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**Article**

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## FINANCIAL ECONOMICS | RESEARCH ARTICLE

# Intangible assets, risk management committee, and audit fee

Aditya Aji Prabhawa<sup>1</sup> and Mohammad Nasih<sup>1\*</sup>

**Abstract:** This study analyzes whether the company's intangible assets will affect the audit fee paid to the auditor and risk management committee as a moderating variable. The sample of this study consisted of 656 observations from companies listed on the Indonesia Stock Exchange (BEI) for 2010–2018 from all industry sectors except the financial industry, using the method of multiple linear regression analysis, aims to determine whether intangible assets affect audit fees and whether the risk management committee strengthens or weakens the relationship between the two variables. The research method used in this study is quantitative. This study indicates that the amount of intangible assets in the company will positively impact audit fees. The risk management committee has the responsibility to shareholders to ensure that their financial statements are free from errors or fraud and also strengthen the relationship between the two variables. These findings provide evidence for policymakers on the relationship between Intangible assets, risk management committees, and audit fees

**Subjects:** Auditing; Financial Statement Analysis; Risk Management

**Keywords:** Intangible assets; risk management committee; audit fees

**Subjects:** M40; M41; M48

### ABOUT THE AUTHORS

Mohammad Nasih is a Professor and also a rector of Universitas Airlangga, Indonesia. His current research focuses include corporate governance issues, political and military connections in business, and financial reporting.

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### PUBLIC INTEREST STATEMENT

This paper analyzes the relationship between intangible assets and audit fees, and whether the risk management committee (RMC) intervenes in this variable relationship. The increasing of intangible assets lately makes shareholders doubt whether this type of asset can be relied on for the company's future. This forces the auditor to ensure that intangible assets contained in the financial statements are appropriate. However, calculating intangible assets is a challenge in itself. RMC, as part of the company keeps the financial statements free from misstatement. This study found that the larger the intangible assets, the higher the audit fees due to increased audit risk, time, and auditor effort in calculating asset value. The existence of RMC is strengthens the relationship between them, which means it will increase the audit fee. This paper can provide stakeholder insights in decision-making for stakeholders to anticipate certain problems in companies with large amounts of intangible assets.

## 1. Introduction

Prior research shows that intangible assets on the balance sheet are associated with audit fees (Datta et al., 2019; Visvanathan, 2017). Researchers and practitioners consider Intangible Assets a key factor for a successful company, and it is essential to increase the value of a product or company (Montemari, 2010). Therefore, the practice of managing Intangible Assets has significantly increased, resulting in an increased value of Intangible Assets and has become a significant concern (Harrison & Sullivan, 2000). Unfortunately, the traditional financial reporting framework does not capture this much because of the “non-physical” nature of Intangible Assets and the uncertainty associated with “future benefits” (Lev & Zarowin, 1999). The public accountant acts as an external auditor in the Public Accounting Firm. Audit services require a fee, which is commonly called an Audit fee, which means that all fees paid and provided to the auditor by a company for the audit services performed, and the amount of the audit fee is influenced by the size of the client company, audit complexity, and audit risk (Simunic, 1980). Auditing Intangible Assets has different challenges than auditing tangible assets such as property, factories, and equipment. Intangible Assets do not require physical verification, but on the other hand, they have a level of assurance and complicated calculations, especially goodwill (Ramanna & Watts, 2012). Therefore, auditing the company’s financial statements regarding intangible assets will increase the auditor’s level of difficulty and time, affecting the audit fees later.

The audit is certainly inseparable from a company’s financial risk. Still, only a few research studies have shown evidence of the relationship between the Risk Management Committee (RMC) and audit results (Ahmed & Che-Ahmad, 2016), and recently, there has been an increase in risk management awareness due to many corporate scandals and various unexpected business failures (Walker et al., 2002). Previous research has also shown that the Risk Management Committee plays a significant role in risk control, detection, and prevention, especially in terms of financial risks (Abdullah et al., 2015). Interestingly, there is positive evidence about RMC and audit fees (Hines et al., 2015). Badertscher et al. (2014) found that RMC would be linked to audit costs through the pricing of auditors’ production costs due to the auditor’s assessment of inherent risk and control. High expectations for the Risk Management Committee’s performance made senior executives more involved in risk monitoring practices, and to overcome this problem, company board members began to form new structures within the organization to assist the company’s risk monitoring process (Beasley, 1996).

