eISSN 2414-9497 *Journal of Tax Reform. 2024;10(1):149–161*

Original Paper

https://doi.org/10.15826/jtr.2024.10.1.162

CEO Characteristics and Tax Aggressiveness in Indonesian Family Firms: The Upper Echelons Theory Perspective

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ABSTRACT

Tax aggressiveness is an effort that companies can undertake to save on tax payments. One of the factors driving why tax aggressiveness is pursued is the presence of CEO. This study emphasizes the characteristics of CEO. Therefore, this study aims to analyze the effect of CEO characteristics on tax aggressiveness based on the upper echelon's theory perspective. CEO characteristics are divided into CEO tenure, educational background, and gender. CEO tenure in this study is proxied by how long someone has held the position of CEO, while educational background and gender are proxied using dummy variables. The choice of profitability is because profit is used as the main basis in tax calculation. The sampling technique used was purposive sampling, with an observation period of 2019–2022 in the seventy family firms listed on the Indonesia Stock Exchange (IDX). The data used is panel data and analyzed employing the EViews program. The model estimation tests feasible to use was the fixed effect model (FEM). The regression results show that CEO tenure, educational background, and gender partially and simultaneously affected tax aggressiveness. The study results generally indicate that family-owned companies tend to utilize more tax aggressiveness. At the same time, the level of education of the general director has a negative effect on tax aggressiveness, i.e. the higher the level of education, the less tax aggressiveness. The gender asymmetry is that women as family business leaders demonstrate greater tax aggressiveness than male leaders. Therefore, the benefit of this research from the government's perspective is to formulate policies to reduce efforts of tax aggressiveness, especially for companies predominantly owned by families.

KEYWORDS

CEO tenure, CEO educational background, CEO gender, tax aggressiveness, family firms

JEL E21, H26, H71

УДК 336.228

Характеристики генерального директора и налоговая агрессивность в индонезийских семейных фирмах: применение теории высших эшелонов

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АННОТАЦИЯ

Налоговая агрессивность – это усилия, которые компании могут предпринять, чтобы сэкономить на налоговых платежах. Одним из факторов, обуславливающих налоговую агрессивность, является наличие генерального директора. В данном исследовании особое внимание уделяется характеристикам генерального директора. Исследование направлено на анализ влияния характеристик генерального директора на налоговую агрессивность с точки зрения теории верхнего эшелона. Характеристики генерального директора подразделяются на срок пребывания в должности, образование и пол. Срок пребывания в должности генерального директора в этом исследовании определяется тем, как долго кто-то занимал должность генерального директора, в то время как образование и пол определяются с помощью фиктивных переменных. В дополнение к этим трем измерениям, в исследовании также использовалась рентабельность в качестве контрольной переменной. Выбор рентабельности обусловлен тем, что прибыль используется в качестве основного показателя при расчете налога. Нами использовалась целенаправленная выборка с периодом наблюдения 2019–2022 гг. в 70 семейных фирмах, котирующихся на Индонезийской фондовой бирже (IDX). Используемые данные являются панельными данными и анализируются с помощью программы EViews. В качестве критерия оценки модели использовать модель с фиксированным эффектом (МКЭ). Результаты регрессионного анализа показывают, что срок пребывания в должности генерального директора, образование и пол частично и одновременно влияли на налоговую агрессивность. Результаты исследования в целом свидетельствуют о том, что семейные компании, как правило, используют более агрессивную налоговую политику. При этом уровень образования генерального директора отрицательно сказывается на налоговой агрессивности, т.е. чем выше уровень образования тем меньше налоговая агрессивность. Гендерная асимметрия состоит в том, что женщины в качестве руководителей семейного бизнеса демонстрируют большую налоговую агрессивность, чем мужчины-руководители. Таким образом, польза от этого исследования с точки зрения правительства заключается в том, чтобы сформулировать политику по снижению агрессивности налогообложения, особенно для компаний, преимущественно принадлежащих семьям.

КЛЮЧЕВЫЕ СЛОВА

срок пребывания в должности генерального директора, образование генерального директора, пол генерального директора, налоговая агрессивность, семейные фирмы

1. Introduction

Tax aggressiveness is one of the efforts made to minimize the tax burden owed by the company. Frank et al. [1] identify tax aggressiveness as taxable income manipulation. It is conducted through tax planning, both tax avoidance and tax evasion. Tax aggressiveness needs to be considered because company policies can directly impact people's welfare [2].

