. This power enables the parent company to divert subsidiary resources for its own benefit, including through earnings manipulation via inappropriate internal RPS.

When a parent company, as the majority shareholder, is able to intervene in managerial decisions and potentially encourage earnings management, minority institutional investors are in a relatively weaker position in terms of control. However, they still possess several mechanisms to constrain such opportunistic behavior. Institutional investors may raise questions and objections during general meetings of shareholders (GMS), request clarification from management, or exert pressure on independent commissioners and audit committees to perform their monitoring roles more effectively. Although their voting power is limited, reputational pressure remains an important consideration for firms.

In addition to RPS to parent firms, RPS may also be conducted with non-parent related parties. RPS to non-parent entities refers to the sale of goods or services by a firm to entities that have a related party relationship due to association, joint venture arrangements, key management personnel relationships, or common control by the same parent company. A joint venture is a form of business cooperation between two or more entities established to undertake specific economic activities, in which each party contributes capital, assets, or expertise and shares the risks and benefits of the jointly controlled entity. In this context, related parties refer to entities that share ownership or joint control over the venture. Accordingly, when a firm sells goods or services to a jointly controlled entity in which it participates, the transaction is classified as RPS to a joint venture.

RPS to joint ventures is one form of affiliated transaction that may be used by firms to engage in EMN. In a joint venture structure, a firm may have significant influence over the venture's economic activities, although it does not exercise full control. This relationship creates opportunities for firms to manage the timing and magnitude of RPS in order to influence reported earnings. One possible strategy is the early recognition of revenue or the inflation of sales figures through transactions with joint ventures, particularly during periods when firms seek to present strong financial performance. Such transactions may serve as a flexible instrument for EMN, as joint ventures operate under shared influence while maintaining separate reporting autonomy. Therefore, although these transactions

may reflect legitimate operational activities, in practice they can be used to strategically manage earnings in order to meet market expectations, internal targets, or managerial bonus incentives.

RPS to non-parent firms tends to present fewer opportunities for EMN, consistent with corporate governance theory (Berle & Means, 1932), which emphasizes monitoring mechanisms and the principle of fairness in corporate transactions. Related parties other than the parent company generally do not have the authority to intervene in operational policies or pricing decisions of the selling firm, resulting in transactions that are more independent and closer to arm's-length conditions. As a result, firms are more likely to obtain profits that reflect prevailing market conditions and face relatively limited pressure from controlling related parties. This condition constrains managerial discretion to engage in EMN, as there is weaker incentive to manipulate earnings through non-arm's-length pricing, which is more likely to occur in transactions involving parent firms. Thus, EMN tends to be higher when RPS is conducted with parent firms compared to non-parent related parties (Demirkan & Demirkan, 2014). In other words, RPS involving parent firms is more likely to be used as a mechanism for EMN than transactions with non-parent related parties. Therefore, the proposed hypothesis is as follows:

H5. *EMN is higher in firms conducting RPS with parent firms than in firms conducting RPS with non-parent related parties.*

3. Research Method

3.1. Sample and Data

The sample in this study consists of non-service and non-financial sector firms listed on the Indonesia Stock Exchange. This selection is made to ensure alignment with the RPS variable, as these sectors primarily involve firms engaged in production and product-based sales, where RPS is more relevant to business activities. The Indonesia Stock Exchange (IDX) classifies listed firms into 12 sectors: energy, basic materials, industrials, consumer non-cyclicals, consumer cyclicals, healthcare, financials, properties and real estate, technology, infrastructure, transportation and logistics, and listed investment products. This study excludes firms in the financial, properties and real estate, technology, infrastructure, transportation and logistics, and listed investment product sectors. Accordingly, the final sample covers 6 of the 12 IDX sectors, namely energy, basic materials, industrials, consumer non-cyclicals, consumer cyclicals, and healthcare.

The exclusion of service and non-production firms is based on differences in transaction characteristics, revenue recognition, and operational structures compared to firms engaged in product-based sales. As a result, sales to related parties and related-party revenues are not fully comparable in the context of earnings management analysis. In manufacturing and trading firms, RPS typically involves the transfer of goods, transfer pricing decisions, sales volume adjustments, trade receivables, and recognition of the cost of goods sold. In contrast, service firms generate revenue primarily from service contracts, fees, commissions, or project-based activities, where earnings management is more closely related to estimates of contract completion, service revenue recognition, and project cost estimation. Given these differences, earnings management mechanisms also vary across firm types. In product-based firms, EMN may be conducted through accelerated sales, transfer pricing manipulation, fictitious transactions, or timing adjustments in revenue recognition. In service firms, EMN is more likely to involve accounting estimates and judgments related to service completion and project costs. Therefore, combining both types of firms may introduce significant data heterogeneity. Restricting the sample to firms engaged in product-based operations enhances homogeneity in business models, financial

reporting structures, and transaction patterns. This improves the validity of measuring RPS in the context of earnings management analysis.

Based on data retrieved from the official website of the Indonesia Stock Exchange on 22 August 2025 through the “Market Data”—“Stock Data”—“Stock List” menu, a total of 601 listed firms were identified. Accordingly, the population of this study consists of 601 firms. When multiplied by the nine-year observation period from 2016 to 2024, this yields a total of 5409 firm-year observations (601×9 years). The study period covers 2016–2024, considering relevant regulatory developments. In particular, PSAK No. 7 (Revised 2014) on Related Party Disclosures stipulates that several provisions became effective for financial reporting periods beginning on or after 1 January 2015. This ensures that the reporting framework applied in the study period is consistent with the relevant accounting standard for related party disclosures.

The sample in this study is selected based on data availability consistent with the variables used. Accordingly, firms that are not continuously listed during the 2016–2024 period, firms without continuous RPS data, and firms without continuous IO data are excluded from the sample. Based on these criteria, the final sample in this study consists of 68 firms. When multiplied by the nine-year observation period, the total number of firm-year observations is 612. This study employs an unbalanced panel data approach, as some observations are incomplete over the 2016–2024 period, resulting in a final usable sample of 585 firm-year observations. Accordingly, the cross-sectional and time-series dimensions are not balanced. The sample is further categorized into three groups. Group 1 includes all firms without distinguishing between SIO and DIO, consisting of 585 observations; this group captures firms with IO regardless of whether ownership is single or dispersed. Group 2 comprises firms with SIO only, while Group 3 includes firms with DIO only. This classification is conducted to align with the objective of the study, namely to examine whether IO, SIO, and DIO moderate the positive effect of RPS on EMN by weakening this relationship.

