

The Impact of Proprietary Costs, Agency Costs, and Financing Incentives on Segment Profit Growth Variations

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Abstract: This study aims to determine the effects of proprietary costs, agency costs, and financing incentives on the differences in segment earnings growth in state-owned enterprises listed on the Indonesia Stock Exchange for the period 2009–2015. The data sources consisted of financial statements, annual reports, and sustainability reports. The study used a quantitative research method. Data were analyzed using multiple regression analysis. The research shows that the three variables of proprietary costs, agency costs, and financing incentives show a significant effect on segment profit growth variations.

1 INTRODUCTION

The globalization era has brought about changes to the world's economy. The disappearance of inter-state boundaries and the introduction of free trade agreements have opened up business opportunities for the improvement of countries' economies. The disappearance of boundaries for the inter-state economy has provided companies with the opportunity to attract external parties, especially investors. One important element in attracting investors is accurate information about a company, especially regarding its performance, predictions for future cash flow and earnings, and risks that may occur in the future, one of which can be obtained from the company's financial statements (Muhammad & Siregar, 2012). This is because financial statement users want transparency of information to be provided by companies in order to assess their future prospects and risks.

One important indication of information for investors is segment reporting, alongside income and cash flow statements (Brown, 1997). The reported company segment must exceed at least 10% of the total revenue of all segments or otherwise meet the requirement, the segment may be loaded, with management's consideration that the information is useful to external parties (Bestari & Siregar, 2012). Segment information helps external users to analyze better the performance of each segment within a company. The decision to disclose segment

information by increasing or limiting it is under the control of the manager. Factors that may affect the quality of the disclosures from these segments will be analyzed in this study.

Segment reporting consists of information between segments that results in profitability. The operating segment is one of the segments reported by a company; this segment has a large number of products, services, and areas of market operations that provide information on growth trends, diversity of operating areas, etc. (Dermawan et al., 2016). Reporting on this segment will increase transparency and provide more reliable information for the users of financial statements to make decisions. This is because the users of financial statements need not only the overall financial statements but also more detailed information on the reports from different business segments of the company.

Managers consider whether the information can lead to competitors changing their strategies, or even attract the attention of major business competitors. Such factors may reduce information on variations in profitability between segments (Blanco et al., 2015).

This research aims to understand the factors that affect the variations in segment profit growth, which consist of proprietary costs, agency costs, and financing incentives as independent variables. The study was conducted in the period 2009–2015, taking into account the effects of the application of regulations related to the operating segment in Indonesia, specifically PSAK No. 5 (revised 2009), to assess companies' disclosure of information relating

to variations in profit growth over that year. PSAK 5 (revised 2009) came into effect in 2011 and adopted the regulations of IFRS 8, which are related to segment reporting. This PSAK supersedes the old regulation of PSAK 5 (revised 2000). Disclosure of segments based on regulation provides more informative for financial statement users who need to make investment decisions. However, the decision to provide information on variations in profit growth between segments does not necessarily depend on the implementation of PSAK 5 (revised 2009). The existence of standards disclosure for the regulation of these segments is expected to improve the quality of a firm's segment information.

2 LITERATURE REVIEW

2.1 Proprietary Costs

According to a previous study (Wang et al., 2011), proprietary costs associated with the variation in profit growth between segments have had a significant affect. In relation to proprietary costs, which correlate with the level of business competition, a company will tend to hide information on the variation in profit growth between segments so that this cannot be used by competitors, thus leading to losses for the company. The following hypothesis is formulated for this study:

H1: Proprietary costs have a significant effect on the variation in profit growth between segments.

2.2 Agency Costs

The same study (Wang et al., 2011) mentions that there is a significant relationship between agency costs and variation in profit growth between segments. Managers will always prioritize their own interests to achieve a good performance assessment by shareholders. Managers will cover the varied segment of the segment's poor profit growth. In relation to the high costs associated with the agent, the manager will attempt to manipulate the profit growth between segments in order to produce information on the variation in the form of inaccurate earnings growth. In this study, the second hypothesis is formulated as follows:

H2: Agency costs significantly influence the variation in profit growth between segments.

