The effect of gender, public accounting firm size, and company size on audit fee

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ABSTRACT
An audit fee is the cost received by the auditor after completing his audit services. This fee is issued by a company who employ an auditor to increase management supervision, the quality of the company’s financial statements, and management independence. This study discusses several independent variables that have been used in previous studies, such as gender, the size of the Public Accounting Firm, and the size of the client’s company. This study aimed to determine the effect of gender, the size of the Public Accounting Firm, and the size of the client’s company on the audit fees in companies listed on the Stock Exchange in 2015-2016. This study uses a quantitative approach with a sample of 46 companies. The selection of samples in this study is conducted using a purposive sampling method. The data used are secondary data obtained from the Indonesia Stock Exchange (IDX). The analysis of the study is conducted using multiple linear regression analysis. The results of the study show that the size of the Public Accounting Firm and the size of the client’s company have an effect on the audit fee, while gender has no effect on the audit fees in companies listed on the Indonesia Stock Exchange ((IDX) in 2015-2016.

1. INTRODUCTION
According to Arief (2016), external auditors are professional auditors who provide services to the general public, especially in auditing the financial statements made by their clients. Users of corporate financial information, such as investors, government agents, and communities depend on external auditors for producing independent information.

External auditor in a Public Accounting Firm consists of men and women, or called gender. The word ‘gender’ can be interpreted as the difference in roles, functions, status and responsibilities of men and women as a result of socio-cultural constructs embedded through the process of socialization from one generation to the next (Pustitawati, 2012). In a normal life, there are differences of the results for the same
work done by men and women in a certain situation. For example, men sometimes make decisions based on logic while women based on their heart feelings. According to Mulyo Prastyo (2017), women can be more efficient and effective in processing information in complex tasks than men, because women have the ability to differentiate and integrate key decisions. Besides that, men are relatively less careful in analyzing the core of a decision. The difference between men and women is on the difference in audit fees.

The size of the Public Accounting Firm is based on the grouping: the Big Four Public Accounting Firms and Non Big Four Public Accounting Firms. A reputable public accounting firm, such as the Big Four, will try to maintain its good name. As stated by Fany and Saputra, (2005), the Big Four Public Accounting Firms will try to produce higher audit quality than Non Big Four Public Accounting Firms so that the size of the Public Accountant Office has something to do with audit fees. Large companies are usually more in demand than small companies so that the company’s growth greatly affects the company’s value. Machfoedz (1994), in Suwito and Herawati (2005), states that company size is a scale that can classify companies into large and small companies based on various factors, such as total assets of the company, stock market value, average sales level, and number of sales.

According to Juanita and Satwiko (2012), large companies have several advantages. The first is that large companies have large resources, competent workforce, and technological equipment that support sophisticated accounting information systems so that they can produce more accurate and faster data. The second is that large companies have better internal control. This will simplify and accelerate auditor performance and reduce the level of errors in presenting the company’s financial statements. The third is that large companies have large financial resources to pay audit fees in order to get good and fast audit services.

Empirical research is needed to find out whether gender, Public Accounting Firm size, and company size have an effect on audit fees in companies listed on the Indonesia Stock Exchange (IDX) period 2015-2016. This study limits the population and sample only on companies listed on the Indonesia Stock Exchange.

The purpose of this study is to find out the effect of gender, Public Accounting Firm size, and company size on audit fees in companies listed on the Indonesia Stock Exchange period 2015-2016. It is expected that this research can be used to find out the factors that influence the audit fee in companies listed on the Indonesia Stock Exchange period 2015-2016 and as a reference for future research, especially with similar topics.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

Gender
According to Hermawati (2007), gender is all social attributes regarding men and women. For example, men are described as having masculine characteristics such as hard, strong, rational, and brave. Important terms related to gender are stereotypes of gender roles, that is, beliefs in the characteristics that are considered true about men and women (Whidiyanti; 2001)

Moreover, Whidiyanti (2001) stated that the behavior of masculine stereotypes is the key to success in the Public Accounting Firm. This also supports the research conducted by Reed (1994) that the characteristics of masculinity, not feminity, is necessary in the profession as accountants

Public Accounting Firm Size
The size of the Public Accounting Firm is based on the grouping: the Big Four and non Big Four (Puspitasari and Latrini: 2014). The size of a Public Accounting Firm can be said “large” if it is affiliated with the Big Four, has branches and clients of large companies, and has professionals of more than 25 people. Meanwhile, the size of a Public Accounting Firm can be said “small”, if it is not affiliated with the Big Four, does not have branches and clients of small companies and has professionals less than 25 people (Astria, 2011).