The grouping of observations has also been applied in prior studies. Kang et al. (2014) examined groups consisting of top-5 firms (336 observations) and non-top-5 firms (646 observations). Their findings show that RPS has a negative effect on firm value, which is stronger in top-5 firms due to more concentrated ownership control. Similarly, Wong et al. (2015) analyzed firms with high family director representation (994 observations) and low family director representation (800 observations), as well as firms with high government ownership (1664 observations) and low government ownership (1552 observations). Their results indicate that RPS has a positive effect on firm value; however, this effect becomes insignificant in firms with high family director presence and high government ownership.

The data used in this study are secondary data. The required data consist of audited consolidated financial statements as of 31 December for the period 2016–2024. The notes to the financial statements are used to identify RPS, as they provide information on related party relationships (e.g., parent entities, entities under common control, joint ventures, and key management personnel) as well as related party transactions (e.g., sales, purchases, payables, and receivables). These notes are also used to identify SIO and DIO. In addition, the income statement, statement of financial position, and statement of cash flows are used to measure EMN.

3.2. Definition and Measurement of Variables

3.2.1. Dependent Variable

Earnings management (EMN) is measured using discretionary accruals derived from the Modified Jones Model. This model is considered one of the most accurate approaches for detecting EMN and provides stronger results compared to other models (Dechow et al., 2010).

Total accruals are calculated as the difference between net income and operating cash flows, and then regressed on changes in revenue and property, plant, and equipment to obtain non-discretionary accruals (NDA). Discretionary accruals (DA) are derived as the difference between total accruals and NDA and are used as a proxy for earnings management, with higher DA values indicating a greater level of earnings management.

3.2.2. Independent Variable

Related party sales (RPS) is measured as the ratio of total sales of goods to related parties to total company sales. This measurement follows [Ermad et al. \(2026\)](#); [Bansal and Thenmozhi \(2020\)](#); [J.-M. Lee \(2019\)](#); [Wang et al. \(2019\)](#); and [S. Kim and Yoo \(2017\)](#). RPS is obtained from the notes of the financial statements, specifically the section on “Transactions and Relationships with Related Parties.” This section discloses various types of related party transactions, including sales to related parties. In addition, it provides detailed information on sales to related parties with specific relationships. These relationships may include parent firms, subsidiaries, joint ventures, entities under common control, and other forms of related party relationships.

3.2.3. Moderating Variables

Institutional ownership (IO) is measured as the proportion of shares held by institutional investors relative to total outstanding shares. This measurement follows [Lin and Fu \(2017\)](#). SIO is also measured as the proportion of shares held by a single institutional investor relative to total outstanding shares. This measure is applied only to firms with SIO. Dispersed institutional ownership (DIO) refers to a structure in which there is more than one institutional investor in a firm’s ownership structure. DIO is measured by the proportion of shares held collectively by institutional shareholders relative to total outstanding shares. This measurement follows the approach of [Jafarinejad et al. \(2015\)](#).

3.2.4. Control Variables

Firm size in this study is measured using the natural logarithm of total assets. This measurement follows [Bansal and Thenmozhi \(2020\)](#); [J.-M. Lee \(2019\)](#); [Wang et al. \(2019\)](#); and [S. Kim and Yoo \(2017\)](#). Total asset turnover is measured as the ratio of sales to total assets of the company, following [Faisal et al. \(2020\)](#).

3.3. Research Model and Hypothesis Testing

The data analysis method used in this study is moderated regression analysis (MRA). This study divides the data into three observation groups to obtain more focused analytical results. The details for each group are as follows:

1. Group 1:

Group 1 includes all observations that have institutional ownership (IO), without distinguishing its type. This group aims to test H1, namely that related party sales (RPS) has a positive effect on earnings management (EMN). Group 1 is also used to test H2, where IO moderates by weakening the positive effect of RPS on EMN. Furthermore, Group 1 is used to test H5, namely that the EMN of firms engaging in RPS with parent firms is higher than the EMN of firms engaging in RPS with non-parent firms. Group 1 is specified following [Sharma et al. \(1981\)](#), and can be mathematically expressed with the following equation:

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 FS_{it} + \beta_3 TATO_{it} + \varepsilon_{it} \quad (1)$$

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 D_{it} + \beta_3 IO_{it} + \beta_4 FS_{it} + \beta_5 TATO_{it} + \varepsilon_{it} \quad (2)$$

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 D_{it} + \beta_3 IO_{it} + \beta_4 RPS_{it} * IO_{it} + \beta_5 FS_{it} + \beta_6 TATO_{it} + \varepsilon_{it} \quad (3)$$

2. Group 2:

Group 2 consists of observations that only have SIO, which refers to a condition where a firm has only one institutional shareholder in its capital structure. This group aims to test H3, namely that SIO moderates by strengthening the positive effect of RPS on EMN. Furthermore, it is also used to test H5, namely that EMN in firms engaging in RPS with parent firms is higher than in firms engaging in RPS with non-parent firms within the SIO group. Group 2 is specified following [Sharma et al. \(1981\)](#), and can be mathematically expressed with the following equation:

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 FS_{it} + \beta_3 TATO_{it} + \varepsilon_{it} \quad (4)$$

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 D_{it} + \beta_3 SIO_{it} + \beta_4 FS_{it} + \beta_5 TATO_{it} + \varepsilon_{it} \quad (5)$$

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 D_{it} + \beta_3 SIO_{it} + \beta_4 RPS_{it} * SIO_{it} + \beta_5 FS_{it} + \beta_6 TATO_{it} + \varepsilon_{it} \quad (6)$$

3. Group 3:

Group 3 consists of observations that only have dispersed institutional ownership (DIO), which refers to a condition where a firm has more than one institutional shareholder in its capital structure. This group aims to test H4, namely that DIO moderates by weakening the positive effect of RPS on EMN. Furthermore, it is also used to test H5, namely that EMN in firms engaging in RPS with parent firms is higher than in firms engaging in RPS with non-parent firms within the DIO group. Group 3 is specified following [Sharma et al. \(1981\)](#), and can be mathematically expressed with the following equation:

