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THE ADOPTION EFFECT OF IFAS 72 ON EARNINGS MANAGEMENT IN INDONESIAN COMPANIES

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ABSTRACT

This thesis studies the effect of revenue recognition on earnings management. Specifically, it examines the adoption of the Indonesian Financial Accounting Standard (IFAS) 72 and its effect on earnings management. This thesis employs the Modified Jones Model by utilizing discretionary accruals as a proxy for accrual-based earnings management. Using the sample listed on the Main Board Index (MBX) of the Indonesian Stock Exchange (IDX) from 2018 to 2021, this thesis findings suggest no decrease in the usage of discretionary accruals in Indonesian firms after adopting IFAS 72. Furthermore, the findings suggest no decrease in the usage of discretionary accruals in the telecommunication, construction, and real estate industry after adopting IFAS 72.

Keywords: earnings management, IFAS 72, discretionary accruals, telecommunication, construction, real estate

1. Introduction

1.1 Research Problem and Motivation

Released by the Indonesian Institute of Accountants (Ikatan Akuntansi Indonesia or IAI), the newest revenue recognition standard, Indonesian Financial Accounting Standard (IFAS) 72 Revenue from Contracts with Customers for Indonesian companies, is adequate starting January 1, 2020. Adopted from the International Financial Reporting Standards (IFRS) 15 Revenue from Contract with Customers, the newest standard replaces the previous standard discussing revenues (IFAS 23), construction contracts (IFAS 34), accounting for real estate development activities (IFAS 44), and related interpretations. The newest standard presents extensive and improved comparability on the revenue recognition model for customer contracts. Furthermore, the standard would also assist users in understanding the financial information from revenues and cash flows arising from customers' contracts.

The newest standard provides a transparent and comprehensive image of the corporate transactions in which a company must disclose the amount of profit or loss they made and record the transaction with accrual-based accounting. The implementation may motivate management to manage their company's earnings because the new revenue recognition standard requires more estimations and judgments (Morawska, 2021). With goals such as misleading the stakeholders' view on the company's performance or motivating contractual outcomes, earnings management may happen when managers utilize their discretion to structure transactions and modify financial performance (Healy & Wahlen, 1999).

This thesis is motivated by three reasons. First, the IAI released IFAS 72 to enhance the nature of the financial statements in Indonesian companies. The convergence towards IFRS shows the need of users to understand the financial information on the quality, quantity, time, and uncertainty of revenue and cash flows originating from customers' contracts. As such, financial statements are more comparable and consistent among companies. However, the adoption may work in favor of managers who seeks to exploit loopholes within the new standard. Therefore, it is appealing to the writer to investigate whether adopting the new standard benefits users of financial statements.

The second reason is to further expand the studies of earnings management in Indonesia. There have been many studies concerning earnings management in the EU region after adopting IFRS (Jeanjean & Stolowy, (2008)). Some of them have also covered Indonesia as a case study (e.g. Fuad & Wijanarto, (2017); Wijayana & Gray, (2019)) but only as a whole,

not from one specific IFRS. However, studies are focusing on the adoption effect of IFRS 15 on earnings management in countries such as Italy and Poland (e.g. Marco et al., (2019); Morawska, (2021); Piosik, (2021)) with various findings. The results from these studies will aid this research in extending the topic of earnings management in Indonesia.

This study may potentially be of interest to standard setters. Based on the evidence of the findings of this thesis, it will aid officials and setters in the consideration if the applied standard has improved the transparency and information quality of the revenue made from consumer contracts. The evidence in this thesis may help affiliated parties to amend the standard, if necessary, due to the possible increase in earnings management. Furthermore, it would aid stakeholders in making better decisions or investing in certain companies of interest.

1.2 Research Objectives

This thesis will investigate the effect of adopting IFAS 72 on earnings management in Indonesian companies. The changes from the previous standard to the current one may or may not affect the practice of earnings management, where a company's financial report may be altered to gain the favour of the investors. Therefore, this bachelor thesis will look at the following research question:

What effect does the adoption of IFAS 72 have on earnings management in Indonesian companies?

The reason this thesis focuses on Indonesia is that there has been little research that focuses on the adoption of IFRS and the effect it has on earnings management in Indonesian companies. However, not all of it explicitly covers the effect of IFRS 15. Fuad & Wijanarto (2017) discovered that adopting IFRS has limited the discretionary behaviour of management in manufacturing firms to steer their earnings. Wijayana & Gray (2019) have also found similar findings, where Asia-Pacific companies have shown a reduced behaviour on earnings management, including Indonesia. Since Indonesian companies adopted IFAS 72 into their accounting standards effectively on 1 January 2020, it will be intriguing to see the effect on earnings management, specifically from the newly adopted standard.

1.3 Data and Methodology

This thesis will use the sample from the annual report data of companies listed from the Main Board Index (MBX) of IDX which comprises of 249 unique firms from 2018-2021, to look at the situation before and after the implementation of IFAS 72. The firms' annual report is crucial to look for information and other related accounts to understand the discretionary accruals from

the sample firms. Furthermore, additional control variables may also be included to provide relevance to the analysis results.

Since this research will focus on discretionary accruals in analyzing earnings management, this thesis will utilize the Modified Jones model proposed by Dechow et al. (1995), where they adjust the original Jones model in considering the management assumption of discretion over revenue. This model searches the effect of IFRS convergence on earnings management in the EU and Asia-Pacific regions with different results, such as an increase or decrease in discretionary accruals (Fuad & Wijanarto, 2017; Jeanjean & Stolowy, 2008; Wijayana & Gray, 2019). This model is chosen because the accounting standards in Indonesia are trying to converge with IFRS, which is frequently used in developed countries. Another reason is that no prior research in Indonesia focuses on IFAS 72 and its effect on discretionary accruals to indicate earnings management. Therefore, this research will focus on the Modified Jones Model as it is the most used model and to see the changes in account receivables to look at the possibility of it being used as a source of earnings management.

1.4 Results and Limitation

From the findings, this research study shows that the adoption of IFAS 72 does not necessarily lead to a decrease in the practice of earnings management. Furthermore, when considering the sensitivity of telecommunication, construction and real estate industry, it is expected to have the most impact from the adoption of IFAS 72. However, the findings show that the three industries mentioned above do not have a decrease in earnings management after the adoption of IFAS 72. A possible explanation on why the adoption of IFAS 72 has no significance with discretionary accruals is due to the limitation in the time period, model specification, omitting the effect of real discretionary accruals, and omitted variable bias from Indonesian companies.