This research aims to determine the relationship between Intangible Assets, Risk Management Committee, and Audit Fees. The relationship between Intangible Assets and the audit fee researched by Visvanathan (2017) found a significant relationship between Intangible Assets and audit fees. Furthermore, research conducted by Datta et al. (2019) also shows a positive relationship between companies with large Intangible Assets and high audit fees, and both studies were conducted in the United States. A stand-alone RMC will conduct its role independently with audit committees and hence, could work more effectively to oversee risk management. RMC has a role as a governance mechanism for controlling company risk and adequately communicating those risks with various stakeholders (Buckby et al., 2015; Nahar et al., 2016). According to (Hines et al. (2015), there is a positive relationship between the Board Risk Management Committee and the Audit Fee, but it has limitations, namely only having data in the Morningstar database. The same results are also found in Larasati et al. (2019) research that the Risk Management Committee as a form of risk response to risk monitoring tasks and producing adequate financial statement guarantees requires comprehensive audit services and causes audit costs to increase. Risk Management Committee also relates audit fees; Badertscher et al. (2014) show a positive relationship between RMC and audit fees due to auditors’ assessments of inherent and control risks.

From some of the studies above, there are gaps between studies because there are many factors that affect the audit fee, for example, the amount of intangible assets owned by the company because it enlarges the audit effort and the existence of the Risk Management Committee will try to reduce misstatement and fraud, it will be considered to be able to add a more comprehensive audit service and increase the audit fee which then becomes the basis for this research. Therefore,

this study's objectives are to obtain empirical evidence of whether intangible assets influence the audit fee, then the second objectivities to obtain empirical evidence whether the risk management committee influences intangible assets and the audit fee.

We make several contributions to the literature. First, we explain the problem of whether an intangible object has made financial statements more difficult to calculate because it has a lot of risk in misstatement, which will increase the auditor's fee and second, these findings suggest that stand-alone RMC on public companies could increase the audit fees charged by the auditors. For practitioners, intangible assets on the company make it more difficult to evaluate assets, and these findings indicate that RMC will increase their cost on audit since the RMC demand a higher quality of audit result. Furthermore, having RMC could strengthen the relationship between Intangible assets and audit fees, since their independence is seen as an essential attribute to enhance their responsibilities. This research is expected to provide insight and information for the development of accounting science, auditors, and professional accountants to determine things that can affect audit costs and as reference material in further research.

The remainder of this paper is structured as follows: Section 2 lays out the research hypotheses and discusses related literature; Section 3 describes data, sample and variables; Section 4 specifies the empirical models, presents the main results and discusses the findings; Section 5 concludes.

## 2. Literature review and hypotheses

### 2.1. Audit pricing theory

Previous research by Simunic (1980) defines audit pricing theory as a basis for determining the cost of the audit (audit fees). The auditor's audit fee is given to the client as a fee for the auditor to do his job. The measurement of audit fee is measured by using quantity (Q) and price (P), in which the amount is calculated using the working hours of the auditor, while the price is determined using the average billing rate for working hours is explained by Simunic (1980). There are two points of view, namely from the demand side and from the supply side. The first is a demand-side audit pricing perspective with a positive relationship between corporate governance quality and audit costs. (Bell et al., 2015; Redor, 2017) found audit fees tended to be higher in response to high risks of misstatement and high-quality audit requests by governance to protect their reputation capital. Experienced boards tend to seek higher quality audits than external auditors; this encourages auditors to charge higher fees (Mitra et al., 2019). The audit request is a function of the set of risks faced by the organization's stakeholders and the set of control mechanisms to reduce these risks (Simunic, 1980). The second is a supply-side perspective showing a negative relationship between the quality of corporate governance and audit costs. Stricter controls and a governance environment can reduce the auditor's assessment of control risk and the level of audit procedures, thereby reducing audit costs (Wahab et al., 2011)

