

The Relationship between Gender and Tax Payments

Hendra Gunawan^{a*}, Melisa^b

^a*Jurusan Manajemen Bisnis, Politeknik Negeri Batam, hendra@polibatam.ac.id, Indonesia*

^b*Jurusan Manajemen Bisnis, Politeknik Negeri Batam, meli_gual@yahoo.co.id, Indonesia*

Abstract. Paying taxes is one deduction from earnings in a company, a few companies are working to find a way to minimize tax payments but still within reasonable limits and do not violate the rules of law that have been defined. This study aims to determine the effect of gender on tax payments using control variables ROA, size, and leverage. Measurement gender is using dummy variables. Dependent measurements are measured using the tax payments CETR. The population used in this study is all companies except for the construction sector and the financial sector. The sample was selected using purposive sampling and data obtained as many as 237 companies. The results showed that gender had no effect on the payment of taxes, while the ROA and size control variables showed a significant result which means the ROA and size affect the payment of taxes. Leverage control variables showed significant results, which means leverage does not affect the payment of taxes in a company.

Keywords: gender, tax, CETR, ROA, size, leverage

Introduction

Taxes are a burden for companies to reduce the net income of a company, so many companies seek to avoid or reduce the value of corporate tax payments. No company is happy to pay taxes. Companies pay taxes because of its force, if it does not pay to be sanctioned at risk for the company. Abhimanyu (2006) states that the tax reform is a fundamental change in all aspects of taxation which has three main objectives, namely a high level of voluntary compliance, confidence in the tax administration and the high productivity of high taxation authorities (Ardyansah, 2014). The government as fiscal policy makers has to make changes for the better tax system in order to increase state revenues in the tax sector (Ardyansah, 2014). Mariwan and Arifin (2005) states that the government is always trying to make efforts to increase the tax ratio gradually by observing and considering the economic conditions in Indonesia and the world economy. A gradual increase in the tax ratio is done through improvements to policy and tax administration, so that the tax base may be more

widespread, and the potential of existing taxes can be collected optimally (Ardyansah, 2014). There are several parties involved either directly or indirectly in the management of tax in the structure of corporate management. These parties include executive chief officer (CEO), chief financial officer (CFO) or finance director, board of directors and audit committee (Khakim, 2014). In this study, researchers focused on the gender of the director of finance in measuring the independent variable. Based on research conducted by Francis et al. (2014) used the CFO or finance director as a party which is used for the measurement of the independent variables to see the transition in the company's CFO.

Gender is a concept that sees the difference between men and women from the point non biological example of social, cultural, and behavioral (Mutmainah, 2007). According Khakim (2014) with the gender differences, it is assumed that men and women will act or have a different response in the face of the same problem. Research that examine the effect of gender on tax payments have been made by the literature with varied results both in terms of tax

*Corresponding author. E-mail: hendra@polibatam.ac.id

evasion, tax evasion, tax compliance, and tax aggressiveness. Hanafi and Harto (2014) found that gender had no effect on tax evasion. Associated with tax compliance, Fitriyani et al. (2014) draws the same conclusion that there is no gender effect on tax compliance.

Research conducted by Francis et al. (2014), which examines the relationship of women with aggressive tax CFO found different results that women lower taxes associated with aggressive than men. It means that women tend to do aggressiveness CFO tax CFO less aggressive than men.

The study is a replication of a study conducted by Francis et al. (2014) was tested on women with aggressive tax CFO. The difference of this study with previous research is on measuring devices independent variables and the dependent variable. In this study, the independent variables were measured using a dummy variable. The dependent variable is measured by one measurement is CETR, chosen this measurement because they are following a previous study done by Francis et al. (2014).

Literature Review

One objective of the entrepreneur is to maximize shareholder wealth or the investor, by maximizing the value of the company to obtain the maximum profit. Agency theory is the relationship or contract between principal and agent. Principal hires an agent to perform tasks for the benefit of the principal, including the delegation, authorization, decision-making from the principal to the agent (Anthony & Govindarajan, 2005). One of the efforts to be made by entrepreneurs is to minimize the tax burden as long as the limits that do not break the rules, because the tax is one deduction from earnings. The amount of tax depends on how much you earn. The greater the greater the income tax payable. Therefore, companies need tax planning or tax planning is right for the company to pay taxes efficiently.