1.5 Thesis Outline

This thesis is outlined in five chapters. This chapter revolves around the research problem, motivation, objectives, data and methodology, and the results and limitations of this thesis. The second chapter discusses existing standards and scientific journals that revolve around earnings management, revenue recognition, and the description of IFAS 72. The data and the methodology used in the analysis are outlined in the third chapter. The fourth chapter presents the results and interpretation. The discussion, conclusion, limitations, and recommendations for future research are discussed in the fifth chapter.

2. Literature Review and Hypotheses Development

2.1 Prior Research on Earnings Management

The implementation of IFAS may motivate management to manage their company's earnings. Relying on IFRS, the convergence provides a transparent and comprehensive image of the corporate transactions in which a company must disclose the amount of profit or loss they made and record the transaction with accrual-based accounting. Goldman & Brashares (1991) conclude that using accrual-based accounting may improve accountability, provide better disclosure, and faithful presentation. By reflecting on the company's performance, Vinnari & Näsi (2008) further believe that accrual-based accounting minimizes the possibility of earnings management. Since accrual earnings management tampers with stakeholders' views concerning firm performance, implementing the newest standards may invoke managers to search for loopholes to hide the company's financial performance.

Earnings management happens when managers utilize their discretion to structure transactions and modify financial performance with goals, such as misleading the stakeholders' view on the company's performance or motivating contractual outcomes (Healy & Wahlen, 1999). Healy and Wahlen (1999) state that there are three reasons firms would practice earnings management. The first is due to capital market motivations. Investors' financial information to help value stocks may create an opportunity for managers to play with earnings to leverage the company's short-term stocks. The second cause is due to contract motivations. Compensation and lending contracts may prompt managers to use their discretion to increase rewards from income-based transactions or avoid violating debt covenants through cash flow management to get out of a poor financial situation. Finally, the last motivation to practice earnings management is to avoid anti-trust or government regulations or to deliberately decrease tax expenses (Healy & Wahlen, 1999). What these motivations have in common is that managers practice earnings management due to their opportunistic behaviour to leverage the company's stocks, increase incentive rewards, or bypass regulations. Regardless of each corporate manager's motivation to conduct earnings management, if earnings management occurs frequently, the financial information provided will have less relevance as they have a low faithful representation of the company's performance.

In addition to the previously mentioned motivation, earnings management may also be evident during the convergence of new standards with various influences. A study in Australia, France, and the UK made by Jeanjean and Stolowy (2008) found that earnings management did not decrease in these countries after adopting IFRS but somewhat increased in the case of

France. Further mentioned in their research is that these countries have different legal traditions. They conclude that sharing the same standards does not represent the same results but prove that management incentives and national institutional factors are essential in formulating financial reporting elements. However, a study by Wijayana and Gray (2019), focusing on Asia-Pacific regions, said otherwise, where they found a diminishing level of earnings management during the implementation of IFRS while underlying the importance of cultural values and institutional factors in each region. Another study that further supports the claim that implementing IFAS may reduce discretionary behaviour in earnings management can be found in research by Fuad and Wijanarto (2017) which focuses on the implementation in Indonesia. Fuad and Wijanarto (2017) emphasized that earnings management could arise due to managers' opportunistic behaviour resulting from an agent-principal dispute. Besides the motivations stated by Healy & Wahlen (1999), connecting with implementing the newest accounting standards, influences such as manager's behaviours, cultural values, and institutional factors also affect how different regions practice earnings management.

2.2 Revenue Recognition and Earnings Management

In order to make a connection between earnings management and revenue contracts from customers, it is crucial to look at existing studies on revenue-based earnings management. Besides earnings and cash flow from operations, revenues are as crucial as a perceived indicator to value a company's performance. Piosik (2021) states that published standards on revenue recognition affect how managers practice and take action in discretion revenue. Evidence by Kasznik (2001) shows that managers used discretion and accelerated revenue recognition before the implementation of Statement of Position (SOP) 91-1 concerning a company's private information regarding entities' underlying economics (Morawska, 2021). Baldissera et al. (2018) further add evidence from Brazil region that there is a negative impact on earnings management on construction companies after implementing Technical Pronouncement CPC 17 Construction Contracts (Morawska, 2021). Caylor (2010) discovered that corporate managers used discretion in accrued and deferred revenue recognition to avert negative earnings for the corporation. While there is little evidence that managers used discretion to decrease earnings or avoid losses in accrued or deferred recognition, further evidence shows that managers preferred to conduct discretion in revenue recognition to avert adverse earnings shocks before implementing the Sarbanes-Oxley (SOX) Act of 2002 (Caylor, 2010). To summarize, managers' discretion to recognize revenue and manage corporate earnings is affected by implementing standards in different regions with different outcomes.

2.3 Indonesian Financial Accounting Standard (IFAS) 72

Since managers' discretion in revenue recognition to manage company earnings is affected by the applicable standard in that region, and the region of focus in this paper is Indonesia, this paper will address IFAS and IFAS 72. Taken from the Indonesian Institute of Accountants (*Ikatan Akuntansi Indonesia* or IAI), Indonesian companies must implement the latest Financial Accounting Standard starting from January 1st, 2015. These standards are a part of IAI plans to converge the previous existing standards towards IFRS. The country continued to converge the latest standards, amendments, and exposure drafts up to standards that are effective from the beginning of 2021 to improve financial transparency in the financial report of Indonesian companies.

Adopting IFRS 15, IAI released IFAS 72, an extensive revenue recognition model for all customer contracts while enhancing comparability between industries and across capital markets (*PSAK 72 - Revenue from Contracts with Customers*, n.d.). Effective from the start of 2020, the newest standards show the need for users to understand the financial information on the nature, amount, timing, and uncertainty of revenue and cash flows from contracts with customers. This information would help users see better comparability and consistency towards the company of interest. As cited by IAI, IFAS 72 is consistent with IFRS 15 in significant respects. The newest standards replace the Indonesian Accounting Standard discussing revenues (IFAS 23 adapted from IAS 18), construction contracts (IFAS 34), customer loyalty programs (Interpretation of Indonesian Financial Accounting Standard (IIFAS) 10), real estate construction agreements (IIFAS 27), transfer of assets from customers (IIFAS 27), and accounting for real estate development activities (IFAS 44) (*PSAK 72 - Revenue from Contracts with Customers*, n.d.).

IFAS 72 introduced a five-step approach model that corporations must follow when determining which amount of revenue needs to be accounted for. The model starts with customer contract identification. Following the contract's identification, firms must identify the performance obligations in the contracts to be used for revenue recognition. In the third step, firms must determine the transaction price for transferring the goods or services. Subsequently, the next step assign the transaction price to the various performance obligations. The final step is recognizing the revenue when the performance obligation is met (*PSAK 72 - Revenue from Contracts with Customers*, n.d.).

