



## Effect of Corporate Governance and Earnings Management on Expense Stickiness



Theresia Ratte Allolinggi <sup>a</sup>

Erwin Saraswati <sup>b</sup>

Abdul Ghofar <sup>c</sup>

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### Abstract

This study aims to examine and analyze the effect of corporate governance and earnings management on expense stickiness. By defining small positive earnings or small earnings increases as the proxy of earnings management and divides the sample into earnings management (upward earnings management) and non-earnings management. This study uses a broad measure of corporate governance by extracting the main factors of corporate governance. The sample obtained is 251 company samples for earnings management samples and 133 companies for corporate governance samples and processed using the Multiple Linear Regression method using the regression model from the research of [Xue & Hong \(2016\)](#). The results showed that corporate governance can reduce the level of expense stickiness. However, the results of this study cannot prove that earnings management can reduce the level of expense stickiness, but this research proves that companies that do not indicate earning management influence the existence of expense stickiness.

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### Corresponding author:

Allolinggi, T. R.

Faculty of Business Economics, Universitas Brawijaya, Indonesia

Jalan Veteran, Malang, Jawa Timur 65145, Indonesia

Email address: [theresiara23@gmail.com](mailto:theresiara23@gmail.com)

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<sup>a</sup> Faculty of Business Economics, Universitas Brawijaya, Indonesia

<sup>b</sup> Faculty of Business Economics, Universitas Brawijaya, Indonesia

<sup>c</sup> Faculty of Business Economics, Universitas Brawijaya, Indonesia

## 1 Introduction

In the accounting literature, cost behavior refers to the way costs respond to changes in activities and decisions. In general, the cost behavior can be divided into two, namely, fixed and variable costs, based on changes in the level of cost-driving activity. This categorization assumes that costs behave symmetrically (Ibrahim, 2017). Based on research conducted by Anderson et al. (2003), shows that moving costs are disproportionate or asymmetrical to changes in activity volume. The movement of costs is said to be asymmetric because the amount of increase in costs caused when there is an increase in activity is greater than the cost that decreases when there is an equal amount of decrease inactivity, this condition is known as expense stickiness (Noreen & Soderstrom, 1997; Cooper & Kaplan, 1998; Anderson et al., 2003; Xie et al., 2003; Calleja et al., 2006).

Xue & Hong (2016) state that there are two points of view used to see the existence of expense stickiness, namely rational decision making and motivational. The first point of view considers expense stickiness as a result of management's decisions after considering the costs and benefits of each alternative. In the second point of view, expense stickiness is considered the result of management intervention that has certain managerial incentives in managing the company's operations. Previous studies have assumed that deliberate decisions and management doubts in cutting idle resources are the main reasons for the emergence of expense stickiness.

When management faces uncertainty about future sales levels and the company bears the cost of adjusting for resource adjustments, management tends to delay reducing resources and believes the impact of the decline is permanent. However, it should be considered that management sometimes has its conflicts of interest and management cannot be expected to behave in an ideal manner as expected (Jensen & Mecking, 1976; Chen et al., 2007). Chen et al. (2008) said that sometimes selfish management behavior can cause expense stickiness. Healy (1985) found that to obtain high compensation, management made adjustments to company earnings. Sweeney (1994) found that in a state of pressure to avoid violating debt covenants, management also tends to choose accounting policies that can benefit management. Several studies indicate that to meet or increase the previous year's earnings, avoid financial reporting and meet predetermined estimates, management tends to perform earnings management (Burgstahler & Dichev (1997); Degeorge (1999)). Kama & Weiss (2010) provide evidence that companies to avoid loss or decrease in income, reduce stickiness from operating costs.

Therefore, to reduce the power in pursuing management's interests, a corporate governance mechanism that is considered capable of controlling management behavior occurs when there is a separation between ownership and control parties. Corporate governance, to some extent, can support the suitability of objectives between management and principals, so that this maximizes company value. Supervision of the implementation of good corporate governance can reduce management opportunism while protecting the interests of principals.