Nature theory states that the differences between men and women is the nature of which must be accepted (Khakim, 2014). Biological differences provide effects such as differences in the roles and tasks between them. All human beings, men and women have different natures in accordance with their respective functions. There are roles and tasks that can be exchanged, but some are not interchangeable for different indeed true nature. Some studies show that women tend to be more conservative than men. They

are more circumspect, more risk-averse (Barber and Odean, 2010), as well as more have high ethics (Collins, 2000; O'Fallon & Butterfield, 2003; Vermier & Van kenhove, 2007; and Kaplan, et al, 2009 in Gavius, et al, 2012). Associated with tax management, this theory explains that women and men will have different considerations and actions for example in terms of decision-making to make tax payments.

As stipulated in the Act on General Rules and Procedures of Taxation, the notion of the body is a group of people or capital as a union, whether conducts or not conduct business include partnership, other company or similar organizations, institutions, and Form A permanent establishment entities including mutual funds (Article 1 paragraph 3 of UU KUP).

Subject and Body Not Taxable

Subject Tax Board, consisting of the subject of domestic tax body that was established or domiciled in Indonesia and foreign tax subject which comprises: Body not established or domiciled in Indonesia; Running a business through BUT in Indonesia; Deriving income from Indonesia without going through the BUT; Permanent Establishment; Establishment used by the subject individual Tax abroad and subject to tax foreign agency to run the business or activities. Subjects not Tax Board consists of: Agency representatives of foreign countries and International Organizations and the particular unit of government agencies with the proviso: Formed by the legislation in force; Financed with funds from the state budget or the budget; Acceptance of these institutions included in the budget of the Government; Books examined by functional supervisory bodies of the country.

Legal Basis Corporate Tax

Law Number 36 Year 2008 regarding Fourth Amendment of Law Number 7 of 1983 on Income Tax (Income Tax Act of 2009) came into effect on January 1, 2009 and most of the rules of procedure have been published. Changes in tax laws the provisions result in changes in the form of the Annual Tax Income Tax Taxpayer (SPT Corporate Tax). As a follow-up to the delivery of SPT Corporate Tax, will be carried out research on SPT SPT and who meet the criteria will be investigated.

Due Agency

Companies need to know the relationship between genders to the payment of taxes to be able to assist companies in decision-making to determine the CFO or finance director is good for the company. Financial director of the company has the responsibility to decide and monitoring of tax reporting and financial reporting related to tax and they should be aware of the significant uncertainties involved in aggressive tax strategies. Based on previous research conducted by Francis et al. (2014), if the CFO women do indeed have a higher degree of risk-aversion, it is expected that companies with more women CFO careful with aggressive tax avoidance activities.

Conversely, if the CFO of women to choose their own profession as CFO and has an attitude comparable risk as their male counterparts, there should be no gender effect in the aggressiveness of tax.

Ha: Gender effect on tax payments.

Research Design

The data used in this research is secondary data obtained from the Indonesia Stock Exchange (BEI). The variables used in this study as follows: Independent variables used in this study was measured using a gender dummy variable, given the value of "1" to the CFO or finance director of women and the value "0" in the men's CFO or finance director. The dependent variable in this study is the payment of taxes as measured by CETR. CETR research conducted by Francis et al. (2014) used as expected to identify aggressive tax planning companies that do use permanent differences and temporary differences.

$$CETR = \text{Paying Taxes/Income before Taxes}$$

ROA reflects the business benefits and efficiency in the utilization of total (Chan et al., 2005). ROA shows the company's ability to conduct efficient use of total assets for the company's operations. This ratio is one profitability ratio that measures a company's ability to generate profits in using the company's total assets.

$$ROA = \text{Net Income/Total Assets}$$

Size is the average net sales for the year to several years. In this case the sale is greater than the variable and fixed costs, it will obtain the number of pre-tax income. Conversely, if the sale is smaller than the

variable costs and fixed costs, the company will suffer a loss (Hermuningsih, 2012).

$$Size = \text{Log Total Assets}$$

Leverage is the ratio used to measure the extent of the company's assets to finance business activities when compared to using their own capital. The study was conducted on all companies listed in Indonesia Stock Exchange (BEI) in 2013 and 2014 unless the finance sector and the construction sector. Researchers used data archives (archival), i.e. the data collected from the records or existing base. Data were taken by investigators is the form of data on the ratio of financial reports by downloading on the site www.idx.co.id.