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 FS_{it} + \beta_3 TATO_{it} + \varepsilon_{it} \quad (7)$$

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 D_{it} + \beta_3 DIO_{it} + \beta_4 FS_{it} + \beta_5 TATO_{it} + \varepsilon_{it} \quad (8)$$

$$EMN_{it} = \beta_0 + \beta_1 RPS_{it} + \beta_2 D_{it} + \beta_3 DIO_{it} + \beta_4 RPS_{it} * DIO_{it} + \beta_5 FS_{it} + \beta_6 TATO_{it} + \varepsilon_{it} \quad (9)$$

Notes:

EMN = earnings management; β_0 = constant; $\beta_{1(i=1,2,3)}$ = regression coefficient; RPS = related party sales; FS = firm size; TATO = total asset turnover; D = dummy (RPS with parent firms = 1; otherwise = 0); IO = institutional ownership; SIO = single institutional ownership; DIO = dispersed institutional ownership; RPS*IO = interaction between RPS and IO; RPS*SIO = interaction between RPS and SIO; RPS*DIO = interaction between RPS and DIO; ε = Epsilon (error term).

4. Results and Discussion

4.1. Descriptive Statistics

Descriptive statistics aim to examine the distribution of the variables under study. This analysis provides a general overview of statistical values such as the minimum value, maximum value, and mean value. The complete results can be seen in Table 1.

Table 1. Descriptive statistics.

Variables	Obs	Min	Max	Mean
EMN	585	−1.0008	1.10058	−0.0218
RPS	585	0.000032	1	0.23902
IO	585	0.1333	0.99958	0.72653

Note: This table presents the descriptive statistics for Group 1 without separating it into Group 2 and Group 3. The data cover a sample of non-financial firms listed on the Indonesia Stock Exchange over the period 2016–2024.

Based on Table 1, the EMN variable, measured using discretionary accruals, has a minimum value of -1.0008 and a maximum value of 1.10058 . This range reflects variation in EMN practices undertaken by firms, both in the form of income-decreasing and income-increasing activities. Furthermore, the mean EMN value of -0.0218 indicates that, on average (585 observations), non-service and non-financial firms listed on the Indonesia Stock Exchange during the 2016–2024 period tend to engage in EMN with an income-decreasing pattern, although the magnitude is relatively small.

RPS has a minimum value of 0.000032 (0.0032%). This value indicates that, among the observed firms, there are firms that engage in RPS amounting to only 0.0032% of their total sales. The maximum value is 1 (100%), indicating that there are observed firms whose RPS is conducted entirely with related parties. Furthermore, the mean RPS value of 0.23902 (23.90%) suggests that, in general, non-service and non-financial firms listed on the Indonesia Stock Exchange during the 2016–2024 period have a relatively low level of RPS.

IO has a minimum value of 0.1333 (13.33%). This value indicates that, among the observed firms, there are firms that have institutional ownership of only 13.33% of total ownership. The maximum value is 0.99958 (99.95%), indicating that there are observed firms whose shares are almost entirely owned by institutional investors. Furthermore, the mean IO value of 0.72653 (72.65%) suggests that non-service and non-financial firms listed on the Indonesia Stock Exchange during the 2016–2024 period are generally dominated by institutional ownership.

4.2. Classical Assumption Test Results

4.2.1. Multicollinearity Test Results

The multicollinearity test is used to detect whether there is a correlation between one independent variable and another. This study employs the estimated correlation coefficients among independent variables and also examines the Variance Inflation Factor to identify whether multicollinearity is present. The results of the multicollinearity test can be seen in Table 2.

Table 2. Multicollinearity test results.

Variables	RPS	IO	FS	TATO	VIF
RPS	1	—	—	—	1.2178
IO	0.3729	1	—	—	1.2288
FS	-0.2093	-0.0272	1	—	1.0501
TATO	0.0861	0.2412	-0.035341	1	1.0628

Note: Multicollinearity is assessed using the correlation coefficients among independent variables and the VIF.

Based on Table 2, the estimated correlation coefficients among the independent variables and the VIF values are each below 0.90 and 10 , respectively. This is because correlations below 0.90 are still considered tolerable, as they are not strong enough to substantially distort parameter estimates. These results indicate the absence of multicollinearity among the independent variables, and therefore the analysis can proceed to the next stage of testing (Hair et al., 2019).

4.2.2. Heteroscedasticity Test Results

The heteroskedasticity test in this study is conducted using the Park test. This test aims to detect whether there is inequality in the variance of the residuals in the regression model by regressing the logarithm of the squared residuals on the independent variables. The summarized test results are presented in Table 3.

Table 3. Heteroscedasticity test results.

Groups	Equation	Obs.	Variables	Prob.	Conclusion
1 (IO)	(3)	585	RPS	0.0366	Exhibits heteroskedasticity
			D	0.2182	
			IO	0.3023	
			RPS*IO	0.0358	
			FS	0.1776	
			TATO	0.0089	
2 (SIO)	(6)	281	RPS	0.1046	Does not exhibit heteroskedasticity
			D	0.4806	
			SIO	0.9980	
			RPS*SIO	0.4838	
			FS	0.5364	
			TATO	0.0699	
3 (DIO)	(9)	304	RPS	0.0151	Exhibits heteroskedasticity
			D	0.6110	
			DIO	0.6372	
			RPS*DIO	0.5392	
			FS	0.3914	
			TATO	0.0367	

Note: A statistically significant relationship (at the 5% level) indicates the presence of heteroskedasticity.

Based on Table 3, in Group 1 Equation (3), with a total of 585 observations, there are three variables with significance values less than 0.05, indicating that Equation (3) exhibits heteroskedasticity. However, since Equation (3) is estimated using REM, the heteroskedasticity issue has been addressed, and thus the model remains appropriate for hypothesis testing and further analysis. Furthermore, in Group 2 Equation (6), with a total of 281 observations, all variables have significance values greater than 0.05. This indicates that there is no evidence of heteroskedasticity in Equation (6), meaning that the regression model satisfies the homoskedasticity assumption and is suitable for further analysis. Lastly, in Group 3 Equation (9), with a total of 304 observations, there are two variables with significance values less than 0.05, indicating that Equation (9) exhibits heteroskedasticity. However, since Equation (9) is estimated using REM, the heteroskedasticity issue has been addressed, and thus the model remains appropriate for hypothesis testing and further analysis.