Research on expense stickiness has been carried out in many countries. However, research that examines the relationship between corporate governance and earnings management on expense stickiness is still very rare. Most of the previous research was only aimed at knowing the existence of expense stickiness. This study aims to examine whether corporate governance and earnings management can reduce the level of expense stickiness. In this study, the notion of earnings management used is different from previous studies. This difference is in the perspective and calculations referred to by researchers from research conducted by Xue & Hong (2016).

### *Literature Review*

#### *Earnings Management*

Some literature consistently shows that earnings management makes it possible to avoid reporting loss or decline in earnings, meet or beat consensus analyst forecasts, reduce taxes, and reduce the likelihood of debt covenant default. Burgstahler & Dichev (1997) find that earnings management helps in avoiding reporting small losses and decreasing income. Xue & Hong (2016) investigate earnings management incentives in avoiding reporting small losses and decreasing income or upwards earnings management that affects the existence of expense stickiness. Kama & Weiss (2010) reveal that companies that carry out earnings management show less stickiness in operating costs. Kama & Weiss (2010) reveal that companies that carry out earnings management show less stickiness in operating costs. Based on this explanation, the first hypothesis in this study is:

*H1: Upward Earnings Management pressure has a negative effect on the existence of Expense Stickiness*

*Corporate governance*

Corporate governance is a mechanism used to supervise and monitor management when there is a separation between ownership and control in a company. According to Larcker et al. (2007), the corporate governance mechanism is designed to solve agency problems that arise due to the separation between ownership and control in a company. Chen et al (2008) stated that sometimes, management's selfish behavior can lead to the emergence of expense stickiness. As a supervisor, good corporate governance at a certain level can reduce the appearance of expense stickiness. When management tries to improve cost control, good corporate governance is expected to facilitate the process and reduce the appearance of expense stickiness (Wan & Wang, 2011; Cornett et al., 2009). Based on this explanation, the second hypothesis in this study is:

*H2: Corporate Governance has a negative effect on the existence of Expense Stickiness*

**2 Materials and Methods**

The approach of this research is quantitative. The population of this study is all companies except for the financial sector listed on the IDX in 2016– 2019. This study uses secondary data in the form of financial and annual reports obtained from the website [www.idx.co.id](http://www.idx.co.id) and the company website. The research sample was taken using the purposive sampling technique, where the sample selection is based on certain criteria. The sample selection process is presented in Table 1.

Table 1  
Sample Selection Procedure

Criteria	Number of Samples
Companies listed on the Indonesia Stock Exchange in 2016-2019	432
Companies that do not attach annual reports in Rupiah	(131)
Companies that do not meet the research data needs in terms of the variables	
Model 1	(50)
Model 2	(168)
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Number of companies used as samples	
Model 1	251
Model 2	133
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Number of Observations for 4 Years (2016-2019)	
Model 1	1004
EM Sub-Sample	32
Non EM Sub-Sample	972
Model 2	532

To measure expense stickiness in research is by:

$$\log \left[ \frac{SGA_{i,t}}{SGA_{i,t-1}} \right] = \beta_0 + \beta_1 \log \left[ \frac{REV_{i,t}}{REV_{i,t-1}} \right] + \beta_2 DUM * \log \left[ \frac{REV_{i,t}}{REV_{i,t-1}} \right] + \beta_3 DUM * CAPR_{i,t} * \log \left[ \frac{REV_{i,t}}{REV_{i,t-1}} \right] + \beta_4 DUM * TOBQ_{i,t} * \log \left[ \frac{REV_{i,t}}{REV_{i,t}} \right] + \varepsilon_{i,t} \dots (\text{Model 1})$$

Based on the definition of expense stickiness, the negative sign of  $\beta_2$  in Model 1 indicates the existence of expense stickiness.