Simunic (1980) sees a significant and positive relationship between client complexity and external audit costs because external auditors will need more time to audit and more expertise to audit when the client company is more complex than the less complicated client firm. Cohen et al. (2002) argue that investment in intangible assets (especially research and development) will be challenging to assess. Then there is also the risk of litigation, which increases the cost of external audits. Litigation is a process that occurs due to a dispute or case to legal channels. Intangible Assets, such as patents and copyrights can be encroached upon by others, even unintentionally, thus attracting companies and auditors into the lengthy trial and that may increase the risk of litigation for the auditor (Datta et al., 2019)

Intangible Assets have these two aspects, namely client complexity and litigation risk because Intangible Assets are challenging to calculate and value (Visvanathan, 2017), which will require more time and effort from external auditors to work. Auditors also increase risk—litigation with as many proportions as intangible assets in financial statements (Simunic, 1980).

## **2.2. Audit fee**

The audit fee is all fees for auditors' services by a company for the audit services performed. The amount of audit fees is influenced by the client company's size, audit complexity, and audit risk. (Simunic, 1980). According to Ettredge, Fuerherm, and Li (2014), a higher level is needed to ensure a higher effort to face a higher risk.

Better audit quality can detect more errors and result in fewer misstatements. So in practice, auditors are required to make more effort. Therefore, in determining the cost of the audit, the auditor should consider the appropriate time in assessing the risk of the company and how much effort the auditor will make in the future in carrying out the audit process (Lobo & Zhao, 2013)

## **2.3. Intangible assets**

According to Kieso et al. (2016), intangible assets are different from tangible assets because they do not have physical material or substance, legal documents usually prove them. In general, there are six categories of intangible assets. Intangible assets are related to marketing, for examples, such as trademarks, which are words, phrases, or symbols that distinguish or identify a particular company or product. Trade names such as Kleenex, Pepsi-Cola, Buick, Excedrin, Wheaties, and Sunkist put product identification right in people's minds, increasing marketability. In the eyes of the law, the right to use a trademark or trade name is owned exclusively by the original user.

Intangible assets related to customers include customer lists, production orders or deposits, and contractual or non-contractual customer relationships.

Intangible assets related to art are copyright, a legally granted right that all writers, painters, musicians, sculptors, and other artists have in their creations and expressions. Copyright is granted for the creator's life plus 70 years, gives the owner or heirs the exclusive rights to reproduce and sell artistic or published work. Copyright cannot be extended.

Intangible assets are related to contracts and franchises, for example, a franchise is a contractual arrangement in which the franchisor gives the franchisor the right to sell a particular product or service, use a specific trademark or trade name, or perform a specific function, usually within a defined geographic area.

Intangible assets related to technology are such as patents. A patent gives the holder the exclusive right to use, manufacture, and sell a product or process for 20 years without others' interference. Companies like Merck, Polaroid, and Xerox are founded on patents and patents to exclusive rights. The two main types of patents are Product Patents, which cover actual physical products, and Process Patents, which govern the product's manufacturing process.

Goodwill is the excess of purchase costs over the fair value of the net identifiable assets (assets fewer liabilities) purchased. Conceptually, goodwill represents future economic benefits from other assets acquired in a business combination that are not individually identified and recognized separately.

## **2.4. Risk management committee**

The emergence of a Risk Management Committee is the way companies can effectively control risk and help investors identify better company risks (Linsley & Shives, 2006). RMC's expertise in risk management will assist the process of communicating risk management information between operations and strategic divisions. For example, RMC can determine what important information needs to be obtained from the operations division (Financial Reporting Council (FRC), 2011). Previous research has also found that disclosure of risk management information is essential in reducing asymmetric information (Miihkinen, 2013) and can increase firm value (Abdullah et al., 2015). Nevertheless, disclosure of risk management information is still low, especially in disclosing information related to non-financial risk management, which is a voluntary disclosure (Larasati et al., 2019; Linsley & Shives, 2006). The presence of RMC in the

company can increase audit demand (increase costs) or reduce auditor risk assessment (reduce costs) (Carcello et al., 2002).

