

## THE EFFECT OF COMPANY LIFE CYCLES ON THE ACCRUALS EARNINGS MANAGEMENT WITH INTERNAL CONTROL SYSTEM AS MODERATING VARIABLE

Hastuti T.D., Ghozali, Yuyetta E.N.A. \*

**Abstract:** Earnings management and company life cycles are still interesting to be researched and discussed because there are many cases of fraud in large local companies and abroad. The financial scandals by management from year to year have proven to increase and it is an irony because the scandals were committed by financial manager of reputable companies. This study examined the relationship between the company life cycles on accruals earnings management and analyzed the internal control system to moderate the relationship between the company life cycles on accruals earnings management. This study used 502 data panel from Indonesian capital stock exchange in 2010- 2014. The result of this study: the company life cycles did not affect the accruals earnings management, but the internal control system was capable of lowering a positive effect of the company life cycles on earnings management.

**Key words:** accrual earnings management, company life cycles, internal control system

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### Introduction

Earnings management is a policy on management option accounting, or an activity that affects the real income so as to achieve some specific purpose of reporting income (Scott, 1997). Definition of earnings management is also provided by Healy (1985). He contends that earnings management is a behavior of managers that use the policies of financial reporting and structuring transactions to create financial reporting alternative to mislead stakeholders on the economic performance of companies or to influence the outcome contractual depending on the accounting numbers reported. Studies related to the accrual earnings management conducted by Dechow and Skinner (2000), found that motivation management makes the earnings management to achieve the expected bonus. Consistent to (Healy, 1986), Dechow and Skinner (2000), Balsam (1998), Bergstresser and Philippon (2006) found that the management of opportunistic act on earnings as they relate to compensation.

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\* **Theresia Dwi Hastuti**, Senior lecturer, Faculty of Economics and Business, Soegijapranata University, Semarang, Indonesia, PhD Candidate in Accounting at the Faculty of Business and Economics, Diponegoro University, Indonesia; **Imam Ghozali** Accounting Professor, Faculty of Business and Economics Diponegoro University, Indonesia; **Etna Nur Afri Yuyetta** Associate Professor in Accounting, Faculty of Business and Economics, Diponegoro University, Indonesia

✉ Corresponding author: ghozali\_imam@yahoo.com

Earnings management and life cycles are still interesting to be researched and discussed because there are many cases of fraud in large local companies and abroad. The financial scandals by management from year to year are increase and that is ironic because scandals are done by financial manager of reputable companies. Anthony and Ramesh (1992) state that the change in sales growth and capital spending is a signal the company's strategy and the strategy of cost-effectiveness, both as a function of the stage of the cycle. In the growth stage (growth), the characteristics of the company experienced strong sales growth, high liquidity and begin to pay dividends. At this stage, the company starts doing product development, so that the capital expenditures for research and development to be high. In the stage of maturity, the selling rate begins to decline, declining market share and the dividend payment is higher than the growth stage. In stage of decline, dividend payments begin to decline, and so did sales and capital expenditures. Researches dealing with the effect of the company life cycle on the earnings management have presented mixed results. Shiue et al. (2012), Bulan and Yan (2009) found that the life cycle affected the accrual earnings management, and real earnings management. Other researchers conducted by Anggraini (2007) as well as Addin and Jouyban (2012) found no difference of accruals earnings management between stages. Motivated by the diversity of the research above, this study intended to examine more deeply the other factors that could strengthen the influence of the life cycle of the company to earnings management. Earnings management will be implemented in a variety of life cycle can be controlled if the conditions of internal control is strong. Based on agency theory, management must be monitored and controlled to ensure that the management is performed with a full adherence to the rules and regulations and reports the economic activities in transparent and accountable manners.