Where:

SGA = natural log of total administration and operation expenses;

REV = natural log of revenue;

DUM = a dummy variable with a value of 1 if the current year REV decreases ( $REV_{i,t}/REV_{i,t-1} < 1$ ), and 0 otherwise;

CAPR = capital intensity, measured as the net value of fixed assets scaled by operating revenue;

TOBQ = growth rate, measured as Tobin's Q

To measure earnings management by determining companies that carry out upward earnings management by categorizing the data with two conditions, namely, data that report small positive earnings, and data that reports a small increase in ROA. Based on research conducted by [Xue & Hong \(2016\)](#), in determining earnings management by categorizing the data into 2 categories, namely the upward earnings management sub-sample or earnings management sub-sample by looking at the results of the calculation of ROA: 0-1.5% and changes in Earnings divided by Total Assets: 0-1%. Companies that do not meet these two requirements are a non-earnings management sub-sample. After determining the two sub-samples, the data are regressed using the regression equation Model 1.

It is expected that the level of expense stickiness is lower in the earnings management sub-sample and the value of  $\beta_2$  is significantly higher than that of the non-earnings management sub-sample. The value of  $\beta_2$  in the non-earnings management, the sub-sample is expected to be significantly negative due to expense stickiness. To measure corporate governance variables, based on the corporate governance indicators used by [Xue & Hong \(2016\)](#) as Table 2.

Table 2  
Corporate Governance Indicators

Variable	Measurement
<b>Ownership concentration (FACT1)</b>	
<i>Shareholding of the largest shareholder</i>	The percentage of the largest shareholder ownership of the total shares
<i>Z index</i>	Share ownership by the largest shareholder is divided by the ownership of the second-largest shareholder
<b>Number of meetings (FACT2)</b>	
<i>No. of board meetings</i>	Number of board meetings in the financial year
<i>No. of Audit Comitte</i>	Number of audit committee meetings in the financial year
<i>No. of shareholders' meetings</i>	Number of shareholder meetings in the financial year
<b>External governance (FACT3)</b>	
<i>Audited by the Big 4</i>	1 for firms audited by big 4 firms and 0 otherwise
<b>Nature of firms (FACT4)</b>	
<i>Central SOE</i>	1 for firms whose ultimate controlling shareholder is the central government or its institutions and 0 otherwise
<i>Local SOE</i>	1 for a company whose main controlling shareholder is a private party or an institution other than the government
<b>Percent of independent directors and board size (FACT5)</b>	
<i>Percent of independent directors</i>	The independent directors' percentage of the whole board
<i>Board size</i>	The number of directors' (including the chairman)
<b>Separation of chairman and CEO, management shareholding (FACT6)</b>	
<i>Separation of chairman and CEO</i>	1 if the same person is chairman and CEO, 0 for separation, and 0.5 for uncertain or not included in the report
<i>Management shareholding</i>	Percentage of management share ownership. Management includes the CEO, president, vice

	president, board of secretaries, and other managers who are reported in the annual report
<b>Same place (FACT7)</b>	
<i>Independent director works in the same place where the firm is located</i>	0 for different, 1 for equal, and 0.5 for uncertainty.

The calculation results of each of the indicators above then combined into one and entered in the following regression equation:

$$\log \left[ \frac{SGA_{i,t}}{SGA_{i,t-1}} \right] = \beta_0 + \beta_1 \log \left[ \frac{REV_{i,t}}{REV_{i,t-1}} \right] + \beta_2 DUM * \log \left[ \frac{REV_{i,t}}{REV_{i,t-1}} \right] + \beta_3 DUM * FACT_{i,t} * \log \left[ \frac{REV_{i,t}}{REV_{i,t-1}} \right] + \beta_4 DUM * CAPR_{i,t} * \log \left[ \frac{REV_{i,t}}{REV_{i,t-1}} \right] + \beta_5 DUM * TOBQ_{i,t} * \log \left[ \frac{REV_{i,t}}{REV_{i,t-1}} \right] \varepsilon_{i,t} \dots (\text{Model 2})$$

Where:

SGA = natural log of total administration and operation expenses;

REV = natural log of revenue;

DUM = a dummy variable with a value of 1 if the current year REV decreases ( $REV_{i,t}/REV_{i,t-1} < 1$ ), and 0 otherwise;

CAPR = capital intensity, measured as the net value of fixed assets scaled by operating revenue;

TOBQ = growth rate, measured as Tobin's Q (i indicates firm and t indicates year).

