FACTORS AFFECTING INCOME SMOOTHING PRACTICE: INSIGHTS FROM THE INDONESIAN CAPITAL MARKET


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Abstract

The objective of this quantitative study is to examine the factors that influence income smoothing practices in the Indonesian capital market, including share ownership by groups/institutions, family-owned firms, and industrial sectors, with firm size serving as a control variable. This study used a purposive sampling technique to acquire a sample of 112 businesses over the years 2017 to 2021, yielding 560 observations by using a panel data approach. The findings indicate that neither share ownership by a group/institution nor a family-owned firm has a substantial impact on income smoothing. Among industrial sectors, only the sector of consumer products significantly influences income smoothing. As a control variable, business size has a favorable influence on income smoothing. This paper provides empirical evidence on financial accounting research, namely on the subject of income smoothing and the quality of earnings reporting, despite a number of limitations, such as a relatively short observation period.

Keywords: Share Ownership by Group/Institution, Family-Owned Firm, Income Smoothing, Industrial Sectors, Firm Size


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1. INTRODUCTION

Because the financial statement is an indicator for its users to evaluate crucial information about a company’s status, it is more probable that managers will want to portray the data in the best light for the user, even if it means manipulating the data (Al Farooque et al., 2014; Suyono & Farooque, 2018). It is quite likely that managers would present financial statements that frequently do not reflect the actual performance. One of the ways in which managers can achieve this objective is by engaging in income smoothing in order to present information that will be perceived more favorably by all stakeholders, particularly with regard to corporate performance, so that they can demonstrate the impressive performance of the company. Income smoothing is the deliberate dampening of fluctuations around a company’s normal earnings level (Beidleman, 1973). In addition,
Koch (1981) described income smoothing as a technique typically employed by managers to reduce the variance of a stream of reported income numbers compared to a perceived target stream by accounting manipulation or real factors in the transaction. When there is an information asymmetry between managers and shareholders due to the separation of ownership and control, income smoothing practices are a common occurrence within the organization. Jensen and Meckling (1976) explained that it makes managers have more superior information than shareholders, and they frequently use this information to benefit themselves. Usually, managers will try to present good information in the financial statements, which is achieved by smoothing the income, so that the company's performance appears favorable to shareholders. In other words, managers' opportunistic behavior will manifest itself through income-smoothing activities. That is why every audited financial statement should demonstrate openness, accountability, and the absence of information asymmetry, which is the hallmark of the credibility and dependability of accounting figures (Feng et al., 2019; Ogundajo et al., 2021). In this context, reliability refers to unaltered, complete information that is free of errors, manipulations, and a very accurate depiction of the underlying economic realities of the company's financial and non-financial position as well as the auditor's fair and honest opinion after exercising professional duty and care. It is because financial reporting transparency is required when presenting information to all stakeholders (Iballi et al., 2022).

Income smoothing is a managerial behavior that tends to be opportunistic as explained by Healy and Wahlen (1999). It is usually done by using managerial judgment when presenting the financial report by either deceive certain stakeholders about the company's underlying economic performance or to affect contractual outcomes dependent on reported accounting data. In another word, according to agency theory, income smoothing can be argued to be an opportunistic activity of managers. One of the ways to solve this problem is by installing corporate governance mechanisms such as the presence of share ownership by a group/institution to monitor the company's operations (Al Faroouque et al., 2014; Suyono & Faroouque, 2018).

According to Li and Richie (2016), managers engage in income smoothing for two reasons: as a signal or as a garble. Signaling provides users, notably investors, with superior information than garbling. Eckel (1981) claimed that income smoothing can be accomplished in two ways, either naturally or intentionally, to control future revenue stability. In this manner, practice managers expect that their performance would appear favorable to stakeholders.

Prior research has proven that income smoothing is a pervasive phenomenon that might impose undue pressure on the accuracy of accounting numbers (Ali & Zhang, 2015; Dong et al., 2021). In addition, when a company submits its initial public offering (IPO), additional issues, and rights issues, managers are under intense pressure to resist the manipulation of earnings (earnings management) in order to convey healthy-looking and false accounting information to investors and other accounting information users (Akpanuko & Umoren, 2018; Godsell et al., 2017).

Income smoothing, on the other hand, adopts accounting techniques to level out uneven income variations from one accounting period to the next (Chen et al., 2019). Prior research has also demonstrated that corporate managers may engage in this practice to encourage investors to pay a premium for stocks with a stable and predictable earnings trend, as opposed to stocks with a volatility trend pattern that is viewed as riskier by risk-averse investors (Chen et al., 2019; Feng et al., 2019). Therefore, managers undertake deliberate efforts to modify results and curves to please investors. Goetzmann et al. (2014) stated that income smoothing is not illegal when the procedure adheres to generally accepted accounting principles (GAAP), because the purpose of the practice is to shift revenues and expenses from one accounting year's end to another. This differs from the opinion of Gross et al. (2016), who argued that although income smoothing may appear legitimate under GAAP, it is fraudulent and fails the credibility test. Income smoothing is motivated by fraud, tax evasion, and the desire to entice uneducated investors with a novel company model devoid of fairness and accurate accounting information.