4.2.3. Autocorrelation Test Results

The autocorrelation test is conducted to determine whether there are disturbances in the regression model caused by correlations among residuals or error terms across different periods. Autocorrelation indicates that the error term in one period is influenced by the error term in another period, which can lead to inefficient coefficient estimates. In this study, autocorrelation is tested using the Durbin–Watson (DW) statistic for each regression equation to ensure that the model is free from autocorrelation issues and produces reliable estimates. The summarized results of the autocorrelation test can be seen in Table 4.

Table 4. Autocorrelation test results.

Equation	Obs	DW	Criteria	Autocorrelation
Equation (3)	585	0.7917	−2 to 2	No autocorrelation
Equation (6)	281	1.3597		
Equation (9)	304	0.3330		

Note: A value close to 2 indicates no autocorrelation, while values substantially below or above 2 suggest positive and negative autocorrelation, respectively.

Based on Table 4, the Durbin–Watson (DW) values for each equation fall within the range of -2 to 2 . This indicates that there is no autocorrelation in any of the equations, meaning that there are no disturbances in the regression function in the form of correlations among the error terms. Therefore, the analysis can proceed to the next stage of testing.

4.3. Hypothesis Testing Results

The first step in the data analysis is to test the panel data estimation model to determine whether CEM, FEM, or REM is the most appropriate model for interpreting the research results. This testing is conducted on nine regression equations. The summarized results of the panel data estimation model selection can be seen in Table 5.

Table 5. Panel data estimation model selection results.

Groups	Obs.	Equation	Hypotheses	Cho Test		Hausman Test		LM Test	Best Model
				Chi-Sq. Stat	Prob.	Chi-Sq. Stat	Prob.	Breusch–Pagan. Prob.	
1	585	(1)	1	575.39	0.00	1.05	0.78	0.00	REM
		(2)		559.76	0.00	2.71	0.74	0.00	REM
		(3)	2	547.54	0.00	3.75	0.71	0.00	REM
2	281	(4)		347.97	0.00	7.80	0.052	0.00	REM
		(5)	3	349.91	0.00	10.47	0.06	0.00	REM
		(6)		331.81	0.00	16.26	0.01	0.00	FEM
3	304	(7)		302.45	0.00	3.22	0.35	0.00	REM
		(8)	4	284.46	0.00	3.68	0.59	0.00	REM
		(9)		176.62	0.00	5.26	0.51	0.00	REM

Note: Panel data model selection is conducted to determine the most appropriate estimation model among the CEM, FEM, and REM for the nine regression equations.

Based on Table 5, it can be observed that, in general, all research equations are selected to use REM as the best estimation model, except for Equation (6), which is selected to use FEM. These results indicate that, in the subsequent stage of regression result interpretation, all equations will be interpreted based on the REM model. Meanwhile, Equation (6) will specifically be interpreted using the FEM model, in accordance with the results of the model selection tests. Equation (6) also satisfies the classical assumption tests as described in the previous section. Furthermore, the results of hypothesis testing aim to accept or reject the research hypotheses. This study has five hypothesis test results distributed across nine equations. The summarized results of hypothesis testing can be seen in Table 6.

Table 6. Summary of hypothesis testing results.

Groups	Obs.	Equation	Hypotheses	Accepted/Rejected	Interpretation
1 (IO)	585	(1)	1	Accepted	RPS has a positive effect on EMN.
		(2)			
		(3)	2	Accepted	IO moderates by weakening the positive effect of RPS on EMN.
2 (SIO)	281	(4)			
		(5)	3	Accepted	SIO moderates by strengthening the positive effect of RPS on EMN.
		(6)			
3 (DIO)	304	(7)			
		(8)	4	Rejected	DIO is unable to moderate the positive effect of RPS on EMN.
		(9)			
1, 2, 3	585, 281, 304	(3), (6), (9)	5	Rejected	The EMN of firms engaging in RPS with parent firms is not greater than that of firms engaging in RPS with non-parent firms.

Based on Table 6, there are five hypothesis testing results in this study. Three hypotheses are accepted, namely H1, H2, and H3, while the remaining two hypotheses are rejected, namely H4 and H5.

4.3.1. Impact of RPS on EMN

The testing of H1 uses REM as the estimation model. This is because REM is selected as the best model in this study after conducting the Chow test, Hausman test, and Lagrange Multiplier test. The summarized output of the H1 test results can be seen in Table 7.

Table 7. Summary of Equation (1) output.

Variables	Coeff.	p-Value
C	0.207704	0.0389
RPS	0.014056	0.0244
FS	0.004334	0.3190
TATO	−0.024645	0.2786
R-squared = 0.011733		F-stat = 2.299194
Adj R-squared = 0.00663		Prob (F-stat) = 0.0064

Note: Using the REM, the results are significant at the 5% level based on Group 1, which consists of 585 firm-year observations.

Based on Table 7, the *p*-value for RPS is significant at the 5% level ($0.0244 < 0.05$). The results indicate that related party sales (RPS) has a positive effect on EMN. This finding suggests that higher levels of RPS are associated with a greater tendency for firms to engage in EMN practices. This condition reflects that related party transactions provide management with greater flexibility in determining accounting policies and revenue recognition, thereby creating opportunities for opportunistic behavior.

When RPS is conducted at relatively high prices, firm revenues tend to increase significantly. In such situations, management may not necessarily prefer excessively high reported performance, as it can attract greater scrutiny from stakeholders such as investors and regulators. Accordingly, management may engage in EMN by reducing reported earnings as a form of income smoothing, aiming to present more stable and sustainable performance over time (Alhadab et al., 2020; Alhadab & El Diri, 2024). This is supported by the descriptive statistics in Table 1, which show a negative average EMN value (−0.0218). This indicates that non-service and non-financial firms observed during 2016–2024 tend to engage in income-decreasing EMN. Overall, the findings suggest that managers are more inclined to make accounting adjustments that reduce rather than increase reported earnings.