FACT: score of each factor of corporate governance

i: entity I; t: period t;  $\beta$ : Regression Coefficient;  $\varepsilon$ : Error

It is expected that the value of  $\beta_2$  will be negative and significant due to expense stickiness. H2 is accepted if  $\beta_3$  is significant positive because good corporate governance can reduce expense stickiness.

### 3 Results and Discussions

The results of descriptive statistics are presented in Table 3 below.

Table 3  
Descriptive Statistics

DATA	Variable	N	Minimum	Maximum	Mean	Std. Dev
EM SUB-SAMPLE	log [SGAt/SGAt-1]	32	-2.53	0.20	-0.05	0.46
	log [REVt/REVt-1]	32	-3.01	0.20	-0.06	0.54
	DUM* log [REVt/REVt-1]	32	-3.01	0.00	-0.11	0.53
	DUM*CAPR <sub>i,t</sub> *log [REVt/REVt-1]	32	-72.72	0.00	-2.35	12.85
	DUM*TOBQ <sub>i,t</sub> *log [REVt/REVt-1]	32	-0.54	0.00	-0.03	0.10
NON EM SUB-SAMPLE	log [SGAt/SGAt-1]	972	-11.91	12.03	0.01	0.93
	log [REVt/REVt-1]	972	-10.09	3.02	-0.01	0.53
	DUM* log [REVt/REVt-1]	972	-10.09	0.00	-0.08	0.55
	DUM*CAPR <sub>i,t</sub> *log [REVt/REVt-1]	972	-4197.1	114.51	-4.92	134.94
	DUM*TOBQ <sub>i,t</sub> *log [REVt/REVt-1]	972	-43.23	0.32	-0.26	2.32
CG SAMPLE	log [SGAt/SGAt-1]	532	-1.20	0.99	-0.11	0.15
	log [REVt/REVt-1]	532	-0.59	3.02	-0.01	0.21
	DUM* log [REVt/REVt-1]	532	-2.85	0.08	-0.03	0.14

DUM*FACT <sub>i,t</sub> *log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	532	-46.12	6.94	-2.52	6.41
DUM*CAPR <sub>i,t</sub> *log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	532	-856.29	0.38	-1.80	37.14
DUM*TOBQ <sub>i,t</sub> *log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	532	-304.54	0.01	-0.70	13.29

Based on the table above, it can be seen that the average value of income and expenses on the EM Sub-Sample and CG Sample has decreased during the study period seen from the negative value in the log [SGA<sub>t</sub> / SGA<sub>t-1</sub>] and log [REV<sub>t</sub> / REV<sub>t-1</sub>], and for the NON-EM Sub-Sample the average value of income and expenses has positive and negative values which indicate that during the study period the income in the NON-EM Sub-Sample has increased but experienced a decrease in expenses. From the statistical results of the three samples above, it is concluded that all samples have high variability. This can be seen from the magnitude of the standard deviation exceeding the average value of the three samples above. The results of the regression analysis for hypothesis 1 are in Table 4.

Table 4  
Results of Regression Analysis

EM Sub-Sample				
Variabel	$\beta$	Std. Error	t Hitung	p value
(Constant)	0.010	0.020	0.521	0.607
log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	0.334	0.256	1.307	0.202
DUM* log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	-0.185	1.452	-0.127	0.900
DUM*CAPR <sub>i,t</sub> * log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	0.029	0.058	0.498	0.622
DUM*TOBQ <sub>i,t</sub> * log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	-0.239	0.578	-0.413	0.683
R <sup>2</sup>	= 0.980			
Adj R <sup>2</sup>	= 0.977			
Non EM Sub-Sample				
Variabel	$\beta$	Std. Error	t Hitung	p value
(Constant)	-0.055	0.029	-1.896	0.058
log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	0.866	0.106	8.151	0.000
DUM* log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	-1.077	0.102	-10.583	0.000
DUM*CAPR <sub>i,t</sub> * log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	0.001	0.000	3.950	0.000
DUM*TOBQ <sub>i,t</sub> * log [REV <sub>t</sub> /REV <sub>t-1</sub> ]	0.009	0.013	0.701	0.484
R <sup>2</sup>	= 0.115			
Adj R <sup>2</sup>	= 0.111			