In addition, the purpose of this study is to examine the factors that influence income smoothing practices, particularly for corporations listed on the Indonesian capital market, which include share ownership by groups/institutions, family-owned firms, and industrial sectors. This research improves the model by including company size as a control variable.

The presence of institutional ownership in the company's stock is anticipated to enhance the company's ability to monitor the conduct of its managers, as institutional investors are typically large corporations with more sophisticated monitoring mechanisms. Managers will not be able to implement opportunistic income-smoothing tactics when the monitoring function of an institution with an interest in a company is operating at peak efficiency. Some institutions that purchase shares for the short term also urge the owners of these institutions to prioritize short-term earnings, therefore their oversight is optimal for attaining this objective. Based on this logic, a number of studies have demonstrated that institutional ownership is more effective at monitoring the conduct of managers. This indicates that the presence of institutional ownership blocks in a corporation can be utilized to end the practice of income smoothing.

Several studies evaluating the link between share ownership by groups/institutions and income smoothing, however, produced contradictory findings. Several international studies have found a negative correlation between share ownership by an institution and income smoothing (Hadani et al., 2011; Kaledkar & Nwaeye, 2011; Chen et al., 2016). In the meantime, Mahastanti and Pratiwi (2014) discovered that the phenomenon of income smoothing in Indonesia publicly traded companies tends to obscure rather than signal. Kwak et al. (2009) examine the relationship between institutional ownership and the level of income smoothing in...
Japanese banks using loan loss reserves. They investigate further the relationship between income smoothing and the ownership of local financial institution shareholders, affiliated institution shareholders, and foreign institution shareholders. The results indicate that the size of income smoothing grows as institutional ownership of banks increases. Moreover, Florentina and Hastuti (2022) also discovered empirical evidence that institutional ownership has a favorable impact on income smoothing.

Based on the above discussion, it is suggested that the findings from previous studies depend on the level of countries in which the studies were conducted. In developed nations such as the United States and the United Kingdom, the average result indicates that the presence of share ownership by a group/institution can discourage managers from engaging in income-smoothing practices. In contrast, when research is conducted in developing nations such as Indonesia, where institutional ownership does not affect income smoothing practice significantly, the results are entirely different. It implies that institutional investors’ supervisory role is not as optimal as in developed nations. This study aims to re-examine the effect of institutional ownership on income smoothing in Indonesia, with the expectation that the results will differ from those of studies conducted in Indonesia, such as those by Makaryanawati and Milani (2008) and Florentina and Hastuti (2022).

Regarding the relationship between family ownership and income smoothing, it appears that large shareholders have stronger incentives and a greater ability to directly monitor managers’ activities than small shareholders, allowing them to mitigate the traditional principal-agent issues. However, the concentration of ownership in the hands of large shareholders may also give rise to an additional agency problem between controlling and non-controlling shareholders. Nepotism, adverse selection, free-riding, and the consumption of unearned perks by family members are some of the agency costs that result from family involvement (Schulze et al., 2003; Hadani, 2007). There is an argument that, due to parental altruism, family members frequently receive employment, perks, and privileges in the family business regardless of their contributions.

Bouvier et al. (2014) conclude that the concentration of family ownership in European banking companies has no effect on income smoothing practices. Prencipe et al. (2008) demonstrate that family-controlled firms in Italy are less sensitive to earnings management than non-family-controlled firms. Moreover, Nurfatimah and Barokah (2017) discovered a favorable correlation between family ownership and financial reporting transparency in Asian countries, in which family owners prefer to require more transparent financial reporting, hence discouraging management from engaging in income smoothing. Similarly, Andayani et al. (2018) concluded that family enterprises are more likely to declare earnings quality based on non-opportunist behavior, hence resulting in higher earnings quality. This suggests that the presence of family ownership in the company facilitates the alignment of interests, while strong earnings quality indicates little earnings management and income smoothing practices. In contrast, Mahmud (2012) discovered different evidence in Malaysia that the bigger the proportion of family ownership in a company, the greater the income smoothing techniques.

Several previous studies, particularly those conducted outside of Indonesia, have confirmed that industry classification is also a factor influencing income smoothing practices. It is like a study by Atik (2009) in Türkiye who found that each organization’s level of income smoothing is ultimately determined by how it responds to the forces that drive the course of economic transformation. The degree to which firms participate in income-smoothing activities in response to environmental opportunities and unpredictability is influenced by conditions. In a similar vein, Mahmud (2012) conducted research in Malaysia and discovered that various industrial sectors experience varying degrees of income smoothing.

The results of the study indicate that the manufacturing and information technology sectors engage in a greater degree of income smoothing than other sectors. Again, Handoyo and Fathurrizki (2018) discovered that firms involved in mining that are listed on the Indonesia Stock Exchange engage in income smoothing practices. Nonetheless, a number of studies that were done in the past concluded that the type of industry does not have a major impact on the opportunistic conduct of managers in income-smoothing operations (Albrecht & Richardson, 1990; Trisanti, 2014).