2.3 Financing Incentives

In the previous study (Wang et al., 2011), financing incentives as associated with profit growth between segments is reported to indicate a positive relationship. This is because companies that have a high dependence on external financing will attempt to reveal a good variation in profit growth between segments to eliminate information asymmetry with creditors. In this study, the third hypothesis is formulated as follows:

H3: Financing incentives have a significant influence on the variation in profit growth between segments.

3 RESEARCH METHODOLOGY

3.1 Conceptual Framework

Based on the background, problem statement, and development of the hypotheses, the variables can be formulated through a conceptual framework, as shown in Figure 3.1.

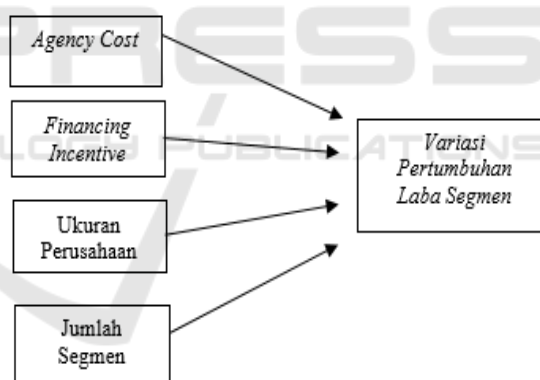


Figure 1: Conceptual Framework

3.2 Operational Definition and Variable Measurement

3.2.1 Variation in Segment Profit Growth

Variation in segment profit growth is an operating profit alteration, taken from the current operating profit minus the previous year's operating profit, scaled by the previous year's operating profit (Wang et al., 2011). The growth of a company's segment profit is a reflection of its performance.

Variation of profit growth between segment

$$= \frac{LO_t - LO_{t-1}}{LO_{t-1}}$$

Description :
 LO : operating profit, current year
 LO_{t-1} : operating profit, previous year

3.2.2 Proprietary Costs

Proprietary costs consist of competitive disadvantage costs and political costs. The cost of competitive disadvantage is the cost that causes the company's competitiveness to weaken as a result of the disclosure of information through the published financial statements utilized by business competitors. Political costs are the costs incurred by the emergence of new regulations from the government due to the disclosure of information in the financial statements (Murdoko Sudarmadji & Sularto, 2007).

The chosen method for this study is the *Herfindahl index*.

$$HHI = \frac{\Sigma(PS)^2}{\Sigma P^2}$$

Description :
 $\Sigma(PS)^2$: quadratic of sales value
 ΣP^2 : quadratic of total sales of firm

3.2.3 Agency Costs

The agency costs consist of monitoring costs, bonding costs, and residual loss. Monitoring costs are the costs borne by the shareholders in supervising and controlling agent behavior. Bonding costs are the costs borne by the manager in order to comply with the mechanism in order to provide assurance of serving the interests of shareholders. Residual loss is a sacrifice that decreases shareholder wealth as a result of agency problems (Destriana, 2011). The measurement method used for agency costs is free cash flow, which by searching operating net cash flow is then less by cash dividend and capital expenditure, then scaled with the company's total assets (Wang et al., 2011).

$$Free\ Cash\ Flow = \frac{ONCF - (CD + CE)}{TA}$$

$$CE = AT_t - AT_{t-1}$$

Description :
 ONCF : operating net cash flow

CD : cash dividend
 CE : capital expenditure
 TA : total asset

3.2.4 Financing Incentives

Financing incentives are the bonus obtained from external financing as the company's efforts reveal variations in profit growth between segments as a benchmark of company performance. The calculation of financing incentives uses a measurement of external financing calculated using the sum of external equity financing and debt financing divided by the total assets.

$$External\ Financing = \frac{EEF + DF}{TA}$$

Description :
 EEF : external equity financing
 DF : debt financing
 TA : total asset

3.3 Research Model

This study used a quantitative research method, with four independent variables as variable X (independent variables) and variable Y (dependent variable). The independent variables consist of proprietary costs, agency costs, and financing incentives. The dependent variable is the variation of profit growth between segments.