## **Review of Literature**

### ***Agency Theory***

The agency problem relates to potential conflicts of interest between shareholders and managers in a company because of the separation between owners as principal and management as agent. Managers are expected to take action to guarantee the fulfillment of the best in the interests of shareholders because they always control the daily activity of management. The application of board structure of agency theory focuses on the control function. Jensen and Mekling (1976) write that agency theory puts the company as a contract interpreter of the various participants mutually transaction one another. Fama and Jensen (1983) state that Commissioners become an effective tool to monitor the management and to reduce the agency costs. Scott (1997) suggests that some parties involved in the business transaction have more information than the others, a condition that leads to so called asymmetric information. Asymmetry of information may include information that is distributed unevenly among agents and principals, and business

processes occurring at the agent cannot be observed directly by the principal. Once such phenomena have taken place, the agent will demonstrate dysfunctional behavior. One dysfunctional behavior demonstrated by the agent is managing data in the financial statements to comply with the expectations of the principal even though the report does not describe the actual condition of the company. One of the manipulations of data in the financial statements is the practice of earnings management.

### ***The Company Life Cycles***

Life cycle concept has been widely discussed. A company life cycle hypothesis is an extension of the concept of product life cycle in marketing (Rink and Swan, 1979). Companies that are in the growth stage generally show higher sales growth than those in other stages. The companies have a larger amount of investment and dividends they pay is still low. Usually companies that are at the stage of growth are still relatively young age. Companies that are at the mature stage in general reflect the payment of dividends, sales growth, and the amount of investment at the medium level. The classification of the life cycle is done only in 3 stages: growth, mature and stagnant. The decline stage was not done because the company in this stage usually no longer listed on the stock exchange. According to Quinn and Cameron (1983) of some of the literature written about the life cycle of the company, none of the stage of decline, because in this stage company has metamorphosis and unpredictable.

### ***Internal Control System an Earnings Management***

The definition of internal control system by COSO is a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of the objectives in the following categories: (1) effectiveness and efficiency of operations; (2) reliability of financial reporting; (3) compliance with applicable laws and regulations; and (4) safeguarding of assets against unauthorized acquisition, use or disposition.

Earnings management is a phenomenon that has been widely known, intended to manipulate reported earnings (increase or decrease) to meet various targets such as target fulfillment profit/loss of earnings management as a widespread phenomenon that aims to manipulation reported earnings. Earnings management based on (Healy, 1985): *"the earnings management occurs when managers use policies in financial reporting and structuring transactions to create financial reporting alternative to mislead some stakeholders on the economic performance of companies or to influence contractual outcomes that depend on accounting numbers reported"*.

Dechow and Dichev (2002), Osma (2008) Cohen and Zarowin (2010) as well as Dechow and Sloan (1991) have shown the results of research conducted extensively about the motivation and the consequences of earnings management activities. Balsam (1998) as well as Bergstresser and Philippon (2006) found

evidence managers raise or lower the profit to influence contractual outcomes. Subekti (2012) found that positive earnings around zero is indication of earnings managed to avoid negative earnings.

### **Hypothesis Development**

#### ***Earnings Management and Company Life Cycles***

The company always faces the life cycles. Sabol et al. (2013) say, these stages occur in all companies and highly recognized by the management. Based on agency theory, management as an agent should face the company life cycle with a good performance. Previous studies on the effect of the company's life cycle on earnings management have provided mixed results. Research conducted by Shieu et al. (2012) confirms that the positive growth outlook relates to the accrual earnings management. Hastuti (2011) found that companies are at a critical point growth to mature and mature to stagnant chose discretionary accrual raise profit. Based on discussion above, this study hypothesized as follows:

*H1: The company life cycles have a positive effect on accrual earnings management.*

#### ***Internal Control System, Company Life Cycles and Earnings Management***

Hunziker (2013) states that a report internal control is the responsibility of the management. They should take care of internal control system properly and ensure the effectiveness of internal control over financial reporting. The company can develop strategies for presenting information on the internal control system with the present implementation of the internal control system as a monitoring tool. A good internal control system gives a signal of good corporate governance. This statement consistent with Suyono and Hariyanto (2012).