Client’s Company Size
Ningsaptiti (2010) stated that company size is the a company’s size which is determined by several factors. Petronila (2007) defined that company size is the company’s size measured by using the total assets owned by the company listed on the end of period financial statements audited using logarithms.

Large companies usually have good internal control so that they can reduce the level of errors in presenting the company financial statements. In addition, large companies also have large financial resources to pay audit fees in order to get good and fast audit services
McKeown, in Diyanti (2010), stated that large companies offer higher audit fees than small companies.

**Audit Fee**
According to Mulyadi (2002), audit fee is a fee received by a public accountant after conducting audit services, in which the amount depends on the risk of the assignment, the complexity of services given, the level of expertise needed to implement the service, and the cost structure of the Public Accounting concerned. The more complex the client, the more difficult it is to audit, thus requiring more time so that the audit fee is even higher (Hanjani: 2014).

A research conducted by Nugrahani (2013), examined the factors that influence the determination of external audit fees in companies listed on the Stock Exchange. It showed that the size of the board of commissioners, audit committee size, auditor characteristics, company size, and subsidiaries have a significant effect on audit fee, while internal audit, independence of the board of commissioners, number of board of commissioner meetings, independence of the audit committee, and number of audit committee meetings have no significant effect on it. Furthermore, Herawaty (2011), also stated that internal control and length of audit time have a significant effect on audit fees. The research conducted by Rizqiasih (2010) showed that the independence of the board of commissioners and that of the audit committee have a significant effect on audit fee, while the size of the board of commissioners, the intensity of board meetings, and the intensity of audit committee meetings do not have a significant effect on it.

Meanwhile, the research conducted Shafira and Ghozali (2017), concludes that company size has a significant effect on audit fees, while audit risk and earnings management do not have significant influence on audit fees. Research conducted by Chandra (2015) found that the intensity of board meetings, company size, and Public Accounting Firm size have a significant effect on audit fee, while independent commissioners, the size of the board of commissioners, intensity of audit committee meetings, and company risk do not have significant influence on it. The research conducted by Hardies, Breesch, and Branson (2015), also showed that gender, sales, and Public Accounting Firm size have a significant effect on audit fee, while auditor switching has no significant influence on it.

**Hypothesis Development**

**Gender and Audit Fee**
Women are relatively more efficient than men for getting access to information. In addition, women also have a great memory of new information than men (Yendrawati and Mukti: 2015). The results of research conducted by Hardies, Breesch, and Branson (2015) showed that gender influences audit fees. For that reason, the hypothesis can be formulated as follows:

H1: Gender has an effect on audit fee.

**Public Accounting Firm Size and Audit Fee**
According to Fanny and Saputra (2005), when a Public Accounting Firm (KAP) claims to be a reputable Accounting Firm, like the Big Four, it will always try hard to maintain its good name and avoid actions that may disrupt its reputation. To maintain its good name, the Big Four Public Accounting Firm will try to produce high-quality financial reports, thus enhancing audit fee. The research conducted by Chandra (2015) showed that the size of Public Accounting Firm influences audit fees. Based on the description above, the hypothesis can be formulated as follows:

H2: Public Accounting Firm size has an effect on audit fees.

**Company Size and Audit Fee**
Wedari (2006), in Eka (2010), stated that company size is an increase from the fact that large companies will have large market capacity, large book value, and high profits. On the other hand, small companies will have a small market capitalization, small book value, and low profits. Carrying out audit work on large companies need more time and more audit teams than carrying out audit work on small companies because large companies have more transactions. The larger the size of the company, the larger the total assets it has, thus increasing audit fee charged to the company. Nugrahani (2012) states that company size influences audit fees. Based on the description above, the hypothesis can be formulated as follows:

H3: Company size has an effect on audit fees.

### 3. RESEARCH METHOD
This study used a quantitative approach that emphasizes the testing of hypotheses. It used
secondary data obtained from the Indonesia Stock Exchange. The population consisted of all companies listed on the Indonesia Stock Exchange period 2015-2016. The sample was taken by using a purposive sampling technique from 46 companies.

**Operational Definition of Variable**

**Gender**

Gender refers to social identity containing a role that must be performed by individuals because of their gender, where the role is in accordance with social and cultural construction. Gender is measured by a dummy variable, that is, if there is a female auditor = 1 and, if there is no female auditor = 0.