Based on table 2 it can be concluded that upward earnings management cannot reduce the level of expense stickiness, because  $\beta_2$  in the research results show a value of -0.185 with a significance value of 0.900. Therefore, these results do not support agency theory which states that to avoid loss, management will perform upward earnings management. This result also does not support previous research (Xue & Hong, 2016; Hemati & Javid, 2017; and Koo et al., 2015; Liu & Lu, 2007) which found that earnings management has a negative effect on expense stickiness, which indicates that the level of expense stickiness will decrease if the company practices. upward earnings management. Although the results of this study do not prove the effect of earnings management on expense stickiness, the results of this study prove the existence of expense stickiness in companies in Indonesia by looking at the test results of the non-em sub-sample which have a significant negative effect on expense stickiness. Based on the research results, it can be seen that

management, when under pressure to report good income, prefers not to reduce expense stickiness. The results of the regression analysis for hypothesis 2 are in Table 5.

Table 5  
Results of Regression Analysis

Variabel	CG Sample			
	$\beta$	Std. Error	t Hitung	p value
(Constant)	-0.113	0.006	-17.412	0.000
log [REVt/REVt-1]	0.259	0.031	8.441	0.000
DUM* log [REVt/REVt-1]	-1.269	0.191	-6.634	0.000
DUM* FACT <sub>i,t</sub> * log [REVt/REVt-1]	0.011	0.002	5.814	0.000
DUM* CAPR <sub>i,t</sub> * log [REVt/REVt-1]	0.004	0.001	6.140	0.000
DUM* TOBQ <sub>i,t</sub> * log [REVt/REVt-1]	-5.132E-5	0.000	-0.113	0.910
R <sup>2</sup>	= 0.119			
Adj R <sup>2</sup>	= 0.111			

Based on table 3 it can be concluded that corporate governance has a negative effect on expense stickiness because the coefficient value of  $\beta_2$  in the research results shows a value of -1,269 with a significance value of 0.000 and the coefficient value of  $\beta_3$  is 0.011 with a significance value of 0.000. The results of this study support previous research from [Xue & Hong \(2016\)](#) which analyzed the effect of corporate governance on expense stickiness and found that good corporate governance has a negative effect on expense stickiness. [Calleja et al. \(2006\)](#) explained that companies with a more stringent corporate governance system that maximized the interests of shareholders had a lower expense stickiness level. The results of this study also indicate that the emerging expense stickiness can be overcome by good corporate governance. It is hoped that corporate governance will be able to alleviate agency problems and withstand managers' incentives to advance their own interests at the expense of shareholders ([Shleifer and Vishny, 1997](#); [Mansor et al., 2013](#); [Mulyadi & Anwar, 2015](#)).

#### 4 Conclusion

The results of this study indicate that corporate governance has a negative effect on expense stickiness. This means that good corporate governance can reduce expense stickiness. This is because companies that have stickiness expense with the help of good corporate governance are able to align the interests of agents and principals. This indicates that the necessary adjustments when there is expense stickiness, management rationally by considering costs and benefits and in accordance with the principal's interests. However, the results of this study failed to prove the negative effect of earnings management on expense stickiness. This shows that when management is under pressure to reduce costs when income decreases because of the incentive to avoid losses and decrease profits, management prefers not to reduce expense stickiness. The researcher realizes that there are limitations in this study regarding the proxies used by researchers that may not be precise. This research also only considers several factors that can affect expense stickiness. The suggestion for further research is to find a better way to proxy the earnings management variable so that it can be more suitable and to extend and expand the research period to increase the number of research samples. Subsequent research can also seek and delve deeper into the factors that can affect expense stickiness other than those used in this research.

#### *Conflict of interest statement*

The authors declared that they have no competing interests.

#### *Statement of authorship*

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

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