To test the proposed hypotheses, this study used a multiple linear regression equation, as follows:

$$Y = \alpha + \beta_1 PC + \beta_2 AC + \beta_3 FI + e$$

Y = variation in profit growth between segments
 α = constant
 β1 – β4 = coefficient regression
 PC = proprietary costs
 AC = agency costs
 FI = financing incentive
 e = error

3.4 Data

The study used secondary quantitative data obtained from the Indonesia Stock Exchange, and partly from www.idx.com, consisting of the annual reports and financial reports of companies in the

category of state-owned enterprises for the period 2009–2015.

The data collection procedure for this research used the purposive sampling technique. The total number of samples obtained for this research was 105. Here is a list of State-Owned Enterprises (BUMN) included in the sample of 105 for the period 2009–2015.

4 RESULTS AND DISCUSSION

4.1 Results

In this study, multiple linear regression analysis was conducted to determine the effect of the independent variables, consisting of proprietary costs (HHI), agency costs (FCF), and financing incentives, on the dependent variable of earnings growth (EGRWAR), with control variables in the form of company size (LNAT) and number of segments (NSEG) for the period 2009–2015. The results of the multiple linear regression are presented in Table 1.

Table 1: Regression Result

Model	Unstandardized Coefficient		Stand. Coef.	T	Sig.
	B	Stat. Error.	Beta		
(Const.)	1.830	1.339		1.367	0.175
HHI	0.482	0.286	0.220	1.681	0.096***
FCF	0.987	0.481	0.215	2.055	0.043**
Financing_Ins	0.020	0.006	0.333	3.149	0.002*
LNAT	-0.085	0.045	-0.204	-1.867	0.065***
NSEG	0.107	0.060	0.235	1.779	0.079***

Notes:

- * = significant at the rate of 1% (0.01)
- ** = significant at the rate of 5% (0.05)
- *** = significant at the rate of 10% (0.10)

Based on Table 3.1, the results obtained from the multiple linear regression are as follows:

$$Y = 1.830 + 0.428 \text{ HHI} + 0.97 \text{ FCF} + 0.020 \text{ FI} - 0.085 \text{ LNAT} + 0.107 \text{ NSEG} + e$$

The results of the hypothesis test show that the value of constant α is equal to 1.830. This is a positive value, which means that the independent variables of proprietary costs, agency costs, and financing incentives affect the large variation in segment profit growth.

The results of the hypothesis test show that the regression value of proprietary costs is 0.482. This value indicates that, if the variable of proprietary costs increases by one unit, this will increase the variation in segment profit growth.

The results of the hypothesis test show that the regression value of agency costs is 0.987. This value indicates that, if the variable of agency costs increases by one unit, this will increase the variation in segment profit growth.

The results of the hypothesis test show that the regression value of financing incentives is 0.020. This value indicates that, if the variable of financing incentives increases by one unit, this will increase the variation in segment profit growth.

The regression coefficient value of the firm size hypothesis test shows a value of -0.085. This value indicates that a decrease of one unit in the control variable of firm size will increase the variation in segment profit growth.

The regression coefficient value of the number of segments shows a value of 0.107. This value indicates that an increase of one unit in the control variable of the number of segments will increase the variation in segment profit growth.

4.2 Discussion

The first hypothesis, which states that proprietary costs affect the variation in segment profit growth, is accepted. The results of this study indicate that proprietary costs have a significant positive effect on the variation in profit growth between segments, as evidenced by the Herfindahl index. This shows that the environment and level of business competition in BUMN companies does not affect the decision of managers to provide information on profit growth between segments. This is because BUMN companies are not only profit-seeking but also providers of public goods and services, as well as drivers of the national economy. BUMN companies also control the oligopoly market structure. An oligopoly is a market that offers one type of product that is controlled by several companies. BUMN companies also have diversified products in their segment of operations and are not dependent on only one product. This condition results in the relatively

low proprietary costs, resulting in high variation in the growth of information. In contrast to companies that concentrate on only one type of product, making high proprietary cost so that the company will limit the information of variation of segment profit. The reason for this is that, for companies that rely on one type of product, the level of business competition is particularly influential for their continuity.