According to the prior discussions, this study aims to investigate the influence of share ownership by groups/institutions, family-owned firms, and industrial sectors on the income smoothing methods of firms in the Indonesian capital market during the 2017–2021 time period. To obtain the most accurate depiction of the relationships between variables, the size of the company is the control variable that is used. Therefore, the research questions of this study are stated as follows:

RQ1: Whether the presence of share ownership by a group/institution diminish income smoothing among listed firms in Indonesia?

RQ2: Does the presence of family ownership influence income smoothing among listed firms in Indonesia?

RQ3: Whether industry type influences income smoothing among listed firms in Indonesia?

The paper is divided into five sections with the Introduction as the first section. Section 2 highlights the theoretical aspects and literature review associated with the study’s variables. Section 3 focuses on research methodology. Section 4 elaborates on the research findings and extends the discussion on findings. Section 5 provides the conclusion of the paper.

2. THEORETICAL FRAMEWORK AND THE CONCEPTUALIZATION OF HYPOTHESES

2.1. Theoretical framework

Based on the work of Jensen and Meckling (1976) and the subsequent work of Tucker and Zarowin (2006), the agency theory proposes that managers with their information superiority motivate to show off fluctuations in income sequential flows to boost
remuneration or lower capital expenditures. Managers may decide to report a more consistent level of operating outcomes in order to smooth out the company’s profits, as outlined by Healy and Wahlen (1999). It is possible by putting away cash during times of plenty to use through leaner times in the future. In addition, income smoothing, as described by Michelson et al. (1995), occurs when management shifts the emphasis of financial reporting from years with particularly large profits to years with relatively low profits. As a result, the company’s profit is reliably achieved at the end of each reporting period, and expanding its market returns is the ultimate objective. The idea behind income smoothing is that a predictable earnings history will make the company more appealing to investors. This is because shareholders tend to give more weight to the means by which their invested companies produce profits.

Smoothing income into several periods becomes managers’ preferred method for reducing fluctuations in reported company earnings, which demonstrates their efforts to bring the range of aberrations down to within the range allowed by good bookkeeping and management. As with other types of smoothing, income smoothing is defined by Belkaoui and Picur (1984) as the practice of choosing to use the same accounting measurements over and over in order to sway reported sources of funding with deviations proportionally less significant compared to the true trend would indicate if smoothing activities were not performed. Moreover, Lyu et al. (2017) described income smoothing as a strategy wherein management utilizes accounting principles in order to normalize wildly varying and uneven profits from one fiscal quarter to the next.

According to agency theory, managers (agents) and owners (principals) competing goals for the company’s financial success (as reflected in their respective compensation packages) can have a significant impact on how income smoothing is actually implemented in practice. Due to a lack of communication between the two parties, income smoothing has developed. Eckel (1981) states that smoothing one’s income can be done in two ways: management-initiated smoothing and natural smoothing. When income is generated in a way that results in a steady stream of cash flow, income smoothing occurs naturally; when it is done on purpose, however, it is the product of either a true revenue smoothing approach or a fake technique. When managers take action in order to gather economic events leading to a constant income stream, this is known as real income smoothing. The term “artificial income smoothing” describes the practice by which business leaders artificially level off their profits by manipulating the numbers in the books. If these conditions can be met, then the shareholders will evaluate the managers’ performance as satisfactory.

In pursuit of the potential outcomes of income smoothing for the trustworthiness of financial reports, Watts and Zimmerman’s (1979) lending credibility theory as well as the ideology behind it alienated to eternal reliability of financial reports and how each expectation of stakeholders when using financial information (Yadav, 2014). Considering the possibility of bias predilection tendencies, financial statement users, and shareholders cannot place their entire faith in the agent/manager-prepared financial report (Balaciuc et al., 2014).

Within the context of agency theory, share-ownership by family members plays a significant position in easing manager-owner tensions, as concerns shared by everybody involved align with the similar people (O’Conaheny, 2000; Al Farooque et al., 2014; Suyono & Farooque, 2018; Suyono, 2018). By limiting the conventional agency differences between management and stockholders, large shareholders typically have stronger incentives and a greater ability to directly monitor the activities of managers. However, concentrated ownership controlled by a small number of very wealthy people may generate a type 2 shareholder agency conflicts between majority and minority groups. Particular costs of agency costs, i.e., free riding, unfavorable selection, and favoritism are increased through the participation of family members in this relationship (Schulze et al., 2003; Hadani, 2007; Suyono, 2015, 2018).

Corporate governance as important mechanisms for keeping an eye on things, such as institutional ownership, is implemented in the company to mitigate these issues. According to Shleifer and Vishny (1997), corporate governance is a collection of legal instruments that safeguard majority parties from expropriation by managers and controlling shareholders. In addition, Cuervo (2002) explained that governance mechanisms include: institutional ownership, managerial ownership, audit committee, board of directors, and independent board of commissioners are able to mitigate these problems. In other words, failure to implement these governance mechanisms results in a weakened corporate governance system within the organization, resulting in an increase in agency problems.

Literature pertaining to the relationship between family-owned businesses and income smoothing attempts to determine whether the presence of family members triggers income smoothing. Anderson et al. (2003) argued that family firms tend to have superior accounting and market performance compared to non-family firms. It discovered evidence that active participation by family members in the governance structure of a company enhances performance.

