



The Effects of Financial Resources on Executive Remuneration: Evidence from IDX 30 Companies at the Indonesian Stock Exchange

Widayanto Widayanto^(✉) and Mone S. Andrias^{ORCID}

Master of Management Program, Faculty of Economics and Business, Universitas Indonesia,
Jakarta, Indonesia
widayanto@ui.ac.id

Abstract. This study aims to examine the impact of financial resources, i.e., assets, revenue, and profit on executive (board of directors and commissioner) remuneration. The data were collected from a listed company on Indonesia Stock Exchange from 2016–2020. The listed companies as research samples are those under the category of IDX 30. IDX 30 is an index consisting of 30 companies that have high liquidity and large capitalization underpinned by strong fundamentals. A multiple regression method was done to analyze the collected data. The findings revealed that assets and revenue significantly impacted executive remuneration. However, the net profit of the company did not significantly impact executive remuneration. According to the findings of this study, the highest-level decision makers in a company use assets and revenue as predictive factors when determining executive remuneration.

Keywords: Executive Remuneration · Financial Resources · IDX 30 · Indonesia Stock Exchange

1 Introduction

The topic of executive remuneration has been continuously becoming a public debate and academic discussion. According to the Web of Science, there were 5.000 scholarly papers have been published on this subject in the last thirty years [1]. Executive remuneration has become the most debatable topic due to its broad interest, large attention, and its relation to reputation risk and social cost. Furthermore, it also involves huge amounts of money [2].

Both external and internal factors influence executive remuneration. The type of industry is amongst the company's external factors that determine executive remuneration [3]. The globalization factor is also critical in the acceleration of the growth of executive remuneration [4].

The internal company factors that determine executive remuneration, amongst others are the firm's ownership structure, size of the executive board, and firm's financial factors [5]. The other internal factors that positively affect the executive remuneration are age and years of tenure of their executive [6].

Regarding the company's financial factors, the company's size and profitability are the major determinant factors of executive remuneration (Haron & Akhtaruddin, 2013). Another study in Malaysia concludes that company size was the key factor, but the company's profit had a weak effect [7].

A study in Germany identifies the size of the company as the most influential factor in executive compensation in the long term [1]. However, other studies in different countries show inconclusive findings. A study in China, for example, found a significant positive correlation between companies' profitability and executive compensation [8]. Meanwhile, a study in South Africa found a weak correlation between executive remuneration and a company's performance [9]. A study in Spain also concluded a weak relationship between executive remuneration and a company's performance [10].

Research in executive remuneration has also involved a cross-countries study. For example, a study had been conducted with 474 samples of non-financial companies registered at the Indonesia Stock Exchange, Malaysia Stock Exchange, Singapore Stock Exchange, and Australia Stock Exchange. The finding concludes that the variables that affect executive remuneration are financial distress status, managerial ownership, and ownership concentration. However, return for shareholders, ROA, and executive composition do not influence executive compensation [11].

Meanwhile, a study on 68 food and beverages manufacturing companies registered in the ASEAN country's stock exchange shows different results. The study found that ROA and a company's size positively significance affect executive remuneration. However, the managerial ownership and ownership concentration negatively significance affected the executive remuneration [12].

Studies about executive remuneration in Indonesia have been conducted by several researchers, with various findings and conclusions. The principles of performance-for-pay and pay-for-performance are considered valid in Indonesia [13]. There is a positive relationship between executive remuneration and several financial performance indicators such as ROA and ROE [14]. The existence of the compensation committee is positively correlated with the executive remuneration and the firm's performance, particularly the higher executive remuneration is connected to firm performance only when the remuneration committee is present [15].

The empirical studies about executive remuneration in publicly listed companies described above presented diverse findings and conclusions. This study aims to examine the impact of total assets, total revenue, and net profit on executive remuneration. We investigate the companies in IDX 30 that have strong fundamental performance.

1.1 Literature Review

According to Acero & Alcalde [10], the debate around executive remuneration of large public companies is divided into two sides of the argument. On one side is about the value they deliver for the companies, where the need to attract and retain them was often used to justify the huge remuneration they received. On the other hand, the executive could exploit the information advantage they have to generate excessive remuneration [10]. Several theories have been developed to frame the process to determine executive remuneration, such as agency theory, and tournament theory [16].

The agency theory emphasized the possibility of motivation contradiction between the executive (agent) who seeks high remuneration with minimum effort, with the shareholders (principal) that expect a high return. Such a situation is known as a principal-agent problem [17]. The agency theory underpins pay-for-performance frameworks, where executive remuneration is part of agency cost to minimize the principal-agent problem [18].