The second hypothesis, which states that agency costs affect the variation in segment profit growth, is accepted. The results of this study indicate that agency costs have a significant positive effect on the variation in profit growth between segments. Agency costs calculated using free cash flow show significant results. This shows that the motive of agency costs can describe the motives of managers in providing information on the variation in profit growth between segments. This condition can occur because managers in BUMN companies are directly responsible to the government as a shareholder, and such companies have a management and supervision system based on the principles of good corporate governance. The position of shareholders in BUMN companies has also been represented by the management of the company with the existence of the cost agency that has been issued and the dominant poetic content so that the policy manager can be controlled easily according to the requirements of the shareholders (government).

The third hypothesis, which states that financing incentives affect the variation in segment profit growth, is accepted. The results of this study indicate that financing incentives have a significant positive effect on the variation in profit growth between segments. This is because BUMN companies in Indonesia receive more capital from outside, such as funding the majority of the government so that when external capital financing increases, so too does information on profit growth between segments. The information is the responsibility of BUMN companies to the government, and also acts as an appraisal of the companies' performance to secure government funding. The results of this study are similar to the research by Wang et al. (2011), which also indicates that financing incentives have a significant positive effect on the variation in profit growth between segments.

Simultaneously, the independent variables of proprietary costs, agency costs, and financing incentives have a significant positive effect on the tax compliance variable. This is because these three independent variables interact and become determinants of managers' decisions to provide information on the variation in segment profit growth.

5 CONCLUSIONS

Based on the analysis that has been carried out, the following conclusions can be drawn:

1. Proprietary cost proxies in the Herfindahl index have a significant positive effect on the variation in profit growth between segments.
2. Agency cost proxies by free cash flow also show a significant positive effect on the variation in profit growth between segments.
3. Financing incentives proxies based on external financing show a significant positive effect on the variation in profit growth between segments.

REFERENCES

- AUP. (2009). Pedoman Penulisan Pembimbingan dan Ujian Skripsi. Surabaya: AUP Universitas Airlangga.
- Bestari, M., & Siregar, S. V. (2012). DETERMINAN MOTIF PENGUNGKAPAN VARIASI PERTUMBUHAN LABA ANTAR SEGMENT PERUSAHAAN MANUFAKTUR YANG TERDAFTAR DI INDONESIA. Universitas Indonesia. Blanco, B., Lara, G., Juan, M., & Tribo, J. A. (2015). Segment disclosure and cost of capital. *Journal of Business Finance & Accounting*, 42(3-4), 367-411.
- Blanco, B., Lara, J. M. G., & Tribó, J. (2014). The relation between segment disclosure and earnings quality. *Journal of Accounting and Public Policy*, 33(5), 449-469.
- Brown, P. (1997). Financial data and decision making by sell-side analysts. *The Journal of Financial Statement Analysis*, 2(3), 43-48.
- Chen, P., & Zhang, G. (2001). Heterogeneous Investment Opportunities and the Value Relevance of Segment Accounting Data. Paper presented at the 2001 Summer Symposium at Hong Kong University of Science and Technology, Hong Kong.
- Destriana, N. (2011). Masalah dan Biaya Keagenan. *Media Bisnis*, 3(1), 8-16.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Lewellen, K. (2006). Financing decisions when managers are risk averse. *Journal of Financial Economics*, 82(3), 551-589.
- Muhammad, F., & Siregar, S. V. (2012). ANALISIS TINGKAT PENGUNGKAPAN SEGMENT: FAKTOR-FAKTOR.
- Sembiring, E. R. (2005). Karakteristik Perusahaan dan Pengungkapan Tanggung Jawab Sosial pada Perusahaan yang Terdaftar di Bursa Efek Jakarta. *Simposium Nasional Akuntansi*, 7, 15-16.

- Soetedjo, S. (2009). Pembahasan Pokok-pokok Pikiran Teori Akuntansi Vernon Kam: Surabaya: Airlangga University Press.
- Wang, Q., Ettredge, M., Huang, Y., & Sun, L. (2011). Strategic revelation of differences in segment earnings growth. *Journal of Accounting and Public Policy*, 30(4), 383-392.