2.4 IFAS 72 Implementation and its Impact on Revenue Recognition and Earnings Management

While revenue recognition has been a relevant instrument in detecting earnings management through the convergence of a new standard in various regions (e.g., Caylor, (2010); Fuad & Wijanarto, (2017); Jeanjean & Stolowy, (2008); Wijayana & Gray, (2019)), there are little research focusing on the relationship of specific revenue recognition standard and earnings management practices. Currently, three empirical studies have similarities with IFAS 72 on the impact of IFRS 15 adoption and earnings management. Tutino et al. (2019) found that in Italian listed companies, the telecommunications industry has a higher effect on earnings management than the utility industry after implementing IFRS 15 standards. Piosik (2021) found that in Poland, listed entities had significantly reduced the increase in discretionary revenue when entities could not meet analysts' operating profit forecasts after implementing IFRS 15. Also, a study in Poland made by Morawska (2021) found that listed entities on the Warsaw Stock Exchange (WSE) managed earnings using discretionary accrued revenue recognition to evade financial deficits. However, Morawska's (2021) results did not verify whether implementing IFRS 15 affected revenue-based earnings management to avoid deficits or declines.

Looking at previous evidence from other regions on implementing IFRS 15, it is expected that adopting IFAS 72 will influence the discretionary accruals in Indonesian entities. Therefore, the following hypothesis leads to be put:

H1: **The adoption of IFAS 72 reduces the usage of discretionary accruals in Indonesian companies.**

2.5 IFAS 72 in Different Industries

The adoption of IFAS 72 affects some industries more than others. A discussion by FASB states that telecommunications, construction, and real estate industries will be affected the most by changes in the amount and timing of IFAS 72 revenue recognition (Lehman & Wodka, 2017). According to Boujelben & Kobbi-Fakhfakh (2020), auditor firms identified these sectors as highly and medium sensitive while implementing IFRS 15. Tutino et al., (2019) further discovered that telecommunications have a higher sensitivity to discretionary accruals than low-sensitivity industries such as utilities. This sensitivity is related to the transition from IAS 18 and 11 toward IFRS 15, where revenues and construction contracts are recognized under one new standard and no longer fall under different standards.

Furthermore, the accounting treatment under IFAS 72 may affect telecommunication, construction, and real estate contracts since they are often made in bundled and long-term contracts. Ciesielski & Weirich (2015) state that implementing IFRS 15 will significantly affect industries with bundled and long-term contracts as their standard transaction method. Hence, these sectors will have the most changes after IFAS 72 implementation.

An important factor that influences a company to perform earnings management is the degree of competition present in the industry that the company performs. Findings from Datta et al. (2013) indicate that earnings management is more common in industries with fierce competition. They also reveal that entities with low product market pricing power participate in higher discretionary earnings accruals than those with superior product market pricing power. One industry with high competition in its market is the telecommunication industry. Since the 1990s, the telecommunication industry has changed a lot in terms of competition where previously it was a monopolistic competition that turned into the privatization of state-owned companies and currently has abundant competitors (Li & Xu, 2004). The increase of competitors due to intense competition may lead to an increase in discretionary accruals.

Trabelsi (2018) discovered that real estate entities in Dubai offer a favourable effect on earnings and stockholders' equity from IFRS 15 early adopters. The favourable effect comes from how the revenues are recognized over time in most customer contracts, and the contract costs are not expensed but capitalized (Trabelsi, 2018). Further positive evidence can be found in a study by Wyk & Coetsee (2020), where the implementation of IFRS 15 offers a proper standard for revenue recognition on construction contracts with the correct procedure and interpretation of obligations and rights in those contracts. This relates to earnings management due to how revenues and costs are accounted for and how companies must apply the obligation and rights of the new framework. It may be difficult for construction and real estate firms to practice earnings management under IFAS 72 in Indonesia.

Given the sensitivity of the telecommunications, construction, and real estate industries have been affected by the implementation of IFAS 72 revenue recognition and the difficulties of applying earnings management, this leads to the following hypothesis to be put:

H2: **The implementation of IFAS 72 reduces the usage of discretionary accruals in the telecommunication, construction, and real estate industry.**

3. Data and Methodology

3.1 Data Collection

This thesis will use sample from the annual report data of companies listed on the Main Board Index (MBX) of the Indonesia Stock Exchange (IDX). The sample will range from the year 2017-2021 to look at the situation before and after the implementation of IFAS 72. The years for which this analysis took place are 2018, 2019, 2020, and 2021 in order to assess two years before and after IFAS 72 mandatory adoption. The year 2017 was included to accommodate lagged variables or annual change variables. The firms in MBX are divided into 12 sectors (Table 1). From a sample of 3,008 observations, some companies do not have a complete observation between 2017-2021 after adjusting the availability for the annual report. Furthermore, from the remaining samples, companies in the banking industry are excluded from the analysis as they have different nature of accruals from other industries.

Table 1. Sample Selection Process

3,008	Initial sample size from the Datastream database
(2,130)	Sample with incomplete annual report data set
(17)	Sample in the banking industry
861	Final sample of observations
249	Total number of unique firms

Table 2. Research Sample

INDUSTRIES	NUMBER OF FIRMS	FREQUENCY
BASIC MATERIALS	35	109
CONSTRUCTION	17	61
CONSUMER CYCLICALS	43	146
CONSUMER NON-CYCLICALS	47	160
ENERGY	23	85
HEALTHCARE	11	41
INDUSTRIAL GOODS & SERVICES	9	31
REAL ESTATE	27	96
TECHNOLOGY	6	19
TELECOMMUNICATIONS SERVICES	10	39
TRANSPORTATION	16	58
UTILITIES	5	16
TOTAL	249	861

3.2 Methodology

In this research, discretionary accruals will be used to analyze earnings management. This thesis will use the Modified Jones model proposed by Dechow et al., (1995) by adjusting the

original Jones model to consider the management assumption of discretion over revenue. This model is utilized to searches the impact on earnings management from IFRS convergence in EU and Asia-Pacific regions (Fuad & Wijanarto, 2017; Jeanjean & Stolowy, 2008; Wijayana & Gray, 2019). In Indonesia, Modified Jones Model is one of the most popular models to measure discretionary accruals and indicate if there is earnings management practice (Suhardianto & Harymawan, 2011). While Modified Jones Model is considered a powerful tool to detect earnings management, Islam et al. (2011) argue that in developing countries, the model is less efficient in gauging earnings management level and are more effective in developed countries.