Agency theory considers that management cannot be trusted to act in the best possible way for the benefit of the public and shareholders. Rests on agency theory, management must be monitored and controlled to ensure that the management is done with full adherence to the rules and regulations and reported in a transparent and accountable. The tighter the control system, the lower expected earnings management conducted, with strict implementation of internal control system within the company will be able to minimize the chance of earning management. Based on this argument, the following hypothesis is suggested:

*H2: internal control system weakens the positive relationship company life cycles on accrual earnings management*

### **Research Methodology**

#### ***Population and Samples***

The population used in this research was manufacturing companies listed in Indonesia Stock Exchange between 2010 - 2014.

The sample is part of the elements of the population Gujarati (2004). The secondary data used in this study were extracted from public sources, the Indonesian Stock Exchange website (www.idx.co.id).

**Model Research**

The model in Equation is used to test the hypothesis.

$$AEM_{i,t} = \gamma_0 + \gamma_1 \text{cycles}_{i,t} + \gamma_2 \text{SPI}_{i,t} + \gamma_3 \text{size}_{i,t} + \gamma_4 \text{cycles} * \text{SPI}_{i,t} + e_{it} \quad (1)$$

*AEM<sub>i,t</sub>* - accruals earnings management *i* in period *t*  
*cycles<sub>i,t</sub>* - company life cycles *i* in period *t* measured by combined four indicator (sales growth, dividend payout, company expenditure and age of firm)  
*size<sub>i,t</sub>* - size of company *i* in period *t* measured by logarithm total asset

**Variables Measurement**

This research variables measurement is detailed in Table 1.

**Table 1. Variables measurement**

No	Variable	Variable measurement
1	Company life cycle	The life cycle of companies classified in the growth, maturity and stagnant using procedures classify the company life cycles developed by Anthony and Ramesh (1992) and tested by Yan (2006) and Shiue et al. (2013). The classification procedure begins by calculating the descriptor of company life cycles with this equation: $DP_t = (DPS_t/EPS_t) \times 100 \quad (I)$ $SG_t = ((SALES_t - SALES_{t-1})/SALES_{t-1}) \times 100 \quad (II)$ $CEV_t = (CE_t / VALUE_t) \times 100 \quad (III)$ $AGE_t = YEAR_t - YEAR \text{ IN COMPANY LISTING} \quad (IV)$ <i>DPT<sub>t</sub></i> - dividend payout firm <i>i</i> in year <i>t</i> ; <i>DPS<sub>t</sub></i> - dividends per share for the company <i>i</i> in year <i>t</i> ; <i>EPS<sub>t</sub></i> - earnings per share for the company <i>i</i> in year <i>t</i> <i>SG<sub>it</sub></i> - sales growth (sales growth) firm <i>i</i> in year <i>t</i> ; <i>SALES<sub>it</sub></i> - net sales firm <i>i</i> in year <i>t</i> ; <i>SALES<sub>it-1</sub></i> - net sales firm <i>i</i> in year <i>t-1</i> ; <i>CEV<sub>t</sub></i> - capital expenditure value <i>I</i> in year <i>t-1</i> ; <i>CET<sub>t</sub></i> - capital expenditure in year <i>t</i> ; <i>VALUE<sub>t</sub></i> - equity market value (closing price x number of shares outstanding at the end of the year) plus the book value of long-term debt firm <i>i</i> at the end of <i>t</i> ; <i>AGE<sub>t</sub></i> - age of the company, calculated by the year <sub><i>t</i></sub> - in the year of company listing in Indonesian capital stock exchange
2	AEM	AEM (accrual earnings management): Measured using a modified jones
3	Internal control system	Internal control system measured by instrument created by Deumes and Knechel (2008) and developed by Hunziker (2013): the instruments are consist 7 points of disclosure of internal control (a) Objective; (b) Responsibility; (c) Effectiveness; (d) Special element;

		(e) Limitations; (f) Monitoring and (g) Internal audit for internal control. Measurement variable internal control system is the sum of the final total score above
4	Size	Measured by logarithm asset

## Result and Discussion

### *Descriptive Statistics*

Based on Table 2, accruals earnings management occurred due to the change of the company's activities which represent the difference between profit and cash flows are derived from the company's operations and managerial policy.