On the other hand, based on the Family Business Survey conducted by PWC in 2021, it was proven that 72% of businesses in Indonesia were family businesses. PCW also revealed that the sector with the highest distribution (50%) was manufacturing. The role of the family in business and management was 87%, and 47% of CEOs were the family members of the company owner; it could also be known that the third generation led 33% of firms. The components of the director's board were more dominant from the family, as indicated by 52%, where the rest were people from outside the family.

Martinez & Ramalho [3], Steijvers & Niskanen [4] and Chen et al. [5] mentioned that family firms have a lower effective tax rate than non-family firms. In addition, they also have a positive correlation with book-tax differences. It signifies that family firms are more aggressive in tax aggressiveness [6].

The criteria determining that a business is a family business include the percentage of ownership, voting control, power over the direction of strategy determination, hereditary family involvement, and active family members in management [7].

This tax aggressiveness research looks from the perspective of the CEO's role. Why the CEO? In this regard, the CEO as the holder of strategic control has a vital role in tax aggressiveness [8; 9]. Managerial style and characteristics also influence managers in creating company value. Therefore, the CEO characteristics play a role in creating company value [10].

In family firms, CEOs who tend to be bolder in tax aggressiveness are influenced by demographic characteristics. Tenure is one of the factors in this CEO demographic. In this case, the upper echelons theory states that CEO tenure is a characteristic that will influence the CEO in decision-making as a company outcome.

Cheng & Zheng [11] found a positive relationship between tenure and CEO's risk-taking character. Risk-taking will affect the courage to make decisions, including in the tax sector.

Goldman et al. [12] stated that CEO tenure had a positive effect on tax planning, where the longer a person serves as CEO, the higher the level of tax aggressiveness. Their research results differ from Aliani [13], who asserted that CEO tenure did not affect tax planning.

Besides tenure, another demographic characteristic influencing tax aggressiveness is educational background. In general, education is the foremost criterion in placing a person in a position. The higher the level of available positions, the higher the educational level required. The CEO's educational background had a positive effect on CEO recruitment; the higher the educational level of the CEO, the higher the probability of being recruited [14]. Aliani [13] and Farag & Mallin [15] proved a positive relationship between CEO's higher education and corporate risk-taking. The CEO's educational background also affected his company's tax planning, especially if the CEO had a tax education background.

Another demographic characteristic that deserves to be analyzed whether this factor influences the CEOs' tax aggressiveness in family firms is gender. Aliani & Zarai [16], Charness & Gneezy [17], and Ho et al. [18] explained that CEO gender plays a role in risky financial decision making, and male CEOs tend to be more daring in tax aggressiveness. CEO gender and conservatism in accounting are mutually associated, and this relationship becomes more substantial when companies experience disputes and high risk in decision making. Based on the phenomenon of family firms and the research gap above, this study aims to prove whether the demographic characteristics of CEOs affect tax aggressiveness.

This paper aims to analyze the effect demographic CEO on tax aggressiveness in Indonesian family firms based on the upper echelon's theory perspective.

Research hypotheses:

H1: CEO tenure has a significant effect on tax aggressiveness.

H2: Educational background of CEO has a significant effect on tax aggressiveness.

H3: CEO gender has a significant effect on tax aggressiveness.

In the next section, we will present a literature review that explains the theory used and the hypotheses we built. Next is the research method describing the population, sample, data collection techniques, variables, and data analysis techniques. The following section is the results and discussion, then closes with conclusions on the research results.

2. Literature Review

2.1. Upper Echelons Theory

Hambrick & Mason [10] put forward the upper echelons theory, explaining a company's outcome. Organizational outcomes and organizational strategies reflect the self-values of individuals who have power in the organization. Upper echelons theory presents a model related to how the role of top-level management characteristics creates organizational outcomes. The main emphasis in this theory is managerial characteristics. Managerial characteristics are indicators inherent in a manager. The top-level management characteristics are divided into two: psychological and observable. Psychological consists of basic cognitive properties and values.

Dyreng et al. [8] showed that observable characteristics comprise age, tenure in the organization, functional background, education, socioeconomic origin, and financial position. These psychological and observable demographic characteristics will be input for a CEO in making policies for the company so that the policy is an outcome of the CEO's demographic characteristics.

Charness & Gneezy [17] showed that tax aggressiveness is a manifestation of tax management, which basically tries to minimize the tax burden, both legally and illegally.