Nevertheless, this thesis will use Modified Jones Model not because it is the most used model to indicate earnings management but because the accounting standards in Indonesia are trying to converge with IFRS, which is frequently used in developed countries. Another reason is that no prior research in Indonesia focuses on IFAS 72 and its effect on discretionary accruals to indicate earnings management and the changes in total assets to look at the possibility of it being utilized as a source of earnings management. The OLS regression of Modified Jones Model based on Dechow et al. (1995) is presented as follows:

$$TA_{it} = \alpha_1(1/Assets_{it-1}) + \alpha_2(\Delta Sales_{it}) + \alpha_3(GPPE_{it}) + \varepsilon_{it}$$

Equation (i). The Modified Jones Model (Dechow et al., 1995)

Where:

TA_{it} = The difference between net income and cash flows from operations deflated by total assets of the previous year

$Assets_{it-1}$ = Total assets for firm at t-1

$\Delta Sales_{it}$ = The difference of year t sales with t-1 year deflated by total assets of the previous year

$GPPE_{it}$ = Gross, property, plant, and equipment deflated by total assets of the previous year

The estimates of parameters from (i) are used to estimate firm-specific non-discretionary accruals. The emphasis in Modified Jones Model is that companies may manipulate revenues through the possibility of managing credit sales (Costa & Soares, 2022; Dechow et al., 1995). Hence, the modification of the original model. The model presented as follows:

$$NDA_{it} = \alpha_1(1/Assets_{it-1}) + \alpha_2(\Delta Sales_{it} - \Delta AR_{it}) + \alpha_3(GPPE_{it})$$

Equation (ii). The Modified Jones Model (Dechow et al., 1995)

Where:

NDA_{it} = Non-discretionary accruals during the period

ΔAR_{it} = The difference of year t receivables with t-1 year receivables deflated by total assets of the previous year

Discretionary accruals can then be found from the difference between total accruals and nondiscretionary accruals to measure earnings management presented as:

$$DA_{it} = TA_{it} - NDA_{it}$$

Equation (iii). The Modified Jones Model (Dechow et al., 1995)

Where:

DA = Discretionary accruals

The results of this comparison provide a proxy for earnings management in a company per year. In order to assess the two years before and after the practical years of IFAS 72, a dummy variable is necessary to examine the impact of implementing IFAS 72 on earnings management. The value is 1 if the observation occurs after the adoption of IFAS 72 and 0 if it occurs before. The dummy variable will then represent equation (iv), where the absolute value of discretionary accruals is the main focus of detecting discretionary accruals. This thesis uses the absolute value for discretionary accruals since the primary focus of this thesis is to identify the size of discretionary accruals (Costa & Soares, 2022). Furthermore, the equation also includes independent firm control variables such as firm size, growth, leverage, market-to-book value, and return on assets (Callao & Jarne, 2010).

$$ABS\_DA_{it} = \alpha_0 + \alpha_1 IFAS\_72 + \alpha_2 SIZE + \alpha_3 GROWTH + \alpha_4 LEV + \alpha_5 MTB + \alpha_6 ROA + \varepsilon_{it}$$

Equation (iv). Absolute Discretionary Accruals Regression Model

Where:

IFAS_72 = Dummy variable that is equal to 1 for the year 2020 and 2021, and 0 otherwise.

SIZE = Firm size measured by the logarithm of firms' total assets

GROWTH = Firms' growth measured by the difference of current year sales with the previous year deflated by total assets of the previous year

LEV = Firms leverage measured by total liabilities deflated by total assets of the previous year

MTB = Firms market-to-book value

ROA = Firms return on assets

The regression model is then checked if it is statistically significant or not. This way, the results could indicate if the amount of earnings management decreased after implementing IFAS 72.

In order to subsequently analyse whether the adoption effect of IFAS 72 on discretionary accruals has a greater impact on telecommunications, construction, and real estate industries, a dummy variable is created for these industries. Furthermore, additional dummy variables are created for these specific industries times the dummy variable of IFAS 72 to see the after effect of adopting IFAS 72. Using absolute discretionary accruals as the dependant variable, the equation is as follows:

$$
\begin{aligned}
ABS\_DA_{it} = \ & \alpha_0 + \alpha_1 IFAS\_72 + \alpha_2 Telecom + \alpha_3 Const + \alpha_4 RealEst \\
& + \alpha_5 TEL\_IFAS72 + \alpha_6 CON\_IFAS72 + \alpha_7 RES\_IFAS72 + +\alpha_8 SIZE \\
& + \alpha_9 GROWTH + \alpha_{10} LEV + \alpha_{11} MTB + \alpha_{12} ROA + \varepsilon_{it}
\end{aligned}
$$

Equation (v). Absolute Discretionary Accruals Regression Model for Telecommunication, Construction, and Real Estate Industries

Where:

Telecom = Dummy variable that is equal to 1 for telecommunication industry, and 0 otherwise

Const = Dummy variable that is equal to 1 for construction industry, and 0 otherwise

RealEst = Dummy variable that is equal to 1 for real estate industry, and 0 otherwise

TEL_IFAS72 = Dummy variable that is equal to 1 for telecommunication industry in the year 2020 and 2021, and 0 otherwise

CON_IFAS72 = Dummy variable that is equal to 1 for construction industry in the year 2020 and 2021, and 0 otherwise

RES_IFAS72 = Dummy variable that is equal to 1 for real estate industry in the year 2020 and 2021, and 0 otherwise

It is expected that there will be a decreased usage of discretionary accrual after the adoption of IFAS 72 and that discretionary accruals have decreased for the telecommunications, construction, and real estate industries, as stated in the literature review.

4. Results

4.1 The Modified Jones Model

This thesis first needs to analyze the regression of the Modified Jones Model proposed by Dechow et al. (1995). The model is utilized to attain discretionary accruals by estimating the nondiscretionary part of total accruals. To obtain discretionary accruals, nondiscretionary

accruals must be deducted from total accruals. Table 3 presents the descriptive statistics for the independent variables of Dechow's earnings management model.