The governance system in modern companies is divided into two parts, internal mechanisms and external mechanisms, which vary depending on the specific recommended environment (Weir, Laing, & McKnight, 2001). Internal governance mechanism indicators consist of the number of directors, the proportion of independent boards of commissioners, and debt to equity, while the indicators for external governance mechanisms consist of institutional ownership (Beiner et al., 2004). When these two mechanisms operate simultaneously, the corporate governance system will allow managers to maximize shareholder value (Nendelstadh & Rosenberg, 2003).

## 2.5. Hypothesis development

### 2.5.1. Intangible assets and audit fee

Intangible assets may also differ from tangible assets from an audit perspective in terms of uncertainty over the valuation that may increase audit risk. That is, the valuation of intangibles may be less accurate (McInnis & Monsen, 2017). Valuation is also more complicated for intangibles as significant subjectivity exists, and managers' assumptions need to be verified, which may be difficult (Ramanna & Watts, 2012). Subjectivity in accounting rules may lead to potential manipulation, and it interprets an increase in the proportion of intangible assets as a potential increase in the probability of manipulation (Beneish, 1999). Intangible assets such as goodwill have to be assessed for the possibility of impairment every accounting period compared to tangible assets that are to be tested for impairment only if specific indicators are present. The use of fair value estimates in arriving at impairments makes it even more difficult given that disclosures about how intangibles are valued must offer only basic information about the assumptions that generated these estimates (Sherman & Young, 2016).

Visvanathan's (2017) research shows that auditors charge higher fees for companies with higher intangible assets because auditors assess this as a higher potential audit risk and require more time and effort. In addition to research and development costs, Datta et al. (2019) found that the number of patents also affects audit fees. Venkataraman et al. (2008) also find that an increase in litigation risk increases in audit fees

According to Soraya and Syafruddin (2013), measuring the performance of asset utilization, both tangible and intangible, needs to be done by companies to evaluate and improve company performance. However, some difficulties arise in measuring the utilization of intangible assets, which is sometimes will affect the auditor's time and effort in the process.

Based on the description above, the hypothesis can be formulated as follows:

### **H1: There is a positive relationship between Intangible Assets and Audit Fee**

### 2.5.2. Risk management committee and audit fee

The determination of audit pricing is the consequence of the auditor's assessment of the client's control environment and occupying client demands on better audit quality and increasing audit fees (Jizi & Nehme, 2018). Good corporate governance and board composition show a positive relationship with corporate accountability (Tumwebaze et al., 2018). The role of the Risk Management Committee is to provide a broader range of risk identification within a company (Aebi et al., 2012). An independent RMC will perform its role independently and responsibilities for risk management (Buckby et al., 2015). In conducting their overseeing function, the RMC should oversee an organization's risk management framework through the process of identifying, assessing, and responding to all future and current risks that appear to threaten an organization's existence (Moore & Brauneis, 2008; Schlich



& Prybylski, 2009). The Risk Management Committee can reasonably be linked to audit costs by pricing the auditor's operating costs as a result of the auditor's assessment of inherent and control risks (Badertscher et al., 2014)

RMC has a role as a governance mechanism to control company risk and communicate with stakeholders (Nahar et al., 2016). RMC also supervises the organization's risk management framework through a process to identify, assess, and respond to all future and current risks that appear to threaten the organization (Schlich & Prybylski, 2009). The establishment of a risk management committee brings commitment and awareness to the board about the importance of a system of internal control (Cummins et al., 2009). Moreover, Carcello et al. (2002) suggest that stronger boards require more audit effort and are associated with higher audit costs. Knechel and Willekens (2006) suggest that when corporate control is subject to the power of internal demand gathered from various stakeholders, and this will result in a net increase in external assurance. Although RMC does not directly purchase auditing services, it may recommend a more extensive service as a risk response to their risk monitoring task, resulting in a higher demand for external assurance.