In addition, previous research has shown that companies from various sectors experience differing degrees of revenue smoothing, depending on the industry. Different industries are confronted with distinct economic and operational challenges that can affect their ability to smooth income and motivation to do so (Atik, 2009). As a result of disparities in experiences, opportunity structures, and environmental unpredictability, Belkaoui and Picur (1984) discovered that firms in the periphery sector exhibit a higher degree of income smoothing than firms in the core sector. Core firms face a more constrained opportunity structure and greater environmental uncertainty than peripheral firms. According to Belkaoui and Picur (1984), the creation of the heart of the industrial economy is ruled by a handful of powerful oligopolies corporations in the late 19th and early 20th centuries led to the classification of sectors. The peripheral sector is comprised of smaller businesses and an environment with less competition.
2.2. The conceptualization of hypotheses

2.2.1. Institutional ownership and income smoothing

It is anticipated that institutional ownership will play an optimal role in overseeing managers' actions, such as keeping an eye out for any opportunistic behavior via income smoothing. Because share ownership constitutes a form of power that may be utilized to sustain the presence of managers, institutional investors, such as a state-owned corporation, banking industries, etc., would provide for better management oversight, as noted by Hadani et al. (2011) as well as Putri and Nasir (2006). Investors by institutions are generally presented as knowledgeable folks who cannot be misled without a lot of effort by management’s tricks and who should have a leg up on normal investors when it comes to interpreting profit and loss statements from the current period to predict future profitability (Lyu et al., 2017; Suyono & Farooque, 2018; Edmans, 2009; Florentina & Hastuti, 2022). As a result, large investors will be better able to keep an eye on management and prevent opportunistic conduct like income smoothing that benefits the managers’ bottom lines but not their own (Lyu et al., 2017; Suyono & Farooque, 2018; Florentina & Hastuti, 2022; Bushee, 1998). That is to say, large investors will get a more complete picture of how managers are working to avoid potential risks of opportunistic behavior, such as income smoothing, from occurring.

The information generated by market reactions to earnings announcements can be used to determine the effectiveness of enterprise resource management by managers, given institutional ownership. When it comes to income smoothing, strong corporate governance is a factor that is influenced by the institution’s or block holder’s shareholdings (Chen et al., 2016; Suyono & Farooque, 2018; Florentina & Hastuti, 2022). Given the common perception that institutional investors are more adept at making use of available data in order to predict the financial success of a company in the future over the investment by individuals, it is often thought that they should be the ones making such predictions. Since a sizable chunk of a company’s shares is held by long-term investors like pension funds and endowments, managers are less likely to engage in income-smoothing strategies.

It has been shown in a number of earlier research that businesses with a larger percentage of share ownership by a group/institution are less likely to engage in income smoothing (Chung et al., 2002; Suyono & Farooque, 2018). In the same vein, and Richie (2016) found similar findings. Other conditions were found by Kalekarkar and Nwaeyeze (2011) that enterprises with less than 15% institutional ownership engaged with high revenue smoothing methods, while those with more than 15% share-ownership by a group/institution were able to dissuade managers’ opportunistic conduct. Similarly, Chen et al. (2016) have shown an inverse relation between share ownership by a group/institution and income smoothing. In other terms, the supervisory function is more effective than a greater proportion of institutional ownership. Ultimately, this condition will prevent managers from engaging in conduct that takes advantage of opportunities, including income smoothing. Based on the above arguments, the following is the first hypothesis for this study:

H1: The greater percentage of share ownership by a group/institution, the fewer managers engage in income smoothing.

2.2.2. Family ownership and income smoothing

Prior research relating to the correlation between share ownership by members of the family and the leveling out of income has produced contradictory findings. Researchers have hypothesized that when a company has a major shareholder, In this case, the manager’s interests align more closely with those of the other stockholders, leading to better business results (Suyono, 2015, 2018; Isik & Soekan, 2013) thus, income smoothing is less likely to occur. Therefore, an investment in a long-term period has resulted from the desire to maintain a business so that it can be passed down to future generations (Suyono, 2018; James, 1999). Typically, family members create a conducive work environment, so they can foster trust and loyalty among all employees (Ward, 1988). In other words, a more conducive working environment in family firms than in non-family firms stimulates improved firm performance and reduces the likelihood of income-smoothing activities. In their research on Italian listed companies, Prencipe et al. (2011) determined that family-controlled firms are less likely to engage in income smoothing than non-family-controlled firms.

In addition, according to Andres (2008), family members frequently have greater authority than non-family members to oversee the operations of managers. Typically, family members inspire trust and loyalty among all workers by providing an appropriate work environment (Ward, 1988). In other words, a more welcoming work environment in family enterprises than in non-family firms leads to greater performance and decreases the probability of income smoothing by managers. Prencipe et al. (2011) in publicly traded Italian companies, found that companies run by families are less likely to use accounting practices to artificially smooth out their profits than those not owned by families.

The presence of family ownership, according to some experts, can lead to slower economic growth if privately-held enterprises are allowed to continue to benefit from being owned by their founding families, at the expense of minority shareholders (Shleifer & Vishny, 1997). Several researchers, including Pervan et al. (2012), have already demonstrated that the concentration of large ownership affects negatively the performance of publicly traded Croatian companies. In Asia, Claessens et al. (2002) documented a similar connection between share ownership by members of the family and company performance (including Indonesia). According to Bouvatier et al. (2014), in Italy, the significant presence of family ownership is indicative of more income smoothing using discretionary accruals.