The study was conducted on all companies listed in Indonesia Stock Exchange (BEI) in 2013 and 2014 unless the finance sector and the construction sector. Researchers used data archives (archival), i.e. the data collected from the records or existing base. Data were taken by investigators is the form of data on the ratio of financial reports by downloading on the site www.idx.co.id.

Researchers will use a random sampling method or based on criteria. The criteria that will be used by researchers, namely: First, the data is taken from the data of the financial statements listed in the Indonesia Stock Exchange (BEI). Second, a complete enterprise data retrieved as needed investigators. Third, any company with missing data will be excluded to be sampled. Fourth, the company that presents the profile CFO or finance director of the company. Fifth, the company has positive earnings.

Number of samples taken in this study is all companies listed on the Indonesian Stock Exchange (BEI) in 2013 and 2014 except finance and construction sectors. Reason investigators excluded these two sectors are to avoid bias because both sectors are using the final income tax. Researchers used a sample which presents the profile of the CFO or finance director Foam companies in Indonesia Exchange and meet the criteria of sampling to facilitate the course of the research process is to test the relationship between genders to the payment of taxes.

Data collection techniques that will researchers do is to use archived data, i.e. data collected from records or existing base where the data used in the data collection techniques are used that are listed in the Indonesia Stock Exchange (BEI). The research data processing through the three stages of coding, data tabulation and data processing. Phase coding is done

by giving the code number on the independent variable as a differentiator. Tabulation of data is done with the data recap through the figures obtained from the financial statements at the Indonesian Stock Exchange (BEI).

Researchers will conduct the tabulation process secondary data from companies listed on the Indonesian Stock Exchange (BEI). The first step to be done is to download the company's financial statements in 2013 and 2014 which have been published on the website www.idx.co.id then researchers analyze the profile of the CFO or finance director and the result of the payment of taxes divided by income before tax of the company, after the data analysis process such financial statements are collected in a single. Items to be included in the form of numbers that will be included in the formula that is processed into SPSS. Furthermore, researchers will insert data into tables that have been determined.

In order to test the relationship between the genders of the tax payment, the researchers will test the statistical correlation. The variables used to measure the independent variables are dummy variables where (1 = CFO or finance director of women and 2 = CFO or finance director of men) against variable dependent i.e. tax payments are measured using the effective cash tax rate formula (CETR). The formula for calculating CETR is the payment of taxes divided by income before taxes. The test starts from the classical assumption of normality test, linearity, autocorrelation.

Normality test is a test that is used to see if the residual value is normally distributed or not. Normality test was not performed on each variable but the residual value. Observation data will normally provide extreme value low and high extremes were few and mostly accumulate in the middle.

Heteroscedasticity test aims to test whether the regression model occurred inequality variants of residuals of the observations to other observations. Variance symptoms are not the same from one observation to another observation referred to homoscedasticity (Santoso and Azhari, 2005). Heteroscedasticity test performed using a scatterplot graph between the residual value of the dependent variable, where the X axis and Y axis that is predictable and is residual.

Autocorrelation test was used to test whether the linear regression model there is a correlation between bullies error in period t with an error period t-1 (previous). A good regression model is a regression that is free of autocorrelation or autocorrelation.

The coefficient of determination (R²) is a measure of how far the ability of the model to explain variations in the independent variable (independent) on the dependent variable (dependent). If the value is closer to the mean of independent variables provide almost all the information needed to predict the variation of the dependent variable. If R² = 0, then the adjusted R² = (1-k) / (n-k). If k > 1, then the adjusted R² is negative (Ghozali H. I., 2012).