Based on the description above, the hypothesis can be formulated as follows:

## **H2: There is a positive relationship between the Risk Management Committee and the Audit Fee**

### *2.5.3. Intangible assets, risk management committee, and audit fees*

Intangible Assets have significantly increased in recent years and have become a significant concern (Harrison & Sullivan, 2000). Auditing Intangible Assets has different challenges than auditing tangible assets such as property, factories, and equipment. Prior research also shows that intangible assets on the balance sheet are associated with audit fees (Datta et al., 2019; Visvanathan, 2017)

Based on the concept of agency theory, RMC has a role in monitoring company activities and provides a broad range of risk identification within the company (Aebi et al., 2012). RMC also has a position as a governance mechanism to oversee company risks and communicate these risks with stakeholders (Nahar et al., 2016). The existence of good corporate governance within the company can increase audit demand (increase costs) or reduce auditor risk assessments (reduce costs) (Carcello et al., 2002).

However, here the RMC appears to be responsible to stakeholders to ensure that financial reports are free from fraud. RMC could recommend a more comprehensive audit service as a form of risk response to risk monitoring tasks and better external assurance, or companies with high intangible assets, the risk will be greater, and the audit costs will be higher.

Based on the description above, the hypothesis can be formulated as follows:

## **H3: Risk Management Committee strengthens the relationship between Intangible Assets and Audit Fees**

### **3. Data and variable measurement**

#### **3.1. Data**

Sources: The data source used in this study is secondary data from the ORBIS database. The secondary data come from companies' audited annual financial reports listed on the Indonesia Stock Exchange 2010–2018.



### 3.2. Population and sample

This study uses a population of all non-financial companies listed on the Indonesia Stock Exchange for the period 2010–2018 with the following criteria:

- (1) Non-financial companies listed on the Indonesia Stock Exchange for the period 2010–2018. This study does not use the SIC code (Standard Industrial Classification) 6, which is financial industries, because they have different characteristics of accounting treatment
- (2) Companies whose annual financial statements have been audited have data related to this research
- (3) Then, it negates all missing variables. After applying these criteria, the final sample was obtained as many as 656 observations.

### 3.3. Regression model

**Model Model 1: To test hypothesis 1 and hypothesis 2, look at the relationship between Intangible Assets and Audit Fee as well to see the relationship between the Risk Management Committee and the Audit Fee**

**Model 2: To test hypothesis 3, which is to see the relationship between Intangible Assets, Risk Management Committee, and Audit Fee**

$$\text{LN}AFEE_{i,t} = \beta_0 + \beta_1 \text{INTANG} * \text{RMC}_{i,t} + \beta_2 \text{INTANG}_{i,t} + \beta_3 \text{RMC}_{i,t} + \beta_5 \text{DIBOC}_{i,t} + \beta_6 \text{BOD}_{i,t} + \beta_7 \text{BOC}_{i,t} + \beta_8 \text{BIG4}_{i,t} + \beta_9 \text{FSIZE}_{i,t} + \beta_{10} \text{ROA}_{i,t} + \beta_{11} \text{LEV}_{i,t} + \varepsilon$$

Description of Variables:

LNFE = Natural Logarithm of Audit Fee

$\beta_0$  = Constant

$\beta_1 \beta_2 \beta_3 \beta_4 \beta_5 \beta_6$  = regression coefficient

INTANG = Natural logarithm of total Intangible Assets

RMC = Number of Risk Management Committee in the company

DIBOC = Divide the number of Independent Commissioners by the total number of commissioners

BOD = number of directors in the company

BOC = number of commissioners in the company

ROA = Return on Asset

FSIZE = Natural logarithm of total assets

LEV = Liabilities divided by total assets

BIG4 = Dummy variable, Code 1 if a company is audited by BIG4 Auditor (EY, KPMG, PwC, Deloitte) and 0 otherwise

$\varepsilon$  = Error

INTANG1 = Dummy variable, Coded 1 if intangible asset exceeds the median value of 17,787

### 3.4. Operational variables

The independent variable in this research is intangible assets, which, unlike tangible assets, do not have physical material or substance. Intangible assets are usually proven by legal documents (Kieso et al., 2016). Some examples of intangible assets are patents, trademarks, business processes, and intellectual property (Falato et al., 2020). Intangible assets in this study use intangible asset data contained in financial statements. The dependent variable in this study is the Audit Fee. The audit fee is all fees for services paid to auditors by a company for the audit services performed. The amount of audit fee is influenced by the size of the client company, audit complexity, and audit risk (Simunic, 1980). Audit fees in this study are measured using the natural logarithm of audit fees paid to external auditors in the financial statements. The moderating variable in this study is the Risk Management Committee. RMC has a role as a governance mechanism to oversee corporate risk and communicate with stakeholders, thus providing a more comprehensive range of risk identification.