This tendency for management to reduce earnings indicates a strategic effort in financial reporting management to achieve specific objectives. EMN practices with a downward earnings pattern may be carried out, among others, to reduce tax burdens, smooth income so that company performance appears more stable, or to reduce attention from external parties such as investors, creditors, and regulators. Thus, the descriptive statistical results provide an overview of the financial reporting behavior of non-service and non-financial firms, which tends to be opportunistic under certain conditions (Alhadab et al., 2020).

RPS increases earnings management, both in the form of income-increasing and income-decreasing practices, indicating its potential use as an opportunistic mechanism by management to adjust reported earnings according to specific objectives (J. J. Chen et al., 2011; C.-L. Chen et al., 2020). In certain situations, management may increase earnings to present stronger financial performance to investors and creditors, while in other cases earnings may be reduced for tax efficiency purposes, to create earnings reserves for future periods, or to reduce political pressure and external scrutiny. This behavior reflects

information asymmetry and agency conflicts between management, shareholders, and other stakeholders, as insiders possess superior information compared to external parties (C.-L. Chen et al., 2020; Gavana et al., 2022). Accordingly, RPS may serve as a channel that provides managerial flexibility in EMN through pricing arrangements, revenue recognition timing, and the volume of transactions between related parties.

The positive coefficient of RPS indicates that RPS has an increasing effect on EMN. This relationship can be explained by agency theory, particularly agency conflicts between managers and owners (Jensen & Meckling, 1976), which describe the contractual relationship within firms. The theory argues that managers possess superior information compared to owners, resulting in information asymmetry. Under such conditions, managers may have opportunities to behave opportunistically in pursuit of their own interests, including engaging in EMN by reducing reported earnings to achieve specific objectives such as tax avoidance, income smoothing, or reducing pressure from shareholders and external stakeholders.

The relationship between RPS and earnings management is also supported by evidence from other countries. In the United States, related party transactions (RPTs), including RPS, are found to have both an efficiency role and an opportunistic function, reflecting agency conflicts and the potential expropriation of minority shareholders (Gordon & Henry, 2004). They document that certain types of RPTs in U.S. public firms are positively associated with abnormal accruals as a proxy for earnings management, suggesting that such transactions may be used to manipulate financial reporting. In addition, their findings indicate that RPTs are associated with weaker corporate governance and lower firm value, reinforcing the view that these transactions can serve as a channel for managerial opportunism under weak monitoring conditions.

This is also consistent with previous studies finding that RPS increases EMN. RPS involves managerial discretion that may be used opportunistically to manage reported earnings, thereby allowing managers to derive private benefits from such transactions (Gordon & Henry, 2004; Kohlbeck & Mayhew, 2010; J. J. Chen et al., 2011; Habib et al., 2017; Marchini et al., 2018; C.-L. Chen et al., 2020; Rahmat et al., 2020; Jalan et al., 2020; Gavana et al., 2022, 2024; Li et al., 2022; Alsultan & Hussainey, 2024).

4.3.2. The Role of IO in Moderating the Effect of RPS on EMN

The testing of H2 was conducted using the REM as the main estimation model. The model was selected based on a series of specification tests, namely the Chow test, Hausman test, and Lagrange Multiplier test, which indicate that REM is the most appropriate model for the data. The detailed results of the H2 test are presented in Tables 8 and 9.

Table 8. Summary of Equation (2) output.

Variables	Coeff.	p-Value
C	0.159184	0.1935
RPS	0.011493	0.0870
D	0.042177	0.3128
IO	0.056391	0.5554
FS	0.004022	0.3528
TATO	−0.029314	0.2041
R-squared = 0.0142		F-stat = 1.6762
Adj R-squared = 0.0057		Prob (F-stat) = 0.1383

Note: Using the REM, the results are significant at the 5% level based on Group 1, which consists of 585 firm-year observations.

Table 9. Summary of Equation (3) output.

Variables	Coeff.	p-Value
C	0.148368	0.2217
RPS	0.002248	0.7894
D	0.030698	0.4651
IO	0.015107	0.8774
RPS*IO	−0.144359	0.0412
FS	0.003600	0.4005
TATO	−0.029561	0.1981
R-squared = 0.0200		F-stat = 1.9663
Adj R-squared = 0.0098		Prob (F-stat) = 0.0085

Note: Using the REM, the results are significant at the 5% level based on Group 1, which consists of 585 firm-year observations.

Based on Table 8, the *p*-value of IO is not significant ($0.5554 > 0.05$), while Table 9 shows that the *p*-value of RPS*IO is significant ($0.0412 < 0.05$). This indicates that institutional ownership (IO) acts as a pure moderating variable. Furthermore, Table 9 reports that the coefficient of related party sales (RPS) is positive (0.002248), whereas the coefficient of the interaction term RPS*IO is negative (−0.144359). This suggests that the interaction reverses the positive effect of RPS on EMN into a negative effect. Accordingly, H2 is accepted, indicating that IO weakens the positive effect of RPS on EMN.

The findings of this study indicate that IO moderates by weakening the positive effect of RPS on EMN. A relatively high level of IO provides institutional investors with stronger incentives and greater capacity to actively monitor management. Through their ownership rights and voting power, institutional investors can demand greater transparency in financial reporting and encourage earnings that more accurately reflect the firm's economic performance. Such active oversight limits managerial opportunities to engage in opportunistic behavior, including EMN through income-decreasing practices.

This is also confirmed by the descriptive statistics in Table 1, which show that the average IO is 0.7265 (72.65%). This finding indicates that non-service and non-financial firms listed on the Indonesia Stock Exchange during the 2016–2024 period are generally characterized by high levels of IO. This condition suggests that when a firm's shares are largely held by institutional investors, monitoring of managerial behavior tends to be stronger, as institutional investors possess greater capacity, resources, and incentives to oversee and discipline management.

The results of this study are consistent with corporate governance theory (Berle & Means, 1932), which posits that IO functions as an effective external monitoring mechanism in mitigating agency conflicts between managers and shareholders. RPS represents a type of transaction that may facilitate managerial opportunism, as it can be used to influence reported earnings and promote EMN practices. However, a significant level of IO enhances the effectiveness of managerial oversight and improves financial reporting transparency. With stronger analytical capabilities and a focus on long-term firm value, institutional investors are able to constrain the use of RPS for opportunistic purposes. Accordingly, IO serves as a moderating variable that weakens the positive effect of RPS on EMN through increased managerial monitoring and accountability.