Nurfatimah and Barokah (2017) discovered that family owners prefer more transparent financial reporting, which discourages management involvement in income smoothing. Similarly, Andayani et al. (2018) observed that family-owned businesses are more likely to report earnings quality
based on non-opportunistic conduct, which leads to
greater earnings quality by not supporting income
smoothing tactics. In contrast, Mahmud (2012)
discovered contradictory findings in Malaysia
indicating that the bigger the share of family
ownership in a business, the higher the income
smoothing practices.

Considering the contradictory findings of
earlier research concerning the connection between
family ownership and income smoothing, the next
hypothesis is:

\[ H2: \text{Family-owned firms influence income}
\text{smoothing practice.} \]

2.2.3. Industrial sectors and income smoothing

Prior studies have argued the conditions of
a corporate environment will have an impact on
various industries differently, resulting in varying
responses from these industries. Consequently,
managers from various industries will exhibit
distinct exploitative actions within the same market
context. Opportunities can seem very different from
one industry to the next, even when operating in
the same economic climate, as argued by Stein
(1989), with managers from certain industries being
more capable of creating revenue under certain
conditions compared to managers under different
sectors. It is clear how various types of industries
that participate in the capital market respond to
environmental conditions with varying rates of stock
price fluctuations.

Extant literature, including Belkaoui and Picur
Türkiye, and Mahmud (2012) in Malaysia, have
demonstrated that the type of industry influences
income smoothing practices. In addition, previous
studies have shown that companies from various
industries flatten their earnings to a variable level.
Different businesses are faced with diverse
economic and operational operations that can affect
an organization’s ability to equalize income and
their incentives to do so (Atik, 2009). Belkaoui and
Picur (1984) examined the link between multiple
economies and income smoothing and discovered
peripheral industry firms exhibited greater levels of
smoothing of earnings than firms in the core sector
as a result of differences in opportunity structure,
experience, and environmental uncertainty. Peripheral
companies are faced with a more constrained
structure of opportunity and greater uncertainty in
their environment than core businesses.

According to Belkaoui and Picur (1984), sector
classification arose from the emergence of the core
industrial sector which was dominated by large
oligopolistic firms during the late 19th and early
20th centuries. Smaller businesses and a less
competitive environment are seen as the periphery
of the sector. Some of the companies asked to be
classified as core or peripheral may have many
features and therefore be misclassified, which may
explain this finding. Kim et al. (2003) and Atik
(2009) are of the same opinion that there is no
significant variation in profit manipulation across
industries. Ashari et al. (1994) found that firms in
industries with greater risk have a greater likelihood
and stronger tendency to smooth their earnings.
Albrecht and Richardson (1990) found no variation
in incidence between the core and peripheral
sectors.

Based on the aforementioned discussions, the
next hypothesis is:

\[ H3: \text{Industrial sectors affect managers’}
\text{opportunistic conduct through income}
\text{smoothing practice.} \]

3. RESEARCH METHODOLOGY

3.1. The measurement of variables

3.1.1. Income smoothing

Here, we use a statistic created by Eckel (1981),
the so-called Eckel Index, to quantify the ways in
which income is smoothed.

\[ \text{Eckel Index} = \frac{CV \Delta GP}{CV \Delta I} \]

\[ CV \Delta GP \text{ or } CV \Delta I = \frac{\sum (\Delta X_i^2)}{n} \cdot \Delta X \]

where:

\( \Delta GP \): profit fluctuation throughout one time period;
\( \Delta I \): income fluctuation throughout one time period;
\( CV \): coefficient of variation for the firm variable
calculated by dividing the standard deviation by the
expected value.

\( \Delta X_i \): change in profit (GP) or income (I) on the period
of \( k \);
\( \Delta X \): average change of profit (GP) or income (I);
\( n \): number of observable years.

3.1.2. Share ownership by an institution

The following formula is used to calculate share
ownership by a group/institution (Suyono, 2016;
Suyono & Farooque, 2018):

\[ \text{Institutional ownership} = \frac{\text{Number of shares owned by institution}}{\text{Total outstanding shares}} \times 100\% \]

3.1.3. Family-owned firm

A family-controlled firm is defined as a firm with
a family ownership structure of 10% or more,
whereas non-family controlled firm is defined as
a firm with a family ownership structure of less than
10%. The information was then encoded using a
dummy variable with a value of 1 for family-
controlled businesses and 0 for non-family
businesses (Anderson et al., 2003; Suyono, 2018).

3.1.4. Industrial sectors

The companies listed on the Indonesian Capital
Market fall into one of three categories: key sectors,
manufacturing sector, or service sector. The Indonesian
Stock Exchange (IDX, www.idx.go.id) classifies
additional subdivisions of these sectors into eight
distinct markets: various industries; consumer
goods industry; basic industry and chemistry;
infrastructure, utilities, and transportation; trade
and investment; mining; agriculture; property and
real estate; and number eight. Following the classification system used by the IDX, eight dummy variables were created to quantify the different categories of industry. If the business fits the profile for its industry, it is given a 1; otherwise, it is given a 0. Since there are eight dummy variables, however, one will be removed from the regression analysis by design (Gujarati & Porter, 2009).