Control variables are made constant so that the influence of the independent variable on the dependent variable is not influenced by external factors that are not researched (Sugiyono, 2014). The control variables in this study were taken from several previous studies, such as those conducted by Visvanathan (2017), Datta et al. (2019), and Larasati et al. (2019), namely the number of independent commissioners (DIBOC), the number of company directors (BOD), the number of commissioners in a company (BOC), a company audited by the BIG4 auditors (BIG4), natural logarithm of total assets (FSize), Return on Asset (ROA), and Leverage (LEV).

### 3.5. Methodology

The research uses STATA 14 software and then descriptive statistical analysis test, Pearson correlation, and multiple linear regression as analysis techniques, which aims to examine the effect of the independent variable on the dependent variable and the moderating variable's impact. However, before that, the Winsor technique is carried out first on the data used to solve extreme data originating from the outlier effect.

## 4. Empirical analysis and result

### 4.1. Description of research results

Table 1 presents the descriptive statistics. The average (mean) of AFEE is 2,738 billion rupiah; the minimum and maximum values are 100 million rupiah and 183 billion rupiah, respectively. RMC uses dummy variables with an average of 0.291, which means that 29.1% of firms have RMC in their

**Table 1. Descriptive statistics**

	Mean	Median	Minimum	Maximum
AFEE	2.738.000.000	1.035.000.000	100.000.000	183.000.000.000
INTANG	17.777	17.787	9.962	23.843
RMC	0.291	0.000	0.000	1.000
DIBOC	0.368	0.333	0.000	0.667
BOD	5.465	5.000	2.000	11.000
BOC	4.976	5.000	2.000	10.000
BIG4	0.556	1.000	0.000	1.000
TASSET	15.480.000.000	5.521.000.000	147.200.000	206.200.000.000
ROA	7.250	5.840	-18.640	41.980
LEV	0.488	0.489	0.072	1.184

Notes:

This table shows descriptive statistics for all the variables used in this study. The sample used in this study amounted to 656 companies listed on the IDX in 2010–2018.

**Table 2. Pearson correlation**

Panel A: From variables LNFAEE to BOC

	[1]	[2]	[3]	[4]	[5]	[6]
<b>[1] LNFAEE</b>	1.000					
<b>[2] INTANG</b>	0.486***	1.000				
<b>[3] RMC</b>	0.290***	0.200***	1.000			
<b>[4] DIBOC</b>	-0.036	0.009	-0.009	1.000		
<b>[5] BOD</b>	0.326***	0.171***	-0.007	-0.166***	1.000	
<b>[6] BOC</b>	0.422***	0.347***	0.268***	0.035	0.353***	1.000

Panel B: From variables BIG4 to ROA

	[7]	[8]	[9]	[10]	[11]	
<b>[7] BIG4</b>	0.477***	0.256***	0.194***	-0.006	0.281***	
<b>[8] FSIZE</b>	0.646***	0.654***	0.322***	-0.024	0.314***	
<b>[9] ROA</b>	0.058	0.069*	0.011	-0.008	0.159***	

*p*-values in parentheses  
 \* *p* < 0.1, \*\* *p* < 0.05, \*\*\* *p* < 0.01

company. Then the average of DIBOC is .0368, which means 36,8% of firms have a total proportion of independent commissioners divided by the total commissioner; then there is BOD, which has an average of 5.4 people and an average BOC of 4.9 people. The average of BIG4 is 0.556, and TASSETS has an average of IDR 15,480 million. Company profitability, as measured by ROA, ranges from -18.64 to 41.98, and the average LEV is 0.488.