This test aims to determine the significance of the influence of the independent variable on the dependent variable. By using a t-test is to compare between t count each independent variable with t-table (critical values with a significance level of 5%). If the t count > t-table with prob sig $\alpha = 5\%$ ($\alpha = 0.05$) means that each independent variable significantly influence the dependent variable (Ghozali, 2012).

Results and Discussion

The population in this study are all companies listed on the Indonesian Stock Exchange (BEI) in 2013 and 2014 unless the finance sector and the construction sector. This study uses data as many as 237 companies over two years has been the author of elimination in accordance with the criteria that have been defined previously. Samples of the independent variables male gender has a frequency of 185 and a percentage of 78.1%, which means that the number of companies with the financial director of a man that is 185 and 237 samples a percentage of 78.1%.

Table 1
Calculation Sample

Indications Company	2013	2014	Total
The whole company on the Stock Exchange	494	513	1007
Company finance sector	(53)	(87)	(140)
Company construction sector	(53)	(55)	(108)
Companies with negative earnings	(99)	(98)	(197)
Do not present the profile of CFO	(161)	(164)	(325)
Total	(128)	(109)	237

Gender woman has a frequency of 52 and a percentage of 21.9%, which means that the number of firms with female finance director of 237 samples is 52 and a percentage of 21.9%. Based on these results, 78.1% of the sample or equal to 185 companies with the financial director of men and 21.9% or equal to 52 companies with the financial director of women, the

number was pretty much that is interesting to determine its effect on the payment of taxes.

Table 2
Descriptive Statistics

	N	Min	Max	Mean	Std. Dev
Cetr	237	0.1100	0.4000	0.2541	0.0620
Size	237	10.8400	14.3700	12.4336	0.6525
Roa	237	0.0048	0.4400	0.2236	0.1029
Leverage	237	0.0003	1.4100	0.4730	0.2175
Valid	237				

CETR the dependent variable is the percentage of tax payments compared to profit of the company has an average value of 0.2541 with the lowest value of 0.11 by PT Budi Acid Jaya engaged in the manufacturing sector and the highest value of 0.40 by PT Bakrie & Brothers engaged in the investment sector. Companies that successfully streamline the tax payment with the highest value of 0.40 is PT Bakrie & Brothers, while companies that have not been able to streamline the tax payment with the lowest score of 0.11 is PT Budi Acid Jaya. In addition to the independent variables and the dependent variable, this study also uses control variables are size, ROA and leverage.

Control variables size as measured by total assets have an average value of (12.4336), which means the entire sector companies that the research sample had an average total assets amounting to 266,809,926,300.75 (12.4336). The highest value (maximum) of 14.3700 and the lowest value (minimum) of 10.8400 which shows the size of the company that owned the highest and lowest with the value of a standard deviation of 0.65. ROA control variables were measured by comparing the net income by total assets of the company had an average value of 0.2236, which means the entire sector companies to exclude the finance sector and the construction sector in 2013 and 2014 have the ability to earn profits by using the company's assets have an average at 0.2236. Minimum value of 0.0048 and a maximum value of 0.4400 indicates the ability of the company is able to earn profits with the assets owned by the company the highest and lowest with the value of a standard deviation of 0.1029.

Leverage control variables were measured by comparing the total debt to total assets has an average value of 0.4730, which means the entire sector companies to exclude the finance sector and the construction sector in 2013 and 2014 has the ability to take advantage of debt compared to equity capital has an average value of 0.4730. A minimum value of

0.0003 maximum value of 1.4100 indicates the ability to use debt compared to equity capital which is managed companies with the lowest and highest values with a standard deviation of 0.2175.