**Table 2. Descriptive statistic of data**

	Accrual earnings management	Company size
<b>Mean</b>	342.905	5.333.665
<b>Maximum</b>	7.415.000	8.379.000
<b>Minimum</b>	9.721	130.000

The smallest and the highest value is 97,21 and 7.415.000. Both of these values are positive, it means activity of earnings management is increasing income. Company size had a minimum value of 130.000, maximum value of 8.379.000, and mean value of 5.333.665. In other words, the samples were big companies.

**Table 3. Description of life cycle frequency**

Life cycles	Frequency	Percent
<b>Growth</b>	324	64.5%
<b>Mature</b>	173	34.5%
<b>Stagnant</b>	5	1%

Description of company life cycles based on Table 4, the majority of the samples were at the growth stage. There were 324 data of 502 or 64.5% of total company sample, the mature stage are 173 data or 34.5% and stagnant stage 5 data or 1%.

**Table 4. Description of internal control system frequency**

SPI_disclosure	Frequency	Percent
<b>1</b>	94	18.7%
<b>2</b>	111	22.1%
<b>3</b>	119	23.7%
<b>4</b>	92	18.3%
<b>5</b>	71	14.1%
<b>6</b>	15	3%
<b>7</b>	0	0
<b>Total</b>	502	100%

The internal control system consisted of seven items of disclosure. Based on Table 5 the majority of the disclosure of internal control systems were 3 points and 2 points. There were 119 companies that disclosed 3 points of internal control system (23.7%) and 111 companies that disclosed 2 points of internal control system (22.1%).

**Hypotheses Test**

According to Table 5, value of F-statistic is 21.05 and significance at level 1%. The results show that the regression model:

$$AEM_{i,t} = \gamma_0 + \gamma_1 \text{cycles}_{i,t} + \gamma_2 \text{SPI}_{i,t} + \gamma_3 \text{size}_{i,t} + \gamma_4 \text{cycles} * \text{SPI}_{i,t} + e_{it} \quad (2)$$

is a fit model. The regression model can be used to predict earnings management accrual is based on the independent variables, namely company life cycles, internal control system and size as control variable. Adjusted R-squared = 13.8%. Its means the variation of accrual earnings management can be explained by variations in the company life cycle, the internal control structure and size of the company 13.8%. The t-statistic of the company life cycle was 0.04 and not significant. Therefore, the H1 was unacceptable. The company life cycle did not affect the accrual earnings management. Healy and Wahlen (1999) state that strong evidence of earnings management occurs only when discussing about the management's efforts to report earnings at end of period to get the incentive. At the stage of the life cycle is different; it is difficult to believe that all the management has the same motivation at the same time. It is difficult to find unity of opinion in doing earnings management among management in one company. The t-statistic value of interaction life cycles and internal control system was -1.6936 and significant in level  $p < 10\%$ . Its mean suggesting H2 acceptable the internal control structure could weaken the positive influence of company life cycles on accrual earnings management.

**Tabel 5. Result on regression test**

Variable	coefficient	Std error	t-statistic
Life cycles	-0.0426	0.0758	-0.5621
ICS	-0.0226	0.0469	-0.4811
Cycles*ICS	-0.0208	0.0123	-1.6936 †
Size	-0.3004	0.0338	-8.8819***
Intercept	1.7585	0.3351	5.2484***
Adjusted R2 = 0.138		F. test = 21.05***	
† p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001			