There was previous research conducted in many countries and type of industries to examine the pay-for-performance frameworks and the conclusions were varied. Several studies found a significant positive effect of executive remuneration on a firm's performance, such as research conducted by Akter et al., [19], Wijeweera et al., [20], Mohd Razali et al., [21], Kirana & Novita, [22], and Pangestu et al., [14]. Several other researchers such as Akter et al., [19], Carlson & Bussin, [9], Ibrahim et al., [23], and Sari & Tjoe, [24] concluded a none or weak effect of executive remuneration on a firm's performance.

The tournament theory did not directly correlate executive remuneration with firm performance but offered the concept that high remuneration to executives will likely support the performance of all levels in the organization [16]. Tournament theory emphasized that the large dispersion of remuneration between levels in the organization hierarchy will likely encourage highly qualified managers to maximize their effort for firm performance [25, 26]. Critics of tournament theory came from supporters of equity theory which argue that inequality in remuneration in a company could stimulate pressured feelings and decrease collaboration which could harm firm performance [1].

What are the findings of previous research on the performance-for-pay concepts? Are they consistent? Research on non-financial firms registered on China Stock Exchange between 2014 to 2018 found a significantly positive relationship between profitability and executive remuneration [8]. Research on 260 companies registered on Malaysia Stock Exchange concluded a significant positive effect of the size of the company on executive compensation, while the effect of firm performance is weak (Lokman & Mohd Tareh, 2020).

Firm performance was also found not to affect executive performance in research on 474 companies registered in Indonesia, Singapore, Malaysia, and Australia stock exchanges [11]. However, company size and firm performance affect significantly positive the executive remuneration in the research of 120 companies registered on the Malaysia stock exchange [27], and research of 68 companies registered in ASEAN countries' stock exchanges [12].

It appears that the company's size is the most influential internal factor to determine executive remuneration. The previous research identified the total asset as the company's size measure [15, 16, 28].

Hypothesis 1 (H1): the company's asset affects significantly positive executive remuneration

There was also previous research that identified total revenue as a company's size measure [5, 9, 28, 29].

Hypothesis 2 (H2): the company's revenue affects significantly positive the executive remuneration

How about the effect of the company's profitability on executive remuneration? The previous research found mixed results. The company's profitability significantly positively affected executive remuneration [9]. The company's profitability did not significantly positive or weakly affect executive remuneration [9].

If we consider that the shareholders are the firm owner therefore it is reasonable to align executive remuneration with the financial performance of the firm [9].

Hypothesis 3 (H3): the company's net profit affects significantly positive the executive remuneration

The research model used in this study referred to several previous studies which used multiple linear regression models to examine the effects of company internal factors such as elements of good corporate governance, or financial measures. Those previous studies amongst others are Lokman & Mohd Tareh, [7], Majid et al., [12], Ibrahim et al., [23], Mohd Razali et al., [21], Maloa, [21], Probahudono et al., [21], and Haron & Akhtaruddin, [21].

$$\text{Exc_Rem} = \alpha + \beta_1 \text{ Assets} + \beta_2 \text{ Revenue} + \beta_3 \text{ Net profit} \quad (1)$$

2 Methods

This study used secondary data retrieved from the annual report of sample companies between 2016 to 2020. The sampling method applied here was purposive sampling amongst the population of traded companies on the Indonesia Stock Exchange. There were several researchers conducted relevant studies that used purposive sampling techniques amongst listed companies such as Kirana & Novita [21], Azazi [21], Majid et al., [12], Sari & Tjoe [12], Maloa [12], and Probahudono et al. [12].

The samples were 30 companies categorized as a member of index IDX30 at Indonesia Stock Exchange as of 1 August 2021, while overall listed companies at Indonesia Stock Exchange are 758 companies. The index IDX30 was launched on April 23, 2012, and it consists of companies with high liquidity, large market capitalization, and strong fundamentals.

The first step in data processing was to perform descriptive statistics analysis, then continued with classical assumption tests to examine whether the original data was meeting all the requirements for multiple linear regression or need data transformation. Those statistical tests were the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Once the original data or the transformed data are passing all those tests, then the next step was to conduct multiple linear regression calculations to obtain values such as R², intercept, coefficients, the significance of each independent variable, and other relevant values necessary for further analysis. We used SPSS to run the data analysis.