**Public Accounting Firm Size**

The size of the Public Accounting Firm is divided into two: Big Four Public Accounting Firm and non Big Four Public Accounting Firm. The Public Accounting Firms affiliated with the Big Four also include large Public Accounting Firms. The size of Public Accounting Firm is measured by the dummy variable, that is, the Big Four Public Accounting Firm = 1 and the non Big Four Public Accounting Firm = 0.

**Company Size**

The company size is a classification of a company based on the total assets they own. Petronila (2007) defines company size as the size of the company measured by using the total assets those listed on the end of period financial statements audited using natural logarithms, that is, SIZE = ln (Total Assets).

**Audit Fee**

An audit fee is the cost received by the auditor after completing his audit services. It is measured by natural logarithms, that is, FEE = ln (Audit Fee)

**Data Analysis Technique**

The data analysis used in this study is quantitative descriptive analysis. The data analysis is conducted using multiple linear regression analysis with SPSS 21.0 for Windows application. The steps taken in analyzing the data to prove the hypothesis are as follows:

1. Calculating the research variables for each sample company during the study period.
2. Performing multiple linear regression analysis using data from previous calculations.

The regression equation (1) used is as follows:

\[ FEE = \alpha + \beta_1 GD_1 + \beta_2 BIG4_2 + \beta_3 SIZE_3 + e \]

Where:

- \( FEE \) = Audit fee
- \( \alpha \) = Constant of regression coefficient
- \( GD \) = Regression coefficient of gender variable
- \( GD \) = Gender variable
- \( BIG4 \) = Regression coefficient of Public Accounting Firm variable
- \( BIG4 \) = Public Accounting Firm variable
- \( SIZE \) = Regression coefficient of company size variable
- \( SIZE \) = Company size variable
- \( e \) = Residual or prediction error

3. Conducting t test to see the influence of the independent variables partially on the dependent variable by determining the level of significance (\( \alpha \)) 5% and comparing the significance value of t with 0.05. If the significance value of t ≤ 0.05, then \( H_0 \) is rejected and \( H_1 \) is accepted. If the significance value of t > 0.05, \( H_0 \) is accepted and \( H_1 \) is rejected.

4. The coefficient of determination

The coefficient of determination is used to measure the effect of independent variables simultaneously on the dependent variable. The value of \( R^2 \) is at a distance between 0 and 1. If the variable selection is correct and if it produces high \( R^2 \) close to 1, it means that the regression model is better in explaining the variability of the independent variable.

5. Testing the symptoms of the assumption of classical model

The classic assumption test needs to be done before performing multiple linear regression analysis. In order to get the best results (Ghozali, 2011: 105). The classic assumption test is presented below:

a. Normality Test

Data normality testing is used to determine whether data are normally distributed or not. This study used the Kolgorov-Smirnov or K-S test. It is stated that the data are normally distributed if the value of Asymp. Sig > 0.05, conversely, the data are not normally distributed if the value of Asymp. Sig < 0.05.

b. Multicollinearity Test

Multicollinearity test was conducted to determine whether or not there is a correlation between independent variables in the regression model (Ghozali, 2011: 105). In an effort to find out the existence of multicollinearity in the regression model, the criteria are set as follows (Ghozali, 2011: 106): If the value of Variant Inflation Factor (VIF) <
10 and the value of Tolerance > 0.1, this means that there is no multicollinearity. Conversely, if the value of Variant Inflation Factor (VIF) = 1 / and the value of Tolerance= 1/10 = 0.1, this means that there is multicollinearity.

c. Autocorrelation Test

Autocorrelation test was also done to determine whether or not there are symptoms of autocorrelation in regression calculations in this study. This test is done using the Durbin-Watson test (DW-test). If the DW number is below -2, meaning that a positive autocorrelation occurs. If the DW number is between -2 to +2, meaning that autocorrelation does not occur. And if the DW number is above +2, negative autocorrelation occurs.

d. Heteroscedasticity Test

Heteroscedasticity test is used to determine whether or not there is an inequality of residual variance from one observation to another in a regression model. (Ghoza-li, 2011: 139). Detection of the existence of heteroscedasticity in this study is conducted using glijser test. If the sig value of the independent variable > 0.05, this means that heteroscedasticity does not occur.

4. DATA ANALYSIS AND DISCUSSION

Description of Research Variables

The results of this study are presented in Table 1.