The results of this study are also consistent with previous research showing that IO can limit managerial opportunism. This strengthens the credibility of financial reporting and enhances monitoring quality, as institutional investors are sophisticated actors with greater ability to detect EMN. Moreover, institutional investors possess the resources, expertise, and capacity to monitor managerial actions effectively. Accordingly, IO is associated with

stronger oversight of corporate activities, thereby reducing managers' ability to engage in opportunistic earnings manipulation (R. Chung et al., 2002; Velury & Jenkins, 2006; Hashim & Devi, 2012; Njah & Jarboui, 2013; I. Kim et al., 2016; Kałdoński et al., 2020; Potharla et al., 2021; Ramalingegowda et al., 2021; Wilson et al., 2022; Wu & Lo, 2022; Trinh et al., 2023; Mian et al., 2023; Ali et al., 2024; C. Y. Chung et al., 2024).

4.3.3. The Role of SIO in Moderating the Effect of RPS on EMN

The testing of H3 was conducted using the FEM as the main estimation model for both Equations (5) and (6). The model selection was based on specification tests, namely the Chow, Hausman, and Lagrange Multiplier tests, which indicate that FEM is the most appropriate model for the data. The results of the H3 test are presented in Tables 10 and 11.

Table 10. Summary of Equation (5) output.

Variables	Coeff.	p-Value
C	0.224517	0.1361
RPS	0.022381	0.0017
D	−0.038909	0.5182
SIO	0.017361	0.8911
FS	0.002673	0.6187
TATO	−0.011313	0.6659
R-squared = 0.037529		F-stat = 2.144592
Adj R-squared = 0.02003		Prob (F-stat) = 0.00046

Note: Using the REM, the results are significant at the 5% level based on Group 2, which consists of 281 firm-year observations.

Table 11. Summary of Equation (6) output.

Variables	Coeff.	p-Value
C	0.486823	0.4327
RPS	0.024809	0.0072
D	−0.175376	0.1121
SIO	0.268123	0.2373
RPS*SIO	0.175950	0.0133
FS	−0.018794	0.5306
TATO	−0.022638	0.4870
R-squared = 0.71971		F-stat = 13.77275
Adj R-squared = 0.66745		Prob (F-stat) = 0.000

Note: Using the FEM, the results are significant at the 5% level based on Group 2, which consists of 281 firm-year observations.

Based on Table 10, the *p*-value of SIO is not significant ($0.8911 > 0.05$), whereas Table 11 shows that the *p*-value of RPS*SIO is significant ($0.0133 < 0.05$), indicating that SIO acts as a pure moderating variable. Furthermore, Table 11 reports a positive coefficient for RPS (0.024809) and a positive coefficient for the interaction term RPS*SIO (0.175950). This indicates that the positive effect of RPS on EMN becomes stronger in the presence of SIO. Accordingly, H3 is supported, suggesting that SIO strengthens the positive relationship between RPS and EMN.

The findings of this study indicate that SIO moderates by enhancing the positive effect of RPS on EMN. This suggests that the presence of SIO functions as a mechanism that amplifies EMN practices conducted through RPS. In the context of agency conflicts, a single

institutional shareholder may have interests aligned with management, particularly when RPS is used as a tool for earnings management. This alignment allows the influence of SIO to operate more effectively, such that higher levels of SIO strengthen the relationship between RPS and EMN.

This finding is further supported by the negative average EMN in the study sample, indicating that firms tend to engage in income-decreasing EMN. Such practices are often considered to potentially disadvantage shareholders in the short term. Under these conditions, a single institutional shareholder can play an active role in monitoring managerial EMN behavior. SIO is measured based on the proportion of shares held relative to total outstanding shares, where a higher ownership stake reflects stronger monitoring intensity. These findings suggest that an SIO structure is sufficient to function as a mechanism for controlling the use of RPS for EMN purposes.

The results of this study are consistent with agency theory, particularly Type II agency conflicts, which highlight conflicts between majority and minority shareholders. In some firms, majority ownership may be concentrated in a single institutional investor without the presence of other institutional shareholders. Such an ownership structure raises concerns regarding potential dominance by a single institutional party. In this context, SIO may have the ability to influence managerial decisions to pursue actions that primarily benefit the controlling institutional shareholder, potentially at the expense of minority shareholders. The findings provide evidence that SIO can facilitate managerial opportunism through its influence over corporate decision-making.

The results of this study are also consistent with previous research, which finds that firms with a single dominant shareholder tend to engage in actions that serve the interests of the controlling party. Such influence is often exerted through managerial control to conduct RPS, thereby creating opportunities for EMN practices (Cheung et al., 2009; Aharony et al., 2010; Kang et al., 2014; Bona-Sánchez et al., 2017).

The results of this study are also consistent with previous research, which finds that control exercised by dominant ownership is more likely to be associated with EMN. Such behavior is often driven by efforts to demonstrate strong short-term performance, maintain stable stock prices, enhance market valuation, and present favorable financial conditions to creditors (Burns et al., 2010; Bao & Lewellyn, 2017; Lassoued et al., 2018; Lemma et al., 2018; Hsieh et al., 2019; K. S. Kim et al., 2020; Garel et al., 2021).

4.3.4. The Role of DIO in Moderating the Effect of RPS on EMN

The testing of H4 was conducted using the REM as the main estimation model for both Equations (8) and (9). The model selection was based on specification tests, namely the Chow, Hausman, and Lagrange Multiplier tests, which indicate that REM is the most appropriate model for the data. The results of the H4 test are presented in Tables 12 and 13.

Table 12. Summary of Equation (8) output.

Variables	Coeff.	p-Value
C	−0.010864	0.9541
RPS	0.002987	0.7957
D	0.087428	0.1354
DIO	0.193152	0.2263
FS	0.006512	0.2930
TATO	−0.037418	0.2696
R-squared = 0.022028		F-stat = 1.342455
Adj R-squared = 0.005619		Prob (F-stat) = 0.24627

Note: Using the REM, the results are significant at the 5% level based on Group 3, which consists of 304 firm-year observations.

Table 13. Summary of Equation (9) output.