Table 3. Descriptive Statistics of The Modified Jones Model

Full sample from MBX Datastream Database, 2017-2021 (Number of observations = 861)					
Variables	**Mean**	**SD**	**Min**	**Median**	**Max**
Total_accruals	-799.876	2,167.262	-12,654.6	-174.76	2,299.711
Total_assets	18,338.8	29,484.78	465.786	7,021.882	178,396.5
GPPE	12,630.18	25,612.93	37.093	3,731.065	148,906
Total_liabilities	9,700.739	17,193.86	61.674	3,092.17	93,469.25
Delta_sales	468.175	3,088.517	-11,863.72	123.600	15,246.72
Delta_receivables	18.546	848.668	-4,659.606	5.845	3,949.406
TA	-.037	.102	-.399	-.038	1.041
SALES	.035	.240	-1.355	.021	2.240
GPPE	.737	.488	.002	.666	2.530
CASHSALES	.033	.225	-1.397	.019	2.234
SIZE	22.733	1.374	18.327	22.672	26.615
GROWTH	.035	.240	-1.355	.021	2.240
LEV	.484	.255	.003	.479	2.066
MTB	2.233	4.657	-14.31	1.14	66.16
ROA	6.047	10.543	-42.78	5.02	120.25

All variables are denoted in million Indonesian Rupiah (IDR).
Variable definitions:

Total_accruals	=	The difference between net income and cash flows from operations
Total_assets	=	Firms' total assets
GPPE	=	Gross, property, plant, and equipment
Total_liabilities	=	Firms' total liabilities
Delta_sales	=	The difference of t year sales with t-1 year
Delta_receivables	=	The difference of t year net receivables with t-1 year
TA	=	The difference between net income and cash flows from operations deflated by total assets of the previous year
SALES	=	The difference of the current year sales with the previous year's sales deflated by total assets of the previous year
GPPE	=	Gross, property, plant, and equipment deflated by total assets of the previous year
CASHSALES	=	The difference between changes in revenues and changes in accounts receivables deflated by total assets of the previous year
SIZE	=	Firms size measured by the logarithm of firms' total assets
GROWTH	=	Firms' growth measured by the difference of current year sales with the previous year deflated by total assets of the previous year
LEV	=	Firms leverage measured by total liabilities deflated by total assets of the previous year
MTB	=	Firms market-to-book value
ROA	=	Firms return on assets

Table 4. Panel Regression Results of The Modified Jones Model

Full sample from MBX Datastream Database, 2017-2021 (Number of observations = 861)				
Variables	**Coefficient**	**SE**	**t-test**	**Significance (P-value)**
Dependant variable: TA (Total Accruals)				
SALES	.080	.015	5.22	0.000***
GPPE	-.060	.006	-9.59	0.000***

Full sample from MBX Datastream Database, 2017-2021 (Number of observations = 861)				
Variables	**Coefficient**	**SE**	**t-test**	**Significance (P-value)**
Constant	-.004	.054	0.69	-0.490
Adj. R-squared		0.111		
F-statistics		51.16		
P-value (F-statistics)		0.000		
***p<0.1; **p<0.05; ***p<0.001**				
Robust standard error				

Variable definitions:

SALES = The difference of the current year sales with the previous year's sales deflated by total assets of the previous year

GPPE = Gross, property, plant, and equipment deflated by total assets of the previous year

Table 4 provides the panel regression results of The Modified Jones Model by Dechow et al. (1995). With a low adjusted R-squared value of 0.111, a significant regression equation was found (F = 51.16.76, p<.000). The results show that the available variables can describe 11.1% of the interpretation from total accruals. In comparison, 88.9% are affected by different variables not explained in this model. The percentage shows that the Modified Jones model by Dechow et al. (1995) offers low goodness of a fit and the magnitude to identify discretionary accruals, contrary to previous findings (Fuad & Wijanarto, 2017; Jeanjean & Stolowy, 2008; Wijayana & Gray, 2019). The coefficient from the Total Accruals regression can then be used to find nondiscretionary accruals.

Table 5. Descriptive Statistics of Nondiscretionary and Discretionary Accruals

Full sample from MBX Datastream Database, 2018-2021 (Number of observations = 861)					
Variables	Mean	SD	Min	Median	Max
NDA	-.038	.034	-.159	-.035	.129
DA	.000	.097	-.338	-.002	1.119
ABS_DA	.059	.078	.000	.039	1.119

Variables are denoted as a fraction or percentage of previous year total assets.

Variable definitions:

NDA = Nondiscretionary accruals calculated by using the estimates from Total Accruals regression results

DA = Discretionary accruals of the Modified Jones Model

ABS_DA = The absolute value of discretionary accruals

The primary focus of this thesis lies in the residuals of the Modified Jones model, which utilizes discretionary accruals. Since the average value of discretionary accruals is diminutive, this thesis does not look at the direction of discretionary accruals as previously stated. However, it focuses on the effect of IFAS 72 on the extent of discretionary accruals. Hence, this thesis will use absolute discretionary accruals. The table shows an average mean of 0.059 in the absolute value of discretionary accruals. The value suggests that listed companies in the MBX index

from 2018 to 2021 are, on average, exercising earnings management by approximately 5.9% compared to the previous year's assets.

4.2 IFAS 72 and Firm-Control Factor Effects on Discretionary Accruals

After obtaining the absolute value of discretionary accruals, this thesis will then analyze the first hypothesis. Table 6 shows the panel regression results of the absolute discretionary accruals regression model from equation (iv) to analyze whether the adoption of IFAS 72 reduces the usage of discretionary accruals in Indonesian listed companies. The model includes the firm control variable of firm size, growth, leverage, market-to-book value, and return on assets.

Table 6. Panel Regression Results of Absolute Discretionary Accruals Regression Model

Full sample from MBX Datastream Database, 2018-2021 (Number of observations = 861)				
Variables	**Coefficient**	**SE**	**t-test**	**Significance (P-value)**
Dependant variable: ABS_DA (Absolute Discretionary Accruals)				
IFAS_72	.004	.005	0.78	0.434
SIZE	-.012	.003	-4.48	0.000***
GROWTH	-.032	.021	-1.50	0.133
LEV	.063	.017	3.67	0.000***
MTB	-.003	.001	-2.56	0.011**
ROA	.004	.001	2.64	0.008***
Constant	.300	.057	5.26	0.000***
Adj. R-squared		0.227		
F-statistics		4.37		
P-value (F-statistics)		0.000		
***p<0.1; **p<0.05; ***p<0.001**				

Robust standard errors
Variable definitions:

IFAS_72	=	Dummy variable that is equal to 1 for the year 2020 and 2021, and 0 otherwise
SIZE	=	Firms size measured by the logarithm of firms' total assets
GROWTH	=	Firms' growth measured by the difference of current year sales with the previous year deflated by total assets of the previous year
LEV	=	Firms leverage measured by total liabilities deflated by total assets of the previous year
MTB	=	Firms market-to-book value
ROA	=	Firms return on assets