Table 3 Test Results

CETR = $\beta_0 + \beta^1 \text{Gender dummies} + \beta^2 \text{Size} + \beta^3 \text{Leverage} + \beta^4 \text{ROA} + \epsilon$			
Variable	Coefficient	t-statistics	Sig Prob
C	0.115	1.475	0.142
Gender	-0.002	-0.206	0.837
SIZE	0.013	2.153	0.032**
Leverage	-0.009	-0.484	0.629
ROA	-0.103	-2.471	0.014
Sample (N)			237
R-square (R Test)			0.041
Durbin-Watson			2.100
Asymp. Sig			0.055
Significant			*p < 0.1, **p < 0.05, ***p < 0.01 (α=5%)

Information: These tables present the results of hypothesis testing Effect of gender on tax payments. Dependent Variables: Payment of taxes (CETR). Independent variables: gender (1 = female 0 = male). Control variables: SIZE, leverage, ROA

R-square values in Table 3 shows that the variable CETR influenced by gender variable by 4.1% (0.041). Autocorrelation with a DW at 2,100. This value is compared with the value (du) by analyzing the 5% significance table, the number of samples 237 (n) and the number of independent variables 1 (K = 1) so that the value du 1,970. Value DW 2100 is greater than the value (du) i.e. 1970 means that there is no autocorrelation in all sectors of the company excluding the finance sector and the construction sector in 2013 and 2014. Values of probability Asymp. Sig normality test of 0.055 indicates that the data used is normally distributed (Asymp. Sig > 0.05).

The gender does not affect the payment of taxes due to a sig of 0.837 is greater than 0.05 (Sig > 0.05). This means that both men and women is not a major factor in terms of tax avoidance, aggressiveness tax and tax compliance. These results are in contrast to studies conducted by Francis et al. (2014), which showed a significant negative result that gender has a relationship to the payment of taxes. However, the research was supported by several studies showing no significant results among studies conducted by Hanafi and Harto (2014), which examines the influence of gender on tax evasion. The results shown are gender has no effect on tax evasion. In addition Fitriyani et al. (2014) draw the same conclusion that examines the influence of gender on tax compliance that there is no gender effect on tax compliance.

The research was carried out tests using Scatter plot heteroscedasticity. In the results shown, there is no clear pattern and dots spread above and below the number 0 on the Y axis, it can be concluded not happen heteroscedasticity.

Conclusion

This study aims to investigate the influence of gender on tax payments. Based on the analysis and hypothesis testing, it can be concluded that gender has no influence on tax payments.

The study has limitations are as follows: First, this study is limited to companies in the Indonesia Stock Exchange in 2013 and 2014. Second, the number of relatively limited sample of only 237 companies, so the results are not significant. Future studies are expected to increase the study sample. Third, the study period was only 2 (two) years of observation, making it less able to describe a good result. Fourth, this study only uses CETR ratio for measuring the dependent variable. The control variables used only using ROA, size and leverage. Fifth, this study only produces Ha adjusted R2 of 0.024 and showed no significant results.

The research has implications include: First, for the company are the findings of research on the gender of the payment of taxes to provide benefits to the company that gender is not a major factor in terms of tax payments. Second, the academic that the findings in this study may provide benefits in the areas of science and insight for academics, especially for those who will follow the research in order to develop this study.

Finally, for investors that the results of research on the effect of gender on tax payments can provide benefits to investors. One factor that could reduce corporate profits are tax payments. The results shown are gender is not the main thing in terms of tax payments both in terms of tax evasion, aggressive tax and tax compliance. Gender of the CFO or finance director is not the main factor for investors to invest in a company.

Some things I would suggest is as follows: First, further research, we recommend adding the independent variable. Second, for the gender variable should be used as a control variable for the results of some research findings on gender mostly just used as control variables. Third, further research is expected to add to the measurement of the dependent variable that can affect the payment of corporate taxes. Finally,

further research is expected to add the period of study to get a better result.