The implementation of internal control system allows the companies to control the management of opportunistic behavior in all conditions; especially in conditions the company experienced a stagnant and declining. This is reinforced by Hunziker (2013) who reported that the internal control is the responsibility of the management to do and take care of proper internal control system and management

must ensure the effectiveness of internal control over financial statement presentation. The company can develop strategies for presenting information on the internal control system by presenting the application of the internal control system as a monitoring tool, can also inform as a signal of good corporate governance. Presentation of the internal control system will increase the confidence of investors because it can reduce user uncertainty of financial statements regarding the quality of financial statements (Bronson et al., 2006). Agency theory explains that in two different interests between management as agent and principal owner of the company as necessary to have a system that is capable of bridging two interests to be reconciled. With the implementation of internal control system will be able to control the management of opportunistic behavior in all conditions, especially in conditions the company experienced a stagnant and declining life cycle. Management remains will defend its interests in a variety of ways, one of them earning management. Good control and supervision of the board of directors and the audit committee will be able to control the behavior of poor management and can maintain the interests of the owner of the company.

### Conclusion

This study aimed to examine the effect of the company's life cycle and interaction of life cycle with internal control system to accruals earnings management. Internal control system in this study was treated as a moderating variable, the variable that could weaken the positive effect of the company life cycle and accrual earnings management. Based on the results of the research found that the life cycle did not affect the accrual earnings management, but the internal control system was capable of lowering a positive influence of company life cycles to earnings management. The implication of this research demonstrated that internal control system weaken the positive influence of company life cycle to accrual earnings management, these results provided evidence that the internal control structure can be a tool the company to control the behavior of opportunities management in all conditions of the life cycle therefore it is important for companies to enforce the implementation of the structure of internal control in accordance with the needs of the company and confirms the auditor to perform auditing standards appropriately concerning the examination of internal control systems as a basis for determining the nature, timing and extent of tests audit.

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### WPLYW CYKLI ŻYCIA FIRMY NA KSZTAŁTOWANIE WYNIKU ROZLICZEŃ MIĘDZYOKRESOWYCH Z SYSTEMEM KONTROLI WEWNĘTRZNEJ JAKO ZMIENNĄ MODERUJĄCĄ

**Streszczenie:** Zarządzanie zyskami i cykle życia firmy są wciąż interesującym tematem do zbadania i omówienia, ponieważ w dużych firmach lokalnych i zagranicznych odnotowuje się wiele przypadków oszustw. Skandale finansowe dotyczące kierownictwa z roku na rok stają się coraz bardziej powszechne i ironią jest, że oszustwa popełniane były przez kierowników finansowych renomowanych firm. W niniejszym badaniu zbadano związek pomiędzy cyklami życia firmy w zakresie kształtowania wyniku rozliczeń międzyokresowych i przeanalizowano system kontroli wewnętrznej w celu złagodzenia relacji pomiędzy cyklami życia przedsiębiorstwa w zakresie kształtowania wyniku rozliczeń międzyokresowych. W badaniu wykorzystano panel 502 danych z indonezyjskiej giełdy kapitałowej z lat 2010 - 2014. Wynik badania: cykle życia firmy nie miały wpływu na kształtowanie wyniku rozliczeń międzyokresowych, ale system kontroli wewnętrznej mógł obniżyć pozytywny wpływ cyklu życia firmy na kształtowanie wyniku finansowego.

**Słowa kluczowe:** kształtowanie wyniku rozliczeń międzyokresowych, cykle życia firmy, system kontroli wewnętrznej

### 公司生命週期對內部控制系統的價值管理與現代變化的影響

**摘要:** 收購管理和公司生命週期仍然有待研究和討論，因為當地大型企業和國外的欺詐案例很多。管理層的財務醜聞被證明是增加的，這是一個諷刺，因為這些醜聞是由有信譽的公司的財務經理承擔的。本研究審查了公司生命週期對應計利潤管理的關係，並分析了內部控制制度，以緩解公司生命週期對應計利潤管理的關係。本研究使用了2010年至2014年印度尼西亞資本證券交易所502個數據組。本研究的結果：公司生命週期不影響應計利潤管理，但內部控制制度能夠降低公司生活的積極影響循環盈餘管理。

**關鍵詞:** 應計盈餘管理，公司生命週期，內部控制制度