Table 7. Multicollineriality Test by Measuring VIF

	IFAS_72	**SIZE**	**GROWTH**	**LEV**	**MTB**	**ROA**
VIF	1.03	1.13	1.13	1.17	1.15	1.25
Mean VIF	1.14					

VIF = Variance Inflation Factor (No severe multicollinearity problem if VIF < 10)

In Table 6, the panel regression attempts to forecast the volume of earnings management as approximated by the absolute discretionary accruals with one dummy variable and five firm control variables. An R-squared value of 0.227 (F = 4.37, p<.000) suggests that with six independent variables utilized, only 22.7% can describe the variance of the dependant variable. The first variable, the IFAS_72 variable, tries to explain the adoption effect on the significance of discretionary accruals. The variable adds .4% discretionary accruals for every observation that occurred in 2020. The SIZE variable indicates firms' size by the logarithm of their total assets for the first firm control variable. The results show that a decrease of 1.2% in discretionary accruals is present. The GROWTH variable indicates firms' growth using the difference in total assets deflated by the previous total assets. The variable decreases by 3.2% in discretionary accruals as firms grow. The LEV variable indicates firms' leverage measured by their total liabilities deflated by the previous year's total assets. The variable adds 6.3% discretionary accruals for every liability they owned. The MTB variable relates to the company's market-to-book value, showing a .3% decrease in discretionary accruals as the market-to-book value increases. The ROA variable indicates firms' return on assets and a .4% addition of discretionary accruals for every return on assets they made. Furthermore, Table 7 provides the VIF value for all independent variables. The results show that the independent variables utilized in the regression model do not have severe multicollinearity problems since each independent variable and the average VIF value is less than 2.

The first hypothesis of this thesis is therefore rejected as the IFAS_72 variable does not reduce firms' number of discretionary accruals. This is because the dummy variable of IFAS_72 shows a positive coefficient toward the dependant variable, and the p-value implies that the variable is not statistically significant after adopting IFAS 72. As for the firm control variables, firms' size, growth, and market-to-book value show a negative relationship with discretionary accruals. However, only firms' size and market-to-book value significantly decrease with discretionary accruals. From the results, it could also be seen that as firms' have higher leverage and return on assets, they may have higher discretionary accruals since the regression results show significance in them. The dominant control variable that significantly decreases discretionary accruals is firms' size, the logarithm of firms' total assets. As the size of their total assets increase, their discretionary accruals decrease.

4.3 IFAS 72 Effects on Discretionary Accruals in Telecommunication, Construction, and Real Estate Industry

Table 8. Panel Regression Results of Absolute Discretionary Accruals Regression Model for Telecommunication, Construction, and Real Estate Industries

Full sample from MBX Datastream Database, 2018-2021 (Number of observations = 991)				
Variables	**Coefficient**	**SD**	**t-test**	**Significance (P-value)**
Dependant variable: ABS_DA (Absolute Discretionary Accruals)				
IFAS_72	.003	.005	0.49	0.624
Telecom	-.010	.012	-0.84	0.401
Const	-.009	.010	-0.85	0.394
RealEst	-.016	.006	-2.55	0.011**
TEL_IFAS72	-.021	.016	-1.32	0.187
CON_IFAS72	.010	.018	0.56	0.575
RES_IFAS72	.010	.011	0.91	0.363
SIZE	-.012	.003	-4.20	0.000***
GROWTH	-.034	.021	-1.58	0.113
LEV	.064	.018	3.63	0.000***
MTB	-.003	.001	-2.59	0.010***
ROA	.004	.001	2.60	0.010***
Constant	.287	.057	5.01	0.000***
Adj. R-squared		0.233		
F-statistics		3.51		
P-value (F-statistics)		0.000		
***p<0.1; **p<0.05; ***p<0.001**				

Robust standard errors
Variable definitions:

IFAS_72	=	Dummy variable that is equal to 1 for the year 2020 and 2021, and 0 otherwise
Telecom	=	Dummy variable that is equal to 1 for telecommunication industry, and 0 otherwise
Const	=	Dummy variable that is equal to 1 for construction industry, and 0 otherwise
RealEst	=	Dummy variable that is equal to 1 for real estate industry, and 0 otherwise
TEL_IFAS72	=	Dummy variable that is equal to 1 for telecommunication industry in the year 2020 and 2021, and 0 otherwise
CON_IFAS72	=	Dummy variable that is equal to 1 for construction industry in the year 2020 and 2021, and 0 otherwise
RES_IFAS72	=	Dummy variable that is equal to 1 for real estate industry in the year 2020 and 2021, and 0 otherwise
SIZE	=	Firms size measured by the logarithm of firms' total assets
GROWTH	=	Firms' growth measured by the difference of current year sales with the previous year deflated by total assets of the previous year
LEV	=	Firms leverage measured by total liabilities deflated by total assets of the previous year
MTB	=	Firms market-to-book value
ROA	=	Firms return on assets

To investigate the second hypothesis, the dummy variables of these industries are multiplied by the dummy variable of IFAS_72 to analyze the after-effect adoption of IFAS 72. With an R-squared value of 0.233 (F = 3.51, p<.000), the results propose that with the independent variables utilized in the model, only 23.3% can describe the variance of the dependent variable. From the dummy variables of these three industries alone, table 8 shows that telecommunication, construction, and real estate industries negatively affect discretionary accruals. However, only the real estate industry shows a significant value with discretionary accruals. This means that from 2018 to 2021, firms belonging to these three industries show a decrease in discretionary accruals but only the real estate industry is significant.

From table 8, while there is a decrease in discretionary accruals in these three industries from 2018 to 2021 with only significant results in the real estate industry, the same cannot be said from 2020 to 2021. The focus from 2020 to 2021 is to show IFAS 72 implementing period and its effect on discretionary accruals in the telecommunication, construction, and real estate industry. Table 8 shows a negative coefficient in the telecommunication industry and a positive coefficient in the construction and real estate industry after the introduction of IFAS 72. However, in the three industries, the p-value does not suggest that the variable is statistically significant after adopting IFAS 72. This means that after the adoption of IFAS 72, the telecommunication, construction, and real estate industries have no significant discretionary accruals. Therefore, the second hypothesis is also rejected.

It is worth noting that the firm control variables have results which are not far off from the previous model, with firm size, growth, and market-to-book value having a negative effect on discretionary accruals and a significant level on firms' size, leverage, market-to-book value, and return on assets with discretionary accruals. This is in line with findings from Fuad & Wijanarto (2017) and Wijayana & Gray (2019), where firm control variables are significant with absolute discretionary accruals in Indonesian companies.