3.1.5. Firm size

The natural logarithm of a company’s total assets serves as a proxy for its size (Suyono, 2018).

### 3.2. The research sample

Based on sampling selection techniques, this study included 112 businesses across five years (2017–2021) using a purposive sampling method. This yields 560 data points. The sample selection criteria are detailed in Table 1.

In addition, the sample classifications for the eight different industries are shown in Table 2 below.

#### Table 1. Characteristics for selecting samples

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria of the sample</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The total number of IDX-listed companies from 2017–2021</td>
<td>535</td>
</tr>
<tr>
<td>2.</td>
<td>Businesses that were delisted from the IDX between 2017 and 2021</td>
<td>40</td>
</tr>
<tr>
<td>3.</td>
<td>Disposing of financial institutions (i.e., insurance, banks, financial institutions, securities companies, and other financial sectors)</td>
<td>91</td>
</tr>
<tr>
<td>4.</td>
<td>Limited-annual-report-filing public companies</td>
<td>292</td>
</tr>
<tr>
<td></td>
<td>Sample size</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>The sum of 5 years of observations (2017–2021)</td>
<td>560</td>
</tr>
</tbody>
</table>

#### Table 2. The eight industries that make up this sample

<table>
<thead>
<tr>
<th>No.</th>
<th>Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Various industries</td>
<td>13</td>
</tr>
<tr>
<td>2.</td>
<td>Consumer goods industry</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>Basic industry and chemistry</td>
<td>7</td>
</tr>
<tr>
<td>4.</td>
<td>Infrastructure, utilities, and transportation</td>
<td>30</td>
</tr>
<tr>
<td>5.</td>
<td>Trade and investment</td>
<td>19</td>
</tr>
<tr>
<td>6.</td>
<td>Mining</td>
<td>15</td>
</tr>
<tr>
<td>7.</td>
<td>Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>8.</td>
<td>Property and real estate</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>112</td>
</tr>
</tbody>
</table>

### 3.3. Data analysis

Ordinary least square (OLS), descriptive statistics, and tests of the classical assumptions of multiple regression (normality, autocorrelation, multicollinearity, and heteroscedasticity) make up the data analysis. After ensuring that all of the hypotheses hold true, this study conducts an OLS-based multiple regression analysis. For the sake of this investigation, the regression equation model is below.

\[
SMOOTH = \alpha + \beta_1INST + \beta_2FAM + \beta_3VARIND + \beta_4CONSGOOD + \beta_5BACHE + \beta_6INFRAS + \beta_7TRADIN + \beta_8MINE + \beta_9AGRI + \beta_{10}PROPERTY + \beta_{11}SIZE + \epsilon
\]

where:
- SMOOTH: income smoothing;
- INST: institutional ownership;
- FAM: family-owned firms;
- VARIND: various industries;
- CONSGOOD: consumer goods industries;
- BACHE: basic industry and chemistry;
- INFRAS: infrastructure, utilities, and transportation;
- TRADIN: trade and investment;
- MINE: mining;
- AGRI: agriculture;
- PROPERTY: property and real estate;
- SIZE: size of the firm;
- \( \epsilon \): error.

### 4. RESULTS AND DISCUSSION

#### 4.1. Results

#### 4.1.1. The descriptive statistics

Table 3 presents the descriptive statistics for the variables that were investigated in this study. The data show that among companies trading on the Indonesian capital market, 25.60% engage in income smoothing, which is relatively high. In addition, the average percentage of institutional investors on the IDX is 51.64%, which is a significant number. Moreover, 49.11% of corporations in the Indonesian capital market is family-owned. The sector of infrastructure, utilities, and transportation (INFRAS) has the highest value on average at 25.89%, while agriculture has the lowest average value at 0.80%. 

![Image](image.png)
The classical assumption test, which includes the normality test, autocorrelation test, heteroscedasticity test, and multicollinearity test, was utilized to create the model employed in this inquiry and the result satisfies all of its criteria. When all the classical assumptions of regression are met, the multiple linear regression test is performed.

4.1.2. Classical assumptions of regression

The classical assumption test, which includes the normality test, autocorrelation test, heteroscedasticity test, and multicollinearity test, was utilized to create the model employed in this inquiry and the result satisfies all of its criteria. When all the classical assumptions of regression are met, the multiple linear regression test is performed.