Variables	Coeff.	p-Value
C	−0.024055	0.8993
RPS	−0.011480	0.4500
D	0.078705	0.1822
DIO	0.128444	0.4397
RPS*DIO	0.195959	0.1453
FS	0.005833	0.3516
TATO	−0.038496	0.2576
R-squared = 0.028879		F-stat = 1.472016
Adj R-squared= 0.0092		Prob (F-stat) = 0.1874

Note: Using the REM, the results are significant at the 5% level based on Group 3, which consists of 304 firm-year observations.

Based on Table 12, the p -value of DIO is not significant ($0.2263 > 0.05$), and Table 13 shows that the p -value of RPS*DIO is also not significant ($0.1453 > 0.05$). This indicates that dispersed institutional ownership (DIO) functions as a homogenizing moderator. Therefore, H4 is rejected, suggesting that DIO does not moderate the relationship between related party sales (RPS) and earnings management (EMN).

The findings indicate that DIO does not moderate the positive effect of RPS on EMN. This suggests that the presence of multiple institutional shareholders does not automatically enhance monitoring effectiveness over EMN practices, particularly when management engages in income-decreasing strategies. In such cases, income-decreasing EMN is often not perceived as purely opportunistic behavior that harms shareholders in the short term, but rather as a defensive accounting strategy, such as tax planning, reserve formation, or intertemporal income adjustment. Consequently, incentives for institutional shareholders to actively intervene and exercise strict oversight become relatively weaker.

Furthermore, in a DIO structure, potential conflicts of interest and free-rider problems among institutional investors may reduce the effectiveness of collective monitoring. This situation is further amplified when EMN is conducted through RPS, which is often difficult to detect both contractually and operationally as a form of earnings manipulation that harms shareholders. As a result, although DIO is expected to function as a governance mechanism that mitigates agency conflicts, its presence is not sufficiently strong to constrain income-decreasing EMN conducted through RPS. These findings emphasize that the moderating role of institutional ownership depends on the nature of EMN behavior and the characteristics of transactions used as a vehicle for earnings management.

The results of this study are consistent with passive monitoring theory, which posits that DIO reflects the presence of multiple institutional investors within a firm's ownership structure. This condition tends to reduce the effectiveness of managerial oversight, as individual institutions often behave passively and do not engage in intensive monitoring. Such passivity arises from heterogeneous interests and weak incentives for each institution to bear monitoring costs individually, while the benefits are shared collectively. Consequently, dispersed institutional ownership is unable to sufficiently constrain managerial discretion, thereby allowing greater managerial flexibility in conducting EMN.

The results of this study are not consistent with corporate governance theory (Berle & Means, 1932), which emphasizes the role of external monitoring mechanisms in reducing agency conflicts between managers and shareholders. In this context, DIO is expected to function as an effective monitoring mechanism of managerial actions, thereby limiting opportunities for EMN. Moreover, dispersed institutional ownership among multiple investors is assumed to facilitate mutual oversight, creating a balance of power in which each investor constrains the potential dominance of any single institution. However, the

findings do not provide sufficient evidence that DIO effectively serves as a monitoring mechanism to reduce EMN.

These results are also inconsistent with previous studies, which find that DIO can constrain opportunistic managerial behavior in conducting RPS. In other words, dispersed institutional ownership is expected to encourage the use of RPS for efficiency purposes rather than for opportunistic earnings manipulation (S. Chen et al., 2012; Bansal & Thenmozhi, 2020; Qi & Sun, 2023; Zhang et al., 2024; M. Chen & Ye, 2025). However, the results of this study do not provide sufficient evidence to support the view that DIO functions as an effective monitoring mechanism.

4.3.5. EMN of Firms Engaging in RPS with Parent Firms and Non-Parent Firms

Based on Table 9, the D value is not significant ($0.4651 > 0.05$). Similarly, Table 11 reports an insignificant D value ($0.1121 > 0.05$), and Table 13 also shows no significance ($0.1822 > 0.05$). Therefore, H5 is rejected, indicating that EMN does not differ significantly between firms conducting RPS with parent firms and those engaging in RPS with non-parent related parties. In other words, there is insufficient evidence of a meaningful difference in EMN across the two types of RPS relationships.

The study finds no evidence that EMN is higher in firms conducting RPS with parent firms compared to those involving non-parent related parties. This can be explained by stricter monitoring mechanisms exercised by parent firms over their subsidiaries. As controlling shareholders, parent firms have strong economic and reputational incentives to ensure the reliability of subsidiary performance and financial reporting, particularly given that subsidiary financial statements are consolidated into group reports. This condition encourages the implementation of robust internal control systems, managerial reporting requirements, and intensive oversight, thereby limiting opportunities for subsidiary managers to engage in EMN. Consequently, a direct relationship with a parent company does not necessarily lead to greater managerial opportunism in the context of RPS.

Furthermore, RPS with non-parent entities generally involves more complex ownership structures and business relationships, resulting in weaker monitoring compared to direct oversight by parent firms. Non-parent related parties, such as jointly controlled entities or affiliated firms, are not always subject to the same level of operational control, thereby increasing the potential for information asymmetry between management and owners. Theoretically, this condition may heighten the likelihood of EMN through the timing of revenue recognition or non-arm's-length pricing. However, the results of this study indicate that EMN in firms conducting RPS with non-parent firms is not higher than in those involving parent firms. This suggests that the complexity of related-party relationships alone is insufficient to explain differences in EMN behavior without considering the effectiveness of broader corporate governance mechanisms.

The results of this study are not consistent with previous research, which suggests that EMN is higher in firms engaging in RPS with parent firms than in those involving non-parent related parties (Y. Chen et al., 2009; Jian & Wong, 2010; Bona-Sánchez et al., 2017). This difference in results indicates that a hierarchical relationship between parent and subsidiary firms does not necessarily increase opportunistic managerial behavior. On the contrary, in this study, the presence of a parent company may function as a monitoring mechanism that constrains EMN practices, primarily due to the parent company's interest in maintaining the quality of consolidated financial statements. Therefore, the findings suggest that the effect of RPS on EMN is context-dependent and is strongly influenced by the effectiveness of corporate governance mechanisms in place.

The results of this study are consistent with agency theory, particularly the view that managerial opportunistic behavior is not determined solely by the type of related party

relationship (parent or non-parent), but is more strongly shaped by managerial incentives, monitoring mechanisms, and the overall corporate governance structure. Although parent firms, as majority shareholders, theoretically possess greater power to influence managerial decisions, the findings indicate that earnings management is not higher in firms with parent-related RPS compared to those with non-parent related parties. This suggests that RPS, regardless of the type of related party, may be used for both efficient and opportunistic purposes. Accordingly, the type of related party relationship does not appear to be the primary determinant of earnings management levels.