Audit Fee

Table 1 shows that audit fee has the average value of 20.76 with the standard deviation value of 1.12. The highest audit fee is 24.72 owned by Surya Semesta Internusa Tbk, while the lowest audit fee is 18.98 owned by Maskapai Reasuransi Indonesia Tbk.

Gender

Gender (GD) is the gender of the auditor who audits the company. Based on Table 1, the variable of gender has an average value of 0.14% with a standard deviation of 0.35%. The minimum value is 0 and the maximum value is 1. This means that if there is a female auditor, the code is 1, whereas if there is no female auditor, the code is 0.

Table 2

<table>
<thead>
<tr>
<th>Description Test Results</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no female auditor</td>
<td>79</td>
<td>85.9</td>
</tr>
<tr>
<td>There is female auditor</td>
<td>13</td>
<td>14.1</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Processed SPSS data

Public Accounting Firm Size

The size of the Public Accounting Firm (BIG4) is divided into Big Four Public Accounting Firm and non Big Four Public Accounting Firm. Based on table 1, the average value of Public Accounting Firm size is 0.54% with a standard deviation of 0.5%. In this study the minimum value of the variable of Public Accounting Firm size is 0 and the maximum value is 1. This means that if using non-Big Four Public Accounting Firm, the code is 0, whereas if using the Big Four Public Accounting Firm, the code is 1.

Table 3

<table>
<thead>
<tr>
<th>Description Test Results</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Big 4</td>
<td>42</td>
<td>45.7</td>
</tr>
<tr>
<td>Big 4</td>
<td>50</td>
<td>54.3</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Processed SPSS data

Client’s Company Size

The company size that is proxied by Log natural total assets shows the size of the company. Based on Table 1, the average value of the variable of company size is 29.584637 with a standard deviation of 2.2101933. In this study the minimum value of company size is 20.28 owned by Merck Tbk, and the maximum value is 36.61, owned by Citra Marga Nusaphala Persada Tbk.

Tabel 1

Hasil Uji Deskriptif

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEE</td>
<td>92</td>
<td>18.9803</td>
<td>24.7194</td>
<td>20.758374</td>
<td>1.1200465</td>
</tr>
<tr>
<td>SIZE</td>
<td>92</td>
<td>20.2795</td>
<td>36.6104</td>
<td>29.584637</td>
<td>2.2101933</td>
</tr>
<tr>
<td>BIG4</td>
<td>92</td>
<td>0</td>
<td>1</td>
<td>.54</td>
<td>.501</td>
</tr>
<tr>
<td>GD</td>
<td>92</td>
<td>0</td>
<td>1</td>
<td>.14</td>
<td>.350</td>
</tr>
</tbody>
</table>

Source: Processed SPSS data
Classical Assumption Test

Normality Test
This study used the KS (One-Sample Kolmogorov-Smirnov) test method with the results as follows (Table 4).

| Source: Processed SPSS data |

Table 4 Normality Test Results

<table>
<thead>
<tr>
<th>Unstandardized Residual</th>
<th>Kolmogrov-Smirnov Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.264</td>
<td>0.082</td>
</tr>
</tbody>
</table>

The results of the normality test show that the data are normally distributed because the significance value is more than 0.05.

Multicollinearity Test
Multicollinearity test is conducted using the tolerance method and variance inflation factor. The results are on Table 4.

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>GD</td>
<td>0.935</td>
<td>1.069</td>
</tr>
<tr>
<td>BIG4</td>
<td>0.983</td>
<td>1.017</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.949</td>
<td>1.054</td>
</tr>
</tbody>
</table>

The results in Table 4 show that all independent variables, gender (GD), Public Accounting Firm size (BIG4), and company size (SIZE), have tolerance values > 0.1 and VIF < 10. It can be concluded that there is no multicollinearity in the regression models tested in this study.

Heteroscedasticity Test
Symptoms of heteroscedasticity test can be known by using a scatter plot. The results are as on Figure 2.