Ho et al. [18] showed that tax aggressiveness reflects the company's aggressiveness in minimizing the tax burden. Tax minimization can be done through the tax planning process.

Tax planning according to Oktaviani et al. [19] is one of the stages in minimizing the tax burden as a form of tax aggressiveness. Tax planning is a series of plans in managing the recording of company transactions, the end of which is the financial statements.

The accounting arrangements at the tax planning stage are legal manipulations without violating the applicable tax rules [1].

The relationship between CEO demographic characteristics and tax aggressiveness from the perspective of upper echelons theory is reflected in Figure 1.

2.2. The Effect of CEO Tenure on Tax Aggressiveness

Aliani [13] showed that tenure is also one of the factors that influence the character of a CEO himself. Tenure is the period for how long the person has served as CEO. As time goes by, one's life experience, both in terms of profession and other aspects of life, will undoubtedly increase; the same goes for a CEO. The longer a person serves as a CEO, the more experienced he will be in carrying out the duties of a CEO, both in management and other aspects of the company, that is his responsibility. Thus, the longer a person serves as CEO, the more courageous he will be in making financial decisions.

Wicaksono & Oktaviani [20] showed that CEO tenure can be seen from how long a person occupies a position as CEO in the company he leads. The longer a person serves as CEO, the more courageous he will be in making financial decisions. It happens because as a person serves as CEO, the experience in decision-making and risk will also increase. The company's financial decisions include the form of company outcomes. The company's outcome reflects the top-level management characteristics. The higher the CEO tenure, the higher the level of CEO tax aggressiveness.

H1: CEO tenure has a significant effect on tax aggressiveness.

2.3. The Effect of CEO Educational Background on Tax Aggressiveness

Aliani [13] showed that educational background is needed to occupy a professional position. The higher the position available at a management level, the higher the educational background required. Educational background, which is a specialization of competence, is obtained through education. Positions in management require these competencies, especially for top-level management such as CEOs.

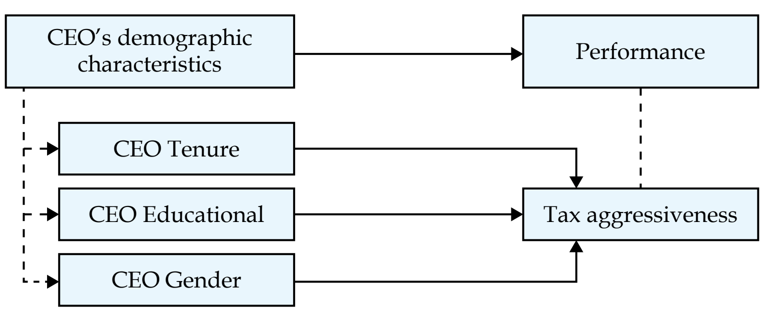

Figure 1. Framework of the relationship between CEO demographic characteristics and tax aggressiveness

Bhagat et al. [14] showed that education is a human effort to grow and develop innate physical and spiritual potentials, following the values in society and culture. The influence of educational background on a person is the driving force for development, while the main driver is the potential in the form of talents and experiences hidden in the person. To achieve this, there needs to be a learning process that will provide understanding, views, and adjustments.

Farag & Mallin [15] showed that educational background is one of the observable demographic characteristics as referred to in the upper echelon's theory. Moreover, educational background is one of the essential factors for someone to occupy a position in the company. The competence of a CEO also comes from his educational background. The higher a person's educational background, the greater the chance to occupy a CEO position. The higher the educational background of a CEO, the higher the corporate risk-taking will be. The CEO's tax aggressiveness decision is included in corporate risk-taking.

H2: Educational background of CEO has a significant effect on tax aggressiveness.

2.4. The Effect of CEO Gender on Tax Aggressiveness

Faccio et al. [21] showed that gender is an essential thing that is easy to observe. Gender brings a big difference in a person, which distinguishes between men and women. The character of risk-taking or risk-averse influences decision-making to carry out tax aggressiveness.

Aliani [13] showed that the risk-taking and risk-averse characters can be caused by differences in the fundamental qualities of individuals, namely agentic quality, and communal quality. Thus, men and women have different criteria in taking risks related to tax aggressiveness according to their characteristics.