5. Conclusions

The sample in this study consists of 68 firms (585 firm-year observations), which are classified into three groups. Group 1 (585 firm-year observations) includes all firms with institutional ownership (IO) without distinguishing between SIO and dispersed institutional ownership (DIO). Group 2 (281 firm-year observations) comprises firms with SIO, while Group 3 (304 observations) consists of firms with DIO only. The data are analyzed using moderated regression analysis with an unbalanced panel data approach over the 2016–2024 period. The results indicate that (1) RPS has a positive effect on EMN; (2) IO weakens the positive effect of RPS on EMN; (3) SIO strengthens the positive effect of RPS on EMN; (4) DIO does not moderate the relationship between RPS and EMN; and (5) EMN is not higher in firms conducting RPS with parent firms than in firms conducting RPS with non-parent related parties.

This study has several limitations. First, it does not distinguish between domestic and international RPS. As a result, RPS involving foreign related parties may have different implications for EMN compared to domestic transactions. Therefore, the findings should be interpreted with this limitation in mind. Second, this study does not further distinguish between RPS involving parent firms of state-owned enterprises (SOEs) and those of non-SOEs. Accordingly, RPS with SOE parent firms may have different implications for EMN compared to non-SOE parent firms. The findings should therefore be interpreted in light of this limitation. Third, this study measures EMN using an accrual-based proxy, which has limitations in capturing the full scope of earnings management practices. This approach does not fully reflect real EMN activities, such as manipulation of sales, production, or discretionary expenses, which are also commonly used to influence reported performance. In addition, the accrual-based proxy cannot fully distinguish between opportunistic earnings management and efficiency-driven earnings management. This limitation the estimated EMN levels may not fully reflect actual earnings management behavior. Fourth, this study focuses only on non-service and non-financial firms with institutional ownership, including both SIO and dispersed institutional ownership (DIO). As a result, firms without institutional ownership are excluded from the sample. This limitation implies that the findings may not fully represent all non-service and non-financial firms listed on the Indonesia Stock Exchange, particularly those with ownership structures dominated by non-institutional shareholders. Therefore, the results should be interpreted in light of this sampling limitation.

This study contributes to the literature by addressing a gap in prior research on the relationship between related party sales (RPS) and earnings management (EMN), particularly regarding the moderating role of institutional ownership. It also provides additional insights into managerial behavior in the context of RPS. Several avenues for future research emerge from the findings of this study. First, in firms with dispersed institutional ownership (DIO), the results indicate that DIO does not moderate the positive effect of RPS on EMN. Accordingly, future studies are therefore encouraged to further examine this group by distinguishing between domestic and foreign DIO, as well as state-

owned enterprises (SOEs) and mutual funds. These differences in ownership types may lead to varying effects on the ability of DIO to mitigate the influence of RPS on EMN. Second, regarding RPS involving parent and non-parent related parties, the findings show that EMN in firms conducting RPS with parent firms is not higher than in firms conducting RPS with non-parent companies. Accordingly, future research is encouraged to further examine this distinction by differentiating between domestic and foreign parent companies. Such differences may provide additional insights into whether the characteristics of parent companies influence the extent of EMN.

The practical recommendations of this study are directed primarily toward corporate management. First, firms are encouraged to provide more detailed disclosures of prevailing market prices at the time RPS occurs in the notes to the financial statements. Such disclosures are important to demonstrate that RPS is conducted at fair value or market-based prices to enable financial statement users to assess whether RPS activities are reasonable and not driven by managerial opportunism. Enhanced transparency can strengthen stakeholder confidence but also supports the implementation of good corporate governance principles, particularly accountability and disclosure.

Second, management is encouraged to strengthen the role of the internal audit function in evaluating the fairness of RPS. Internal audit should not be limited to administrative compliance, but should also assess the economic substance of transactions, pricing mechanisms, and their potential implications for EMN. In addition, independent commissioners are expected to play an active role in overseeing and following up on audit findings to ensure that RPS is conducted objectively and in accordance with the principle of fairness. The synergy between internal audit and independent commissioners is expected to enhance monitoring effectiveness, facilitate early detection of potential irregularities, and reduce the risk of RPS being used for opportunistic purposes. Ultimately, corporate transparency and accountability can be strengthened, while also reinforcing shareholder confidence in good corporate governance practices.

Third, management is advised to establish comprehensive internal guidelines for RPS, including transaction criteria, materiality thresholds, and clear approval and reporting procedures. These guidelines serve as formal control mechanisms to ensure that RPS is conducted based on sound economic considerations and in accordance with the principle of fairness. With such structured governance in place, firms can enhance transparency, accountability, and consistency in the implementation of good corporate governance practices, while also minimizing potential conflicts of interest that may create opportunities for EMN.

The first recommendation for regulators is to consider updating PSAK No. 224 on related party disclosures by requiring firms to disclose the market value of RPS at the time the transaction occurs in the notes to the financial statements. This additional requirement is important to ensure that RPS is conducted at fair value and can be independently assessed by users of financial statements. Such regulation would strengthen transparency and accountability in financial reporting, while also reducing the potential for opportunistic transactions that may facilitate EMN. Accordingly, the role of regulators is crucial in fostering a more robust corporate governance environment, enhancing reporting integrity, and supporting capital market efficiency in Indonesia.

Second, regulators are also advised to introduce provisions requiring firms to establish a dedicated audit committee responsible for assessing the fairness of related party transactions in general, and RPS in particular. This committee would independently evaluate the determination of fair value, pricing mechanisms, and payment certainty associated with such transactions. The establishment of a specialized audit committee is expected to strengthen firms' internal control systems and ensure that RPS is conducted transparently,

objectively, and in accordance with applicable standards. Such regulation would contribute to enhancing financial reporting integrity, mitigating conflicts of interest, and protecting minority shareholders' interests.

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Abbreviations

EMN	earnings management
RPS	related party sales
IO	institutional ownership
SIO	single institutional ownership
DIO	dispersed institutional ownership
MRA	moderated regression analysis

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