5. Conclusion, Discussion, and Limitation

This thesis analyses the relationship between IFAS 72 and discretionary accruals. From the regression results, the mandatory adoption of IFAS 72 has no significance in the practice of earnings management in Indonesia and does not decrease the usage of discretionary accruals. The insignificance suggests that the shifts in discretionary accruals cannot solely be explained by implementing IFAS 72. The findings are in contrast to what Tutino et al. (2019), Morawska (2021), and Piosik (2021) found in Italian and Poland companies, where they found a decrease

in discretionary accruals. This is also in contrast to Fuad & Wijanarto's (2017) findings, where there is a significant reduction in discretionary accruals after IFRS convergence. However, Jeanjean & Stolowy (2008) argued that implementing a new standard alone is insufficient to decrease discretionary accruals significantly. Variables such as management incentives, cultural values, and institutional factors also affect the practice of earnings management (Healy & Wahlen, 1999). These variables may have more considerable control over financial reporting that a single accounting standard.

Furthermore, IFAS 72 on discretionary accruals has insignificant effects on industries such as telecommunication, construction, and real estate. The findings contradict what the literature has suggested. The telecommunication industry, where it will be affected the most after the newest standard introduction, as stated by Lehman & Wodka (2017), Li & Xu (2004), and Tutino et al. (2019), was not found. Moreover, Boujelben & Kobbi-Fakhfakh (2020) argue that industries such as telecommunication, construction, and real estate have higher sensitivity during adopting IFRS 15, whereas IFAS 72 was adopted.

A possible explanation for this insignificance results could be due to the competition in each industry and their understanding of the newest standard (Li & Xu, 2004; Trabelsi, 2018; Wyk & Coetsee, 2020). The insignificance results from the telecommunication and construction industries could be traced back to how they have a low degree of competition due to the active number of entities in those industries. Compared to the real estate industry, the significant results could be explained by the high number of firms competing in that industry. Moreover, the insignificant results after adopting IFAS 72 in the telecommunication, construction, and real estate industry could be due to first-time adoption bias. Wyk & Coetsee (2020) explains that implementing IFRS 15 provides a proper framework for revenue recognition on customer contacts with the correct application and interpretation of obligations and rights. It is possible that the adoption of IFAS 72 is not yet fully perceived by the adopting companies and may make an explicit and unreserved statement regarding the new standard. While there is a decrease in discretionary accruals from the telecommunication industry after the implementation date, it cannot be concluded explicitly if the decrease comes from adopting the newest standard or other probabilities since it does not have a high significance level.

This thesis, however, was subject to several limitations. It should be noted that this thesis only focused on accruals-based earnings management and not real earnings management, which causes a restriction in the broad understanding of earning management. For example,

Fuad & Wijanarto (2017) found differences in the use of real and discretionary accruals after IFRS convergence in Indonesia. The introduction of IFAS 72 may not shift the discretionary accruals. However, there is a possibility that a study in real earnings management could clarify whether earnings management has decreased or does not have an effect in its entirety. Furthermore, there are possibilities of omitted variable bias from the relationship between IFAS 72 and discretionary accruals. While the results from the firms' control variable in this study are significant, other relevant factors may also better explain the behaviour of discretionary accruals that were omitted. Those variables could be, for example, from the auditors' view, investors' protection, profitability, and management stock ownership. (Callao & Jarne, 2010; Fuad & Wijanarto, 2017; Tutino et al., 2019). Finally, there was lacking prior research which discussed identical subjects in Indonesia. The lack of prior studies causes this thesis to find a lack of relevant supporting evidence on the variable of IFAS 72. Furthermore, the usage of the Modified Jones Model is incompatible with detecting the value of discretionary accruals after the adoption of IFAS 72, in contrast to findings from Morawska (2021); Piosik (2021); and Tutino et al. (2019). The difference between the findings in this study and the study from Poland and Italian firms could be explained due to the difference in each country's laws and regulations, cultures, and institutional factors. Including the small-time window of this research to see the before and after effect of the new standard. However, the limitation provides opportunities for future research to design better models for Indonesian firms and may attain better representative results.

Contrariwise, the results from this thesis offer considerable contributions and recommendations. This thesis confirms that earnings management exists in Indonesian companies after adopting IFAS 72. From the findings, the average nominal of absolute discretionary accruals is .059, which suggests that companies in Indonesia have altered their account earnings by 5.9% from their previous year's total assets. While the number is small, officials and standard setters may consider evaluating the revenue recognition standard to minimize future earnings management and increase transparency. Furthermore, this thesis could aid stakeholders in making better decisions or investing in certain companies of interest. External parties should consider the possibilities of a company's earnings management which could obscure firms' financial performance.

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<center>**Appendices**</center>

Appendix I. Sample Selection Process

3,008	Initial sample size from the Datastream database
(2,130)	Sample with incomplete annual report data set
(17)	Sample in the banking industry
861	Final sample of observations
249	Total number of unique firms

Appendix II. MBX Constituents

INDUSTRIES	NUMBER OF FIRMS	FREQUENCY
BASIC MATERIALS	35	109
CONSTRUCTION	17	61
CONSUMER CYCLICALS	43	146
CONSUMER NON-CYCLICALS	47	160
ENERGY	23	85
HEALTHCARE	11	41
INDUSTRIAL GOODS & SERVICES	9	31
REAL ESTATE	27	96
TECHNOLOGY	6	19
TELECOMMUNICATIONS SERVICES	10	39
TRANSPORTATION	16	58
UTILITIES	5	16
TOTAL	249	861

Appendix III. Descriptive Statistics of The Modified Jones Model

Full sample from MBX Datastream Database, 2017-2021 (Number of observations = 861)					
Variables	**Mean**	**SD**	**Min**	**Median**	**Max**
Total_accruals	-799.876	2,167.262	-12,654.6	-174.76	2,299.711
Total_assets	18,338.8	29,484.78	465.786	7,021.882	178,396.5
GPPE	12,630.18	25,612.93	37.093	3,731.065	148,906
Total_liabilities	9,700.739	17,193.86	61.674	3,092.17	93,469.25
Delta_sales	468.175	3,088.517	-11,863.72	123.600	15,246.72
Delta_receivables	18.546	848.668	-4,659.606	5.845	3,949.406
TA	-.037	.102	-.399	-.038	1.041
SALES	.035	.240	-1.355	.021	2.240
GPPE	.737	.488	.002	.666	2.530
CASHSALES	.033	.225	-1.397	.019	2.234
SIZE	22.733	1.374	18.327	22.672	26.615
GROWTH	.035	.240	-1.355	.021	2.240
LEV	.484	.255	.003	.479	2.066
MTB	2.233	4.657	-14.31	1.14	66.16
ROA	6.047	10.543	-42.78	5.02	120.25