Abele & Wojciszke [22] affirm that the two fundamental qualities are agentic and communal in social cognition. Agentic quality includes qualities in achieving tasks and goals, competence, and assertiveness, such as aggressive, ambitious, dominant, confident, and strong. Meanwhile, communal quality refers to maintaining relationships and social functions, such as helping, being friendly, sympathetic, sensitive, gentle, and maintaining ethics. These differences in nature affect the CEO's leadership style in management and risk-taking.

Ho et al. [18] and Aliani & Zarai [16] stated that companies led by female CEOs are more conservative in financial reporting and more opposed to fraud. Women are more ethical and risk averse. Male CEOs will be more risk-takers than women. It supports the idea that male CEOs will be more risk-takers in tax aggressiveness than female CEOs.

H3: CEO gender has a significant effect on tax aggressiveness.

3. Data and Methods

3.1. Research Methodology

The population of this study was family firms listed on the Indonesia Stock Exchange (IDX) for the 2019–2022 period. A company is included in the family firm category if the founder or acquirer owns 25% or more of the company rights through investment, at least one representative of a family member is involved in the company management, and the majority of "votes" are in the hands of the founder or acquirer (or spouse, parent, child, or heir).

The research sample was taken using the purposive sampling method. In purposive sampling, selecting a group of subjects is based on specific criteria with previously known population characteristics. The following criteria determined the sample in this study:

1. Companies listed on the IDX during the 2019–2022 period.
2. Companies that met the criteria as family firms according to [13].
3. Companies that experienced profit during the 2019–2022 period.
4. Companies that published annual reports and financial reports for the period 2019–2022.
5. Companies that had complete information on CEO educational background, CEO tenure, and CEO gender.

6. Companies that had a Cash Effective Tax Rate value of less than one.

The dependent variable in this study was tax aggressiveness. Tax aggressiveness is the level of aggressiveness towards taxes through the efforts made to minimize the company's tax burden. The proxy used for this research was the Cash Effective Tax Rate. The Cash Effective Tax Rate formula (1) is as follows:

$$CETR = \frac{Tax\ payment\ i\ period}{Profit\ before\ tax}.$$

This study used independent variables consisting of CEO tenure, CEO educational background, and CEO gender. The independent variable data were obtained from the annual reports of the family firms published in the CEO or president director section.

The first independent variable was CEO tenure. CEO tenure is the CEO's term of office. CEO tenure was measured by how long someone has served as CEO (number of years). The measurement of CEO tenure has also been carried out in previous studies [8].

Furthermore, educational background describes what education has taken until someone finally occupies a CEO or during his tenure as CEO. Educational background in this study was gauged using Dummy. CEO with an educational background of master's degree majoring in finance, accounting, and tax was symbolized by a value of 1. Meanwhile, for educational backgrounds other than that, it was represented by a value of 0 [13].

Another independent variable was gender. Gender is the most essential thing that distinguishes one person from another, divided into men and women. Proxy against gender used Dummy. This study developed the logic that male CEOs tend to be risk-takers compared to female CEOs. Thus, male CEOs would be assigned a score of 1, while female CEOs would be assigned a score of 0 [16; 23].

Meanwhile, the control variable is a variable that has been shown to have a relationship with the dependent variable based on previous studies carried out. The control variable used in this study was profitability. Profitability is the company's ability to generate profits [2; 24]. In this study, the measure of profitability used was Return on Assets (ROA).

3.2. Sampling of enterprises

Based on Table 1, secondary data were collected utilizing documentation techniques by downloading annual reports and annual financial reports through the website www.idx.co.id. Determination of the sample used the purposive sampling method as described in the previous section. Based on the purposive sampling results, it was found that 533 companies were listed on the Indonesia Stock Exchange (IDX). Twenty-eight companies were delisted from the IDX during the period 2019 to 2022.

In addition, 392 companies did not meet the criteria for family firms as used by Price Waterhouse Cooper in its survey to reveal family firms in Indonesia. The com-

Table 1. Purposive Sampling Results

Criteria	Total
Companies listed on the IDX in 2019	533
Companies delisted from the IDX during the period 2019 to 2022	28
Companies that did not meet the criteria for family firms as used by PWC [25] in its survey	392
Companies that suffered losses	39
Companies that did not have sufficient background information on their CEO	1
Companies that did not publish annual financial statements in a specific period	1
Companies that had a CETR value of more than one (CETR > 1)	2
Final Sample	70

panies that suffered losses were 39 companies. One company did not have sufficient information about its CEO background. One company did not publish its annual financial statements for a specific period. Lastly, two companies had more than one Cash Effective Tax Ratio > 1. Thus, the final sample for this study was 70 companies.