**4.2. Model analysis and hypothesis testing**

**4.2.1. Pearson correlation**

Pearson correlation is used to measure the strength of the relationship between two variables (Acock, 2008). An asterisk (\*) in each coefficient indicates the level of significance. Table 2 shows that LNFAEE with Intangible Assets (INTANG) and RMC have a positive relationship with a significance level of 1%. Then DIBOC, BOD, BOC, BIG4, FSIZE showed a significant relationship. This indicates that the existence of INTANG and RMC will affect the amount of audit fees (LNFAEE).

**4.2.2. Multiple Linear Regression**

This study uses two multiple linear regression analysis models to test existing hypotheses. Table 3 shows the result of models 1 and 2. Model 1 shows the regression results of INTANG and RMC with audit fees. The table above shows a positive relationship between INTANG and LNFAEE of 0.032 (t = 1.99) with a significant 5%, which supports hypothesis 1. According to research by Visvanathan (2017) and the significant positive relationship between RMC and LNFAEE is 0.194 (t = 1.98), with a significance of 5% on audit fees, which supports hypothesis 2, according to research conducted by Larasati et al. (2019). The relationship between control variables and audit fees is BOD, BOC, BIG4, FSIZE have a significant positive relationship to LNFAEE, while the other control variables do not show insignificant results.

Model 2 shows that the regression result of INTANGRMC is 0.054 (t = 2.07), with a significance of 5%. These results support hypothesis 3, namely that the greater the number of intangible assets and a Risk Management Committee’s presence makes the audit fee bigger. The results of this test can be seen in Table 3, which proves that there is a significant positive relationship between INTANG and LNFAEE, which means that a large number of intangible assets affect the audit fee. Then RMC also strengthens the relationship between intangible assets and audit fees. In model 2, it shows that RMC has a negative but insignificant coefficient, which means that RMC has a negative relationship with

**Table 3. Multiple linear regression**

	(1)	(2)
	LNFEF	LNFEF
INTANGxRMC		0.054**
		(2.07)
INTANG	0.032**	0.017
	(1.99)	(0.95)
RMC	0.194**	-0.807
	(1.98)	(-1.64)
DIBOC	-0.106	-0.079
	(-0.39)	(-0.29)
BOD	0.043**	0.045**
	(2.11)	(2.24)
BOC	0.047*	0.045*
	(1.88)	(1.84)
BIG4	0.611***	0.628***
	(8.20)	(8.26)
FSIZE	0.345***	0.341***
	(8.99)	(9.01)
ROA	-0.003	-0.003
	(-0.64)	(-0.73)
LEV	0.328*	0.321*
	(1.94)	(1.89)
_cons	11.724***	12.114***
	(15.59)	(15.73)
Industry Dummies	Included	Included
Year Dummies	Included	Included
r2	0.542	0.546
N	656	656

t statistics in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

audit fees, although not significant. Following research conducted by Visvanathan (2017) and Datta et al. (2019), it shows that intangible assets affect the company's audit fee because auditors see intangible assets adding challenges, audit risk, and require more effort.

#### 4.2.3. Endogeneity problem

The findings so far were obtained based on the assumption that corporate governance is may be endogenous, some possibilities lead to associations between all of the dependent variables and corporate governance. Although, potential endogeneity concern in this study is the correlations between the dependent variable, moderation variable, and observable variable, it is also possible that the findings were affected by the observed variables included in the regression model. Therefore, we re-examined the findings using the Coarsened Exact Matching (CEM) approach to address this potential problem. CEM, As an alternative approach to addressing the self-selection concern. CEM is focused on potential observed variables that might influence the results in ordinary regression. DeFond et al. (2016) argue that the coarsened exact model (CEM) is a better approach than Propensity Score Matching (PSM) for examining the effect of the observed variables related to the regression results. This is because this