### Table 3. The output of descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMOOTH</td>
<td>560</td>
<td>-23.0170</td>
<td>0.0000</td>
<td>-0.256081</td>
<td>1.1401779</td>
</tr>
<tr>
<td>INST</td>
<td>560</td>
<td>0.0170</td>
<td>0.9870</td>
<td>0.316171</td>
<td>0.3131193</td>
</tr>
<tr>
<td>FAM</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.491071</td>
<td>0.5003672</td>
</tr>
<tr>
<td>SIZE</td>
<td>560</td>
<td>21.8100</td>
<td>33.6000</td>
<td>28.160536</td>
<td>1.9029600</td>
</tr>
<tr>
<td>VARIND</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.080357</td>
<td>0.2720884</td>
</tr>
<tr>
<td>CONSGOOD</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.071429</td>
<td>0.2577696</td>
</tr>
<tr>
<td>BACHE</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.062500</td>
<td>0.2422779</td>
</tr>
<tr>
<td>INFRAS</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.258929</td>
<td>0.4384379</td>
</tr>
<tr>
<td>TRADIN</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.151786</td>
<td>0.3359339</td>
</tr>
<tr>
<td>MINE</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.160714</td>
<td>0.3673956</td>
</tr>
<tr>
<td>AGRI</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.080390</td>
<td>0.10941524</td>
</tr>
<tr>
<td>PROPERTY</td>
<td>560</td>
<td>0.0000</td>
<td>1.0000</td>
<td>0.205357</td>
<td>0.4042235</td>
</tr>
<tr>
<td>Valid N listwise</td>
<td>560</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4. Output of ordinary least square

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-3.981</td>
<td>1.411</td>
<td>-2.821</td>
<td>0.005</td>
</tr>
<tr>
<td>INST</td>
<td>0.276</td>
<td>0.265</td>
<td>0.044</td>
<td>0.145</td>
</tr>
<tr>
<td>FAM</td>
<td>-0.084</td>
<td>0.172</td>
<td>-0.567</td>
<td>0.411</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.143</td>
<td>0.044</td>
<td>0.367</td>
<td>0.000</td>
</tr>
<tr>
<td>VARIND</td>
<td>0.355</td>
<td>0.437</td>
<td>0.047</td>
<td>0.128</td>
</tr>
<tr>
<td>CONSGOOD</td>
<td>-1.020</td>
<td>0.186</td>
<td>-0.128</td>
<td>0.286</td>
</tr>
<tr>
<td>BACHE</td>
<td>-0.616</td>
<td>0.365</td>
<td>-0.786</td>
<td>0.092</td>
</tr>
<tr>
<td>TRADIN</td>
<td>0.152</td>
<td>0.266</td>
<td>0.028</td>
<td>0.572</td>
</tr>
<tr>
<td>MINE</td>
<td>0.187</td>
<td>0.267</td>
<td>0.035</td>
<td>0.700</td>
</tr>
<tr>
<td>AGRI</td>
<td>-0.213</td>
<td>0.490</td>
<td>-0.010</td>
<td>0.240</td>
</tr>
<tr>
<td>PROPERTY</td>
<td>0.137</td>
<td>0.245</td>
<td>0.028</td>
<td>0.557</td>
</tr>
</tbody>
</table>

Note: a. Dependent variable: SMOOTH; F = 3.225; Sig. = 0.005; R² = 0.039; Adj. R² = 0.039. INFRAS is excluded from the regression.

### 4.1.3. Output of ordinary least square

The primary premise of this research is that the prevalence of institutional ownership in a company correlates negatively with the likelihood of income smoothing by management. The regression study showed no statistically significant relationship between institutional ownership and income smoothing among companies trading on the Indonesian capital market. The equation for the regression model is presented below.

\[
SMOOTH = -3.981 + 0.276\text{INST} - 0.844\text{FAM} + 0.355\text{VARIND} - 1.020\text{CONSGOOD} - 0.616\text{BACHE} + 0.152\text{TRADIN} + 0.187\text{MINE} - 0.213\text{AGRI} + 0.137\text{PROPERTY} + 14.3\text{SIZE} + \epsilon
\]

4.2. Discussion

The primary premise of this research is that the prevalence of institutional ownership in a company correlates negatively with the likelihood of income smoothing by management. The regression study showed no statistically significant relationship between institutional ownership and income smoothing among companies trading on the Indonesian capital market, disproving the first hypothesis. Agency theory, as proposed by Jensen and Meckling (1976) and elaborated upon by Tucker and Zarowin (2006), is believed to be the best way to oversee managers’ actions with the participation of investors from organizations/institutions who are also smart investors. However, this research was unable to confirm this hypothesis. As a result, managers will be less likely to engage in exploitative actions like income smoothing if oversight plays its intended role. That is to say, the relatively high degree of institutional ownership (51.64% on average) in the Indonesian capital market has not been successful in discouraging income smoothing by managers, whose rate remains elevated at 24.89%.

What this study found, specifically, contradicts previous research in developed countries that demonstrated that institutional ownership can reduce methods of smoothing income according to numerous studies (Bushee, 1998; Chung et al., 2002; Edmans, 2009; Hadani et al., 2011; Kalelkar & Nwaeze, 2011; Chen et al., 2016), this is the case. Similar results were found by researchers in Indonesia a decade earlier, such as Makaryanawati and Milani (2008), who looked at companies trading on the Indonesian capital market and found that institutional ownership had no effect on the prevalence of income smoothing among listed firms.

This research shows that the idea of institutional investor monitoring, which can help reduce income smoothing in industrialized countries like the United States, does not apply to...
the Indonesian context. As a result, even if there are a lot of institutional investors (51.64%), managers are still able to engage in opportunistic conduct like income smoothing activities, suggesting that the supervisory role of investors from the institution in Indonesia has not been optimal.