4. Results

4.1. Results of Descriptive Statistical Analysis

Descriptive statistics include the interpretation of the mean, minimum, maximum, and standard deviation. Descriptive statistics can be seen in Table 2. The standard deviation for each variable is lower than the mean value. This result shows the data is quite good.

4.2. Estimation Model Test

The first model estimation test is conducted through the Chow Test. The Chow Test aims to determine whether the suitable estimation model for panel data is the Common Effect Model or Fixed Effect Model.

Table 3 displays the cross-section chi-square values, indicating a probability value of 0.0000, which is less than 0.05. Therefore, the estimation model used is the Fixed Effect Model.

After determining the suitable estimation model in the first stage, the second stage Fixed Effect Model with the Hausman Test is crucial to decide whether to stick with the Fixed Effect Model or switch to the Random Effect Model.

Table 4 shows a probability value of 0.0005, indicating that the random cross-section is less than 0.05. Therefore, the estimation model used to analyze the panel data in this study is the Fixed Effect Model.

The results of the model estimation can be seen from the coefficient of determination, reflected in the R-squared value. Based on the R-squared value and the F-statistical value in Table 5, it can be stated that independent variables such as

Table 2. Descriptive Statistical Analysis

	Y_TAX AGGRESSIVENESS	X2_ EDUCATIONAL_ BACKGROUND	X1_TENURE	X3_GENDER	X4_ROA
Mean	0.22535	0.392857	10.67143	0.93214	0.06430
Median	0.23995	0.00000	8.00000	1.00000	0.04874
Maximum	0.81462	1.00000	48.00000	1.00000	0.45558
Minimum	0.00000	0.00000	1.00000	0.00000	0.00053
Std. Dev.	0.12720	0.48926	9.93848	0.25195	0.05685

Table 3. Chow Test

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	12.210457	(69,206)	0.0000
Cross-section Chi-square	455.632855	69	0.0000

Tabel 4. Hausman Test

Correlated Random Effects – Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	22.062268	5	0.0005

CEO tenure, CEO educational background, and CEO gender, and control variable profitability simultaneously affected the dependent variable tax aggressiveness with an effect of 82.1%. Therefore, it is known that independent variables outside this study gave 17.9% of the influence.

4.3. Hypothesis Test Results

The results of the panel data regression analysis conclude that the best estimation method for this study is the Fixed Effect Model. Hypothesis testing in this study is conducted based on Table 5, with details as follows:

H1: The Effect of CEO Tenure on Tax Aggressiveness.

Based on the regression results in Table 5, the t-statistical probability of the independent variable CEO tenure was 0.0306, less than 0.05 (0.0306 < 0.05). The regression results showed that CEO tenure had a significant effect on tax aggressiveness. Thus, hypothesis *H1* was accepted, and it is stated that the CEO tenure variable has been proven to influence tax aggressiveness. In addition, the regression coefficient for the CEO tenure variable was 0.006896, meaning that the regression coefficient was positive.

H2: The Effect of CEO Educational Background on Tax Aggressiveness.

Based on the regression results in Table 5, the educational background proved significant, with a t-statistic test result of 0.0036. The hypothesis *H2* states that the CEO's educational background is thought to affect tax aggressiveness. The hypothesis *H2* was accepted based on the educational background t-statistic test results of 0.0036, which was less than 0.005 (0.0036 < 0.005).

H3: The Effect of CEO Gender on Tax Aggressiveness.

The gender variable was proxied using a dummy variable, where male CEOs were assigned a value of one, whereas female CEOs were assigned zero. Based on the regression results in Table 5, the independent variable CEO gender had

Table 5. FEM Test Results

Dependent Variable: Y__CETR_
Method: Panel Least Squares
Date: 12/26/2023 Time: 16:13
Sample: 2019 2022
Periods included: 4
Cross-sections included: 70
Total panel (balanced) observations: 280

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.403047	0.072419	5.565489	0.0000
X2__EDUCATIONAL_BACK GROUND_	–0.182144	0.061896	–2.942725	0.0036
X1__TENURE_	0.006896	0.003168	2.176800	0.0306
X3__GENDER_	–0.159184	0.054412	–2.925556	0.0038
X4__ROA_	–0.487555	0.137132	–3.555367	0.0005