Autocorrelation Test
Autocorrelation test is conducted using the Durbin Watson test. The results are as on Table 5.

| Source: Processed SPSS data |

Table 5 Autocorrelation Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.900</td>
</tr>
</tbody>
</table>

The test result shows a value of 1.983, which means that the Durbin-Watson value is
still in the range of autocorrelation-free regions because it is between -2 to +2

**Hypothesis Test**

The following are the results of multiple linear regression tests for the first model. This regression examines the influence of the independent variable on the dependent variable as measured by Dechow and Dichev. The results are as on Table 6.

| Independent Variable | Regression Model        | Coefficient | t    | Sig.
|----------------------|-------------------------|-------------|------|------
| (Constant)           |                         | 14.176      | 10.410 | 0.000 |
| GD                   |                         | 0.008       | 0.029 | 0.970 |
| BIG4                 |                         | 0.875       | 4.425 | 0.000 |
| SIZE                 |                         | 0.206       | 4.525 | 0.000 |
| R square             |                         | 0.324       |       |      |
| F statistic          |                         | 14.046      |       |      |
| F Sig                |                         | 0.000       |       |      |

Source: SPSS calculation

\[ \text{FEE}_i = 14.176 + 0.008 \text{GD}_i + 0.875 \text{BIG4}_i + 0.206 \ln(\text{SIZE}_i) + e \]

The interpretation of the regression coefficient value is as follows:
1. Constant value is 14.176, which means that if there are no other variables, the value of audit fee is 14.176
2. The variable of gender is not significant to audit fee.
3. The variable of Public Accounting Firm size has a regression coefficient of 0.875. This means that if the size of the Public Accounting Firm increases by one unit, the audit fee will increase by 0.875, and vice versa by assuming other variables are constant.
4. The variable of company size has a regression coefficient of 0.206. This means that if the company size variable increases by one unit, the audit fee will increase by 0.026, and vice versa, assuming other variables are constant.

Hypothesis testing was done by looking at the value of the t test which aims to determine the effect of the independent variables on the dependent variable partially.
1. The t test value for the variable of gender (GD) is 0.029, with a significance level of 0.977. This significance value is greater than 0.05. It can be concluded that gender has no effect on audit fee, so the hypothesis in this study is not proven.
2. The t-test value of the variable of Public Accounting Firm size (BIG4) is 4.425, with a significance level of 0.000. This significance value is smaller than 0.05. It can be concluded that Public Accounting Firm size has a significant positive effect on audit fee, so the hypothesis in this study is proven.
3. The t test value of the variable of company size is 4.525, with a significance level of 0.000. This significance value is smaller than 0.05. It can be concluded that company size has a positive effect on audit fee, so the hypothesis in this study is proven.
4. The coefficient of determination \( R^2 \) shows the extent to which all the independent variables explain the dependent variable. Table 4.7 shows that the value of \( R^2 \) is 0.324, indicating that the variables of gender, Public Accounting Firm size, and company size are able to explain variations in audit fee of 0.324 or 32.4%, while the remaining 0.676 or 67.6% are explained by variables outside the independent variables used in this study.

**Discussion**

**The Effect of Gender on Audit Fee**

Based on the results of this study, it is found that gender has no effect on audit fee. There is no difference in audit fees between men and women because they conduct audit services in teamwork consisting of men and women. In addition, there are audit procedures in carrying out their duties. The results of this study are also consistent with the results of research conducted by Abed and Al-Badainah (2013) that there is no influence between gender and audit fees. According to Abed and Al-Badainah (2013) there is no difference between male auditor and female auditor, and female auditors tend to reject unethical behavior or violation of the accountant's code of ethics.

**The Effect of Public Accounting Firm Size on Audit Fee**

Based on the results of this study, it can be seen that Public Accounting Firm size has a significant positive effect on audit fee. This is in accordance with the results of research conducted by Chandra (2015), that Public Accounting Firm size influences audit fees.
According to Chandra (2015), the size of Public Accounting Firm has an effect on audit fees because to maintain its good name, the Big Four Public Accounting Firm will always try to produce higher financial reporting, so the Big Four Public Accounting Firms will assign higher audit fees to their clients than non-Big Four Public Accounting Firms.

The Effect of Client’s Company Size on Audit Fee
The variable of company size was proxied by Log natural (Ln) total assets. The company size is seen from the total assets of a company. The company’s total assets indicate the complexity of a company. Company size affects the company in issuing audit fees. This is consistent with the results of research conducted by Chandra (2015) that company size influences the audit fee. According to Chandra (2015), when auditing large companies, auditors require more time and more audit teams than auditing small companies because large companies have larger and more complex transactions. Therefore, the bigger the company, the greater the audit fee that will be charged to the company.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

Conclusion
The results prove that gender has no effect on audit fee, indicating that there is no difference between male or female auditors who conduct an audit in a company, but Public Accounting Firm size and company size have a significant effect on audit fee, indicating that the larger the company, the higher the audit fee that will be charged to the company.

Suggestion
It is recommended that for further research, the researchers should add the number of sample and variables that might affect the audit fee apart from the independent variables used in this study.

REFERENCES