3 Result and Discussion

The annual report of 30 sample companies provided varied data on the detail of their executive (board of directors and board of commissioners) remuneration. The majority of those samples presented only the total amount of remuneration, whereas the individual data and detailed remuneration components were not presented. Few companies

which are state-owned enterprises presented both individual data and detail of remuneration components. It can be seen in Table 1 that 4 companies gave the individual executive remuneration data and its detail components too, while 19 companies gave total remuneration data only.

Given the above available data, therefore, the analysis in this research used the total amount of board of directors and board of commissioners combined so that remuneration data of all 30 samples could be included. Table 2 shows descriptive statistics as follow.

Table 2 shows descriptive statistics, where N was 150 given the data were taken from 30 companies, from 2016 to 2020 (5 years). It can be seen that the standard deviation of assets, net profit, and total executive remuneration were higher than their mean, which indicated that the data were widely dispersed. Therefore, the use of median instead of mean for analytical purposes was more advisable. As an example, the median total remuneration is IDR 85.815.000.000 per year so assuming the member of BOC and BOD combined are 10 persons, hence the average total remuneration per person is IDR 8,581,500,000 per year.

Table 1. The number of companies provided the data in each detailed category.

Rem. Data of Sample companies	Individual Executive	Separated BOC and BOD data	Combined BOC and BOD data
Detail Rem. Components	4	4	0
Detail Cash Components	0	3	0
Total Rem. only	1	9	9

Table 2. Descriptive Statistics

	N	Min	Max	Med	Mean	Std Dev
Asset (IDR Millions)	150	4,087,231	1,511,804,628	56,967,697	203,163,709	347,375,513
Revenue (IDR Millions)	150	0	239,205,000	38,525,955	51,701,331	48,271,555
Net Profit (IDR Millions)	150	-3,296,890	34,413,825	3,728,330	7,444,445	8,999,554
Total Exc. Rem. (IDR Millions)	150	8,109	1,200,000	85,815	164,707	216,038
Valid N	150					

The results of assumption tests suggest that the data needs to be transformed to meet the requirement for multiple linear regression analysis. In this case, only the dependent variable data needs to be transformed to z by the following formula, where y is Exc_Rem

$$z = e^{\sqrt{\log_{10}(y)}} \quad (2)$$

Once the dependent variable data was transformed, then the assumption test was performed again, and it gave satisfactory results for multiple regression analysis. The output of multiple regression analysis at $p\text{-value} = 0,05$ is shown in Table 3 and Table 4.

The F test result and the R2 value shown in Table 3 indicate that the model satisfactorily represented the causal relationship between all independent variables (assets, revenue, and profit) towards the dependent variable (executive remuneration).

The t-test results show that the H1 and H2 were supported which was consistent with the previous research. The size of a company's asset reflects the complexity magnitude and accountability of the executives. According to [12] size of the firm is among the factors that positively affect executive remuneration. A study involving 68 food and beverage manufacturing firms registered on the stock exchange in ASEAN countries found that return on asset and company size has a positive significant influence on director's remuneration [12]. The size of the company is the most influential factor that affects director remuneration [12].

Meanwhile, Hypothesis 3 was not supported. This is an interesting finding given that there was a positive correlation between executive remuneration toward ROA and ROE, where the higher executive remuneration will give higher ROA and ROE of respective companies [12]. Suppose we assume that the shareholders are the firm's owners, therefore it is reasonable to align the executive remuneration with the financial achievement of

Table 3. Multiple Regression Analysis 1

Calculations	Output
F test – to examine the simultaneous effect of independent variables	F = 105.235 The sig. value = 0.000
t-test – to examine the individual effect of each independent variable	The sig. value is: Asset = 0.002. Revenue = 0.000. Profit = 0.725.
R2 – to examine the strength of the causal relationship	R2 = 0.684

Table 4. Regression Analysis 2

Independent Variables	Intercept (α)	B
Asset	8.358	6.308E ⁻¹⁰
Revenue		1.434E ⁻⁸
Net Profit		4.224E ⁻⁹

the firm, particularly the market performance and the firm's accounting [12]. However, another study showed that there is an insignificant relationship between profitability and executive remuneration [12].

Table 4 shows the value of intercept (α) and β of each independent variable which could be used in Eq. (1) as the predictive equation of executive remuneration.

4 Conclusion

This study provides evidence that the combined independent variable (asset, revenue, and net profit) together affect the dependent variable (executive remuneration). The asset and revenue individually have a significant positive impact on the executive remuneration, while net profit does not have a significant positive impact. The implication of this study for the highest decision-makers in the company is to put into account financial resources factors such as assets and revenue when determining their executive remuneration by using the predictive equation formula obtained in this study.

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