Effects Specification
Cross-section fixed (dummy variables)

Root MSE	0.053628	R-squared	0.821617
Mean dependent var	0.225350	Adjusted R-squared	0.758404
S.D. dependent var	0.127201	S.E. of regression	0.062522
Akaike info criterion	–2.484935	Sum squared resid	0.805257
Schwarz criterion	–1.524312	Log likelihood	421.8909
Hannan-Quinn criter.	–2.099628	F-statistic	12.99755
Durbin-Watson stat	1.844002	Prob(F-statistic)	0.000000

a t-statistic test result of 0.0038. It denotes that the CEO gender variable was significant to tax aggressiveness. An interesting finding in this study is the regression coefficient result of the gender variable, which was 0.159184.

5. Discussion

5.1. The Effect of CEO Tenure on Tax Aggressiveness

CEO tenure is the CEO's term of office, which is how long someone has served as CEO, expressed in years. This study used a sample of family firms listed on the IDX. Therefore, CEO tenure in this study measured the year someone has served as CEO of a family firm.

Previous research has also carried out the year proxy used for CEO tenure [13; 24]. The upper echelons theory proposed by Hambrick & Mason [10] explains that the policies in a company are decided by top-level management. In making policies, a manager will be influenced by the demographic characteristics that exist in him, one of which is tenure. Making tax policies takes courage to take risks because tax violations can be subject to criminal sanctions. The longer a person serves as CEO, the more courageous he will be in making financial decisions [11].

The results of this study align with previous research [12; 13; 25], which also verifies that as the term of office increases, the CEO will dare to take risks in tax planning. Chen & Zheng [11] asserted that CEO tenure had a positive effect on risk-taking; as the CEO's tenure increases, the risk-taking CEO will increase in making a decision. Increased risk-taking will make a CEO more courageous in making decisions, including in taxes. The longer a person serves as CEO, the more experienced he will be in making decisions [26]. There are many problems faced and must be decided so that the CEO can be more confident in making decisions and risk-taking with the experience he has.

The results of this study differ from Finkelstein & Hambrick [27], Duan et al. [23] and Bhagat et al. [28] that the newly elected CEO will attract public attention. At the beginning of the CEO's tenure, the level of tax aggressiveness is higher because of the efforts to show the CEO's best performance through the high profits obtained by the company by doing tax planning. Higher company profits will attract investors to invest in the company. The longer the tenure of the CEO, the higher the ETR, which indicates a reduced CEO tax aggressiveness. It contradicts the results of this study.

5.2. The Effect of CEO Educational Background on Tax Aggressiveness

Education is one of the factors considered for companies when recruiting employees [29]. Previously, the company would analyze the level of specific educational background required by a position currently needed by the company. When the recruitment process is carried out, the company then considers whether the applicant's educational background matches the criteria that the company has analyzed to fill the position. The educational background of the CEO has a positive effect on CEO recruitment. The higher the educational level of the prospective CEO, the higher the probability of being recruited [14].

The results of this study validate that the CEO educational background of a family firm affected the level of tax aggressiveness. Upper Echelons Theory reinforces this statement by [10], which states that the demographic characteristics of a top-level management influence the policies he makes for the company. Educational background is the character of a person who becomes a "ticket" for someone to occupy a position in the company, especially the CEO.

The results of the negative regression coefficient from educational background, i.e., –0.181992, would reduce the value of the dependent variable, namely tax aggressiveness. This result is consistent with Aliani & Zarai [16] and Astutik & Venusita [24] that educational background had a negative effect on tax aggressiveness. The regression coefficient results from the educational background of a CEO who had an accounting, tax, and finance background actually reduced the level of tax aggressiveness.

Their tax knowledge is, as described by Aliani [13], as follows. Educational background was measured by a dummy variable that gave the CEO a value of one for a master's degree graduate majoring in accounting, tax, and finance. CEOs who are experts in taxation will adopt a tax information system into three components: tax oversight, tax warnings, and fiscal failures. The most important thing is the last component, namely fiscal failure. CEOs who have a tax educational background will know things related to fiscal reconciliation to reduce the level of tax aggressiveness of a CEO.