**Table 4. Coarsened exact matching**

<b>PANEL A</b>		
	INTANG1 = 0	INTANG1 = 1
All	328	328
Matched	222	303
Unmatched	106	25
<b>PANEL B</b>		
	(1)	(2)
	LNFEF	LNFEF
INTANGxRMC		0.056*
		(1.85)
INTANG	0.030*	0.018
	(1.95)	(1.00)
RMC	0.192**	-0.828
	(2.07)	(-1.53)
DIBOC	-0.020	-0.011
	(-0.06)	(-0.04)
BOD	0.039*	0.041*
	(1.84)	(1.93)
BOC	0.022	0.022
	(0.78)	(0.81)
BIG4	0.687***	0.701***
	(9.72)	(9.91)
FSIZE	0.276***	0.275***
	(7.19)	(7.27)
ROA	-0.000	-0.000
	(-0.00)	(-0.08)
LEV	0.414**	0.403**
	(2.16)	(2.11)
_cons	12.995***	12.995***
	(18.46)	(18.46)
Industry Dummies	Included	Included
Year Dummies	Included	Included
r2	0.512	0.512
N	525	525

t statistics in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

approach is not susceptible to the random matching problem. Therefore, the findings in this study are robust from the self-selection problem. We employ coarsened exact matching for all models used in this research. This is to ensure that the assignment of observations into the treatment group and control group was random. We set each covariate into three equal bins or strata.

Ten covariates were input into the CEM model. Table 4, panel A presents the matching CEM summary. A total of 303 out of 328 connected observations were matched with 222 out of 328 unconnected observations. Table 4, panel B presents the result of the replication of the model by the CEM method. The result shows that the coefficient of INTANGxRMC is 0.056 and significant of 1% level ( $t = 1.85$ ) in column 2, INTANG is 0.030 with the significance of 1%, and the result of RMC is 0.0192 and

significant of 10% level ( $t= 2.07$ ) in column 1. The table reveals a consistent result with that in Table 3 further supporting our hypothesis. We find that audit fee is significantly related to intangible assets in this sample as well, and the risk management committee also strengthens the relationship.

## 5. Conclusions

This paper examines the relationship between intangible assets and audit fees. We predict there is a positive association between intangible assets and audit fees. We also predict that there is a positive association between the risk management committee and audit fee. Lastly, we also predict that risk management committees and intangible assets are positively related to audit fees. The results indicate that auditors charge higher fees for firms with a higher proportion of intangible assets on the balance sheet for a sample of Indonesian listed companies. This happens for several possible reasons. Auditors view intangible assets for such firms to be riskier, such as the valuation process is more complicated for intangibles as significant subjectivity exists and several assumptions, goodwill have to be assessed for the possibility of impairment every accounting period, and other factors due to the increase in litigation risk, time, and auditors' effort in calculating asset value. Audit fees are also higher when a company has a Risk Management Committee. The formation of an RMC in a company provides a better division of tasks and enables them to focus on their work, as the RMC's main duties are to discover risks and recommend ways to address them.

Together, the existence of a Risk Management Committee as a moderation in this study seems to strengthen the relationship between intangible assets and audit fees, which means that it will increase audit costs. The Risk Management Committee in a company has a function to oversee risk and supervise the company from making mistakes or fraud. However, RMC does not have the authority to purchase audit services. Still, because it has a responsibility to monitor risk, recommend a more extensive service, increase control risk, inherent risk to external auditors as a form of risk response to their risk monitoring responsibilities, demand a higher audit coverage to address the risk and enhance good accounting and audit quality, this is due to the fact that extended audit hours and expert audit staff conduct more comprehensive investigation, which results in higher audit fees (Khan et al., 2019).

We acknowledge several potential limitations in this study. First, the calculation of intangible assets is difficult to measure. We try to deal with this problem by looking at what is recorded in the balance sheet, but there is still the possibility that other intangible assets are not recorded on the balance sheet. Second, the sample used in this study is relatively small, although it includes all of the Indonesian listed companies in the relevant industries. Second, not all companies use intangible assets in their business models. The sample used in this study is relatively small. We try to solve this issue by including all Indonesian listed companies in the relevant industries from 2010 to 2018. Third, most of our RMC data and audit fees come from annual reports, and there are no regulations whatsoever for disclosing or not disclosing such information that affects management actions for individual companies; we try to get as much data as possible by looking at financial reports manually. We leave the latter point as a basis for future research and suggest considering what characteristics of intangible assets will make audit fees higher such as patents, goodwill, trademarks, etc. Then consider the characteristics of the RMC members, such as (educational background, expertise, etc.) to the results of financial statements or audit fees within the company.

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