All variables are denoted in million Indonesian Rupiah (IDR).
Variable definitions:

Total_accruals	=	The difference between net income and cash flows from operations
Total_assets	=	Firms' total assets

GPPE	=	Gross, property, plant, and equipment
Total_liabilities	=	Firms' total liabilities
Delta_sales	=	The difference of t year sales with t-1 year
Delta_receivables	=	The difference of t year net receivables with t-1 year
TA	=	The difference between net income and cash flows from operations deflated by total assets of the previous year
SALES	=	The difference of the current year sales with the previous year's sales deflated by total assets of the previous year
GPPE	=	Gross, property, plant, and equipment deflated by total assets of the previous year
CASHSALES	=	The difference between changes in revenues and changes in accounts receivables deflated by total assets of the previous year
SIZE	=	Firms size measured by the logarithm of firms' total assets
GROWTH	=	Firms' growth measured by the difference of current year sales with the previous year deflated by total assets of the previous year
LEV	=	Firms leverage measured by total liabilities deflated by total assets of the previous year
MTB	=	Firms market-to-book value
ROA	=	Firms return on assets

Appendix IV. Panel Regression Results of The Modified Jones Model

Full sample from MBX Datastream Database, 2017-2021 (Number of observations = 861)

Variables	Coefficient	SE	t-test	Significance (P-value)
Dependant variable: TA (Total Accruals)				
SALES	.080	.015	5.22	0.000***
GPPE	-.060	.006	-9.59	0.000***
Constant	-.004	.054	0.69	-0.490
Adj. R-squared		0.111		
F-statistics		51.16		
P-value (F-statistics)		0.000		
***p<0.1; **p<0.05; ***p<0.001**				

Robust standard error

Variable definitions:

SALES	=	The difference of the current year sales with the previous year's sales deflated by total assets of the previous year
GPPE	=	Gross, property, plant, and equipment deflated by total assets of the previous year

Appendix V. Descriptive Statistics of Nondiscretionary and Discretionary Accruals

Full sample from MBX Datastream Database, 2018-2021 (Number of observations = 861)

Variables	Mean	SD	Min	Median	Max
NDA	-.038	.034	-.159	-.035	.129
DA	.000	.097	-.338	-.002	1.119
ABS_DA	.059	.078	.000	.039	1.119

Variables are denoted expressed as a fraction or percentage of previous year total assets.

Variable definitions:

NDA	=	Nondiscretionary accruals calculated by using the estimates from Total Accruals regression results
DA	=	Discretionary accruals of the Modified Jones Model
ABS_DA	=	The absolute value of discretionary accruals

Appendix VI. Panel Regression Results of Absolute Discretionary Accruals Regression Model

Full sample from MBX Datastream Database, 2018-2021 (Number of observations = 861)

Variables	Coefficient	SE	t-test	Significance (P-value)
Dependant variable: ABS_DA (Absolute Discretionary Accruals)				
IFAS_72	.004	.005	0.78	0.434
SIZE	-.012	.003	-4.48	0.000***
GROWTH	-.032	.021	-1.50	0.133
LEV	.063	.017	3.67	0.000***
MTB	-.003	.001	-2.56	0.011**
ROA	.004	.001	2.64	0.008***
Constant	.300	.057	5.26	0.000***
Adj. R-squared		0.227		
F-statistics		4.37		
P-value (F-statistics)		0.000		
***p<0.1; **p<0.05; ***p<0.001**				

Robust standard errors
Variable definitions:

IFAS_72	=	Dummy variable that is equal to 1 for the year 2020 and 2021, and 0 otherwise
SIZE	=	Firms size measured by the logarithm of firms' total assets
GROWTH	=	Firms' growth measured by the difference of current year sales with the previous year deflated by total assets of the previous year
LEV	=	Firms leverage measured by total liabilities deflated by total assets of the previous year
MTB	=	Firms market-to-book value
ROA	=	Firms return on assets

Appendix VII. Multicollineriality Test by Measuring VIF

	IFAS_72	SIZE	GROWTH	LEV	MTB	ROA
VIF	1.03	1.13	1.13	1.17	1.15	1.25
Mean VIF	1.14					

VIF = Variance Inflation Factor (No severe multicollinearity problem if VIF < 10)

Appendix VIII. Panel Regression Results of Absolute Discretionary Accruals Regression Model for Telecommunication, Construction, and Real Estate Industries

Full sample from MBX Datastream Database, 2018-2021 (Number of observations = 991)

Variables	Coefficient	SD	t-test	Significance (P-value)
Dependant variable: ABS_DA (Absolute Discretionary Accruals)				
IFAS_72	.003	.005	0.49	0.624
Telecom	-.010	.012	-0.84	0.401
Const	-.009	.010	-0.85	0.394
RealEst	-.016	.006	-2.55	0.011**
TEL_IFAS72	-.021	.016	-1.32	0.187
CON_IFAS72	.010	.018	0.56	0.575
RES_IFAS72	.010	.011	0.91	0.363
SIZE	-.012	.003	-4.20	0.000***
GROWTH	-.034	.021	-1.58	0.113
LEV	.064	.018	3.63	0.000***
MTB	-.003	.001	-2.59	0.010***

ROA	.004	.001	2.60	0.010***
Constant	.287	.057	5.01	0.000***
Adj. R-squared		0.233		
F-statistics		3.51		
P-value (F-statistics)		0.000		
***p<0.1; **p<0.05; ***p<0.001**				

Robust standard errors
Variable definitions:

IFAS_72	=	Dummy variable that is equal to 1 for the year 2020 and 2021, and 0 otherwise
Telecom	=	Dummy variable that is equal to 1 for telecommunication industry, and 0 otherwise
Const	=	Dummy variable that is equal to 1 for construction industry, and 0 otherwise
RealEst	=	Dummy variable that is equal to 1 for real estate industry, and 0 otherwise
TEL_IFAS72	=	Dummy variable that is equal to 1 for telecommunication industry in the year 2020 and 2021, and 0 otherwise
CON_IFAS72	=	Dummy variable that is equal to 1 for construction industry in the year 2020 and 2021, and 0 otherwise
RES_IFAS72	=	Dummy variable that is equal to 1 for real estate industry in the year 2020 and 2021, and 0 otherwise
SIZE	=	Firms size measured by the logarithm of firms' total assets
GROWTH	=	Firms' growth measured by the difference of current year sales with the previous year deflated by total assets of the previous year
LEV	=	Firms leverage measured by total liabilities deflated by total assets of the previous year
MTB	=	Firms market-to-book value
ROA	=	Firms return on assets