5.3. The Effect of CEO Gender on Tax Aggressiveness

Gender is the essential thing that distinguishes humans into men and women. Aliani & Zarai [16], Wicaksono & Oktaviani [20], and Abele&Wojciszke [22] state two fundamental qualities in social cognition. Agentic quality is described by tendencies to be dominant, confident, aggressive, ambitious, and assertive. Second, communal quality is described as a person who is gentle, friendly, and maintains ethics. Communal quality is associated with women.

Moreover, these two fundamental traits make a difference in the leadership style of management and risk-taking [30–32]. The difference between the two fundamental human qualities makes the third hypothesis that CEO gender influences tax aggressiveness. It is because tax aggressiveness is the level of aggressiveness of the CEO in manipulating the company's tax burden. Meanwhile, company CEOs also vary by gender, both male and female. The fundamental quality of agentic quality and communal quality will affect their risk preferences.

According to Ho et al. [18] and Hoseini et al. [33] companies led by female CEOs are more conservative in financial reporting and opposed to fraud. These results imply that male CEOs are more risk-takers so that they are thought to have higher tax aggressiveness. Therefore, the gender variable in this study was measured by a dummy variable, which assigned a value of one to male CEOs.

Therefore, the hypothesis *H3* was accepted since the CEO gender variable was proven to affect tax aggressiveness. It is supported by the Upper Echelons Theory proposed by Hambrick & Mason [10], which states that demographic characteristics are divided into psychological and observable characteristics. In this case, the CEO's gender is both. Gender is something that other people can easily see in us. Meanwhile, according to Eagly et al. [30], gender brings differences in the fundamental qualities in human psychological traits, namely agentic and communal.

Thus, with the regression coefficient results, it is stated that male CEOs would reduce the level of tax aggressiveness. Undoubtedly, it is the opposite of [17; 34], which asserted that female CEOs tended to be risk-averse and men tended to be risk-takers in leading the company. Previous studies might help answer the above findings [15; 30; 35], proving that female CEOs had a significant positive impact on total risk and company-specific risk. Based on human capital and resource dependence theories, the presence of female CEOs will present different perspectives and professional experiences so that they may prefer to make riskier decisions.

6. Conclusion

Based on the results, the conclusions of this study are as follows: (1) Hypothesis *H1* was accepted by proving that CEO tenure affected tax aggressiveness; (2) Hypothesis *H2* was accepted by verifying that the CEO's educational background affected tax aggressiveness; (3) Hypothesis *H3* was accepted with CEO gender proven to influence tax aggressiveness.

However, the limitations that can be explained in this study are that the determination of the research sample, namely family firms, was only based on the company's annual report, so there may be other sources that can show that a company is a family firm, which may reveal more family firms listed on the IDX and increase the number of research samples. In addition, there are many other proxies used to measure tax aggressiveness so that by combining proxies other than CETR, it is possible to prove the insignificant relationship of variables to tax aggressiveness.

Based on the conclusions described above, the implications that can be made in this study are as follows. The current government has accommodated the CEOs' demographic characteristics of family firms, as evidenced by the research sample. Even though the average CEO had a risk-taker nature, sanctions and applicable laws and regulations could reduce the level of tax aggressiveness of CEOs in family firms.

The government needs to improve tax education for company leaders because it has been proven that educational background variables will reduce the level of CEO tax aggressiveness. Thus, the more education CEOs receive, it is possible to increase CEO awareness of tax benefits and tax sanctions, thereby increasing state revenue through taxes.

Lastly, there are still other factors that need to be analyzed and tested for their relationship to tax aggressiveness because based on the coefficient of determination results, there were still 17.8% of variables outside this study that affected tax aggressiveness.

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For citation

Oktaviani R.M., Rohman A., Zulaikha Z. CEO Characteristics and Tax Aggressiveness in Indonesian Family Firms: The Upper Echelons Theory Perspective. *Journal of Tax Reform*. 2024;10(1):149–161. https://doi.org/10.15826/jtr.2024.10.1.162

Article info

Received *December 28, 2023*; Revised *January 28, 2024*; Accepted *February 4, 2024*

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Для цитирования

Oktaviani R.M., Rohman A., Zulaikha Z. CEO Characteristics and Tax Aggressiveness in Indonesian Family Firms: The Upper Echelons Theory Perspective. *Journal of Tax Reform*. 2024;10(1):149–161. https://doi.org/10.15826/jtr.2024.10.1.162

Информация о статье

Дата поступления *28 декабря 2023 г.*; дата поступления после рецензирования *28 января 2024 г.*; дата принятия к печати *4 февраля 2024 г.*