This finding can serve as a proposal for the competent authorities on the Indonesian capital market to optimize the role of institutional ownership's supervisory function. The findings of this study can also serve as a guide for Indonesian capital market authorities to develop an acceptable strategy to encourage the optimization of institutional ownership's supervisory role. With proper oversight, the still prevalent practice of income smoothing on the Indonesian capital market should be diminished. Obviously, all interested parties must contribute to the optimization of the role of share ownership by a group/institution among firms in the Indonesian capital market. Therefore, it is anticipated that this condition will have beneficial implications for the development of a supervisory system for managers so that they no longer run businesses based on opportunistic conduct. If this assumption can be verified, further research in Indonesia on this topic will demonstrate the importance of institutional ownership when it comes to lowering income smoothing methods.

In addition, the second hypothesis states that the effect of family-owned firms on income smoothing is not supported. It indicates that the significant presence of relatives in Indonesian listed companies (49%) does not automatically result in a rise in revenue smoothing practices. This result contradicts both Prencipe et al. (2011) and Bouvatier et al. (2014). According to Prencipe et al. (2011), business enterprises that are owned and operated by relatives are statistically less likely to do income smoothing than firms controlled by professional stockholders. In the meantime, Bouvatier et al. (2014) discovered that large concentrations of ownership by members of the same family, in most cases, will engage in more discretionary income-smoothing practices. This condition does not exist on the IDX, where evidence indicates that family-owned businesses have no effect on income smoothing. Therefore, in contrast to studies conducted outside of Indonesia, the presence of family members in company management is not a determining factor for the practice of revenue-smoothing in the Indonesian context.

Contrary to that, the findings of this study differ from Nurfatimah and Barokah (2017) who discovered that family ownership in companies listed on capital markets in Asia tends to favor honest financial reporting and discourages income smoothing tactics. Similarly, Andayani et al. (2018) discovered that managers from the family side tend to promote financial reporting procedures that generate high-quality earnings by avoiding earnings management and income smoothing.

In light of the findings of this research, it can be said that the current share ownership situation, whether dominant on the family side or not, has no bearing on practices of income smoothing as well as higher run businesses based on income smoothing tactics. However, this finding research gap should be looked at in further research to establish the ideal proportion of family and non-family ownership in preventing opportunistic behavior among managers.

In addition, the last hypothesis asserts that the nature of the industry influences the income smoothing practice. Only the sector of consumer goods has a major bearing on the practice of income smoothing, whereas other industrial sectors have little to no bearing on the practice of income smoothing, as indicated by regression output results. Accordingly, the last hypothesis is rarely supported, except for the sector of consumer goods. Therefore, only the consumer goods industry partially supports H3.

This study demonstrates that a business climate will have varying effects on various sectors, with an exception of the consumer goods industry, and that the effects on the various tiers of income from smoothing procedures are negative. In other words, the findings of this study generally contradict evidence from prior studies that demonstrated that industrial sectors influence income smoothing, such as Belkaoui and Picur (1984) in the United States, Atik (2009) in Türkiye, and Mahmud (2012) in Malaysia. This study finds empirical evidence that the consumer goods industry has a major impact on income smoothing practices, indicating that this sector in the Indonesian capital market has the lowest practice of income smoothing.

This study demonstrates, using firm size as a control variable, we find that smoothing of income is more common among larger firms trading on the Indonesia capital market. This indicates that the likelihood of income smoothing increases proportionally with the size of the company. Obviously, this is a problem for which the capital market authorities must find a solution in order to develop an effective regulatory mechanism so that the practice of income smoothing does not increase in tandem with the company's growth. This result is consistent with the findings of Ergin (2010), who demonstrated that the size of a company positively influences income smoothing. In addition, this result contradicts the findings of Sherlita and Kurniawan (2013), who discovered that company size has no effect on income smoothing.

5. CONCLUSION

The purpose of this research is to analyze the 2017-2021 income smoothing methods of companies trading on the Indonesia capital market in relation to share ownership by groups/institutions, family-controlled firms, and industrial sectors classification. Based on an analysis of 560 data points, it was discovered that neither share ownership by groups/institutions nor family-owned businesses significantly affects the incidence of income smoothing. Additionally, this study shows that the industrial sectors have no substantial effect on the income smoothing practice, except for the consumer products sector.

It follows from the results of this study that share ownership by a group/institution in companies traded on the Indonesia capital market has not been able to serve as an effective monitoring tool and that managers may still engage in damaging opportunistic income smoothing actions even if this type of investor is present. According to agency theory, it is in the best interest of such businesses to assess the significance of share ownership by
groups/institutions, so that these investors can perform their supervision duties effectively. Additional factors, such as the year of observation, may be included in future studies of income smoothing if researchers are interested.

This study has several limitations, including the following: 1) a relatively short observation period of only 5 years (2017–2021) may produce an inaccurate analysis, so future research is encouraged to add a longer observation period of at least 10 years; 2) the occurrence of the COVID-19 pandemic in 2020 and 2021 resulted in data changes related to several proxies used in this study. It is suggested that future studies incorporate the COVID-19 pandemic as a control variable to address this issue.

REFERENCES