References

- Ahmed, A. S., and S. Duellman. 2013. Managerial overconfidence and accounting conservatism. *Journal of Accounting Research*. 51(1): 1-30.
- Atkinson, S. M., S. B. Baird, and M. B. Frye. 2003. Do female mutual fund managers manage differently? *Journal of Financial Research*. 26(1): 1-18.
- Austin, C. R., and R. Wilson. 2013. Are Reputation Costs a Determinant of Tax Avoidance? Working paper, The University of Iowa.
- Barber, B. M., and T. Odean. 2001. Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*. 116(1): 261-292.
- Barua, A., L. F. Davidson, D. V. Rama, and S. Thiruvadi. 2010. CFO gender and accruals quality. *Accounting Horizons*. 24(1): 25-39.
- Bernasek, A., and S. Shwiff. 2001. Gender, risk, and retirement. *Journal of Economic Issues*. 35(2): 345-356.
- Blouin, J., C. Gleason, L. Mills, and S. Sikes. 2010. Pre-empting disclosure? Firms' decisions prior to FIN No. 48. *The Accounting Review*. 85(3): 791-815.
- Boone, J. P., I. K. Khurana, and K. K. Raman. 2013. Religiosity and tax avoidance. *The Journal of the American Taxation Association*. 35(1): 53-84.
- Brinig, M. 1995. Why Can't a Woman Be More Like a Man? Or Do Gender Differences Affect Choice? Working paper, George Mason University.
- Byrnes, J. P., D. C. Miller, and W. D. Schafer. 1999. Gender differences in risk taking: A meta-analysis. *Psychological Bulletin* 125 (3): 367-383. Catalyst. 2008. 2007 Census: Corporate Officers and Top Earners Report. New York, NY: Catalyst.
- Catalyst. 2008. 2007 Census: Corporate Officers and Top Earners Report. New York, NY: Catalyst.
- Cazier, R. A., S. O. Rego, X. Tian, and R. J. Wilson. 2009. Early Evidence on the Determinants of Unrecognized Tax Benefits. Working paper, Texas Christian University, Indiana University, The Ohio State University, and University of Oregon.
- Chen, S., X. Chen, Q. Cheng, and T. Shevlin. 2010. Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*. 95(1): 41-61.
- Crosan, R., and U. Gneezy. 2009. Gender differences in preferences. *Journal of Economic Literature*. 47(2): 448-474.

- Desai, M. A., and D. Dharmapala. 2006. Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*. 79(1): 145-179.
- Desai, M. A., and D. Dharmapala. 2009. Corporate tax avoidance and firm value. *The Review of Economics and Statistics*. 91(3): 537-546.
- Desai, H., C. E. Hogan, and M. S. Wilkins. 2006. The reputational penalty for aggressive accounting: Earnings restatements and management turnover. *The Accounting Review*. 81(1): 83-112.
- Dwyer, P. D., J. H. Gilkeson, and J. A. List. 2002. Gender differences in revealed risk taking: Evidence from mutual fund investors. *Economics Letters*. 76(2): 151-158.
- Dyregang, S., M. Hanlon, and E. L. Maydew. 2008. Long-run corporate tax avoidance. *The Accounting Review*. 83(1): 61-82.
- Dyregang, S. D., M. Hanlon, and E. L. Maydew. 2010. The effects of executives on corporate tax avoidance. *The Accounting Review*. 85(4): 1163-1189.
- Eckel, C. C., and P. J. Grossman. 2004. Men, women, and risk aversion: Experimental evidence.
- Handbook of Experimental Results, edited by Plott, C., and V. Smith. New York, NY: Elsevier.
- Financial Accounting Standards Board (FASB). 1975. Accounting for Contingencies. Statement of Financial Accounting Standards (SFAS) No. 5. Norwalk, CT: FASB.
- Financial Accounting Standards Board (FASB). 1992. Accounting for Income Taxes. Statement of Financial Accounting Standards (SFAS) No. 109. Norwalk, CT: FASB.
- Financial Accounting Standards Board (FASB). 2006. Accounting for Uncertainty in Income Taxes-an Interpretation of FASB Statement No. 109. FASB Interpretation No. 48. Norwalk, CT: FASB.
- Francis, B., I. Hasan, and Q. Wu. 2013. The impact of CFO gender on bank loan contracting. *Journal of Accounting Auditing and Finance*. 28(1): 53-78.
- Francis, B., I. Hasan, J. C. Park, and Q. Wu. 2014. Gender differences in financial reporting decision making: Evidence from accounting conservatism. *Contemporary Accounting Research* (forthcoming).
- Frank, M. M., L. J. Lynch, and S. O. Rego. 2009. Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review*. 84(2): 467-496.