**Analysis of tax compliance determinants using Fisher model among Semarang boarding house taxpayers**

**Fathur Rehan Abdillah** 1\* **Deden Dinar Iskandar** 2

1,2 University of Diponegoro, Semarang, 50275, Central Java, Indonesia

**Email**

fathurrehan777@gmail.com \*

**Received:** Month, Date, Year (Required) **Revised:**  **Accepted:**

**Abstract**

This study aims to analyze the determinants of tax compliance using the Fisher model on taxpayers who own boarding houses in Semarang City. The variables of this study include dependent variables in the form of tax compliance and independent variables such as age, gender, education level, income, occupation, complexity of the tax system, possibility of tax detection and sanctions, tax rates, fairness of the tax system, business community friends, social norms, ethical values, institutional perceptions, and religiosity. The research sample consisted of 100 boarding house owners selected by purposive sampling, and the data were analyzed using logistic regression. The results of this study indicate that occupation, social norms, religiosity, and business community factors have a significant positive effect on tax compliance, meaning that higher or better levels of these factors are associated with increased taxpayer compliance in paying taxes. Conversely, the complexity of the tax system has a negative effect on tax compliance, suggesting that the more complex the tax system, the less compliant taxpayers are. However, factors such as age, gender, education level, possibility of tax detection and sanctions, tax rates, fairness of the tax system, ethical values, and institutional perceptions do not significantly affect the tax compliance of boarding house owners in Semarang City. This study highlights the importance of simplifying the tax system and promoting social norms and religiosity to improve tax compliance.

**Keywords:** determinants; tax compliance; fisher model; income tax

**DOI :**

**p-ISSN :**

**e-ISSN :**

**ⓒ Copyright: BDJ Fact : Breakthrough Development Journal in Financial & Accounting (2025)**

**This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License. Site Using OJS 3 PKP Optimized.**

1. **Introduction**

The country has an important source of income from the taxation sector so that tax collection will affect the national and regional economy (Sihombing & Alestriana, 2020). The performance of a country's tax revenue can be seen through the tax ratio, which is an important indicator in assessing the extent to which the country has succeeded in collecting revenue from the tax sector compared to the size of the country's economy. According to the 2024 OECD Report, Indonesia's tax ratio in 2022 compared to Asia Pacific countries tends to be low, namely 12.1%. This ratio is still below the Asia and Pacific average (19.3%) and also below the OECD average (34.0%) (OECD, 2024).

The relatively low tax ratio in Indonesia, when compared to other countries in the Asia Pacific region, indicates structural challenges in the Indonesian tax system that need to be fixed immediately. Indonesia's tax ratio, although not as high as its neighboring countries such as Malaysia and the Philippines, is one of the main challenges in fiscal management. However, the increase in tax revenues over the past five years shows that there has been positive progress in optimizing state revenues. The following data illustrates the development of tax revenues in Indonesia over the previous five-year period.

Based on Figure 1. it can be seen that tax payments in 2019 were IDR1,332.67 trillion, reflecting a growth of 1.5%. However, in 2020, tax payments fell to IDR1,072.11 trillion, marking a decline in growth of 19.6% due to the impact of the Covid-19 pandemic. In 2021, tax payments rebounded positively, reaching tax revenues of IDR1,278.63 trillion, representing a growth of 19.3%. This upward trend continued into 2022, with tax revenues reaching IDR1,716.77 trillion and an impressive growth rate of 34.3%. In the most recent tax year (2023), tax revenues were IDR1,869.23 trillion, reflecting a growth of 8.9% (Oktaviyoni, 2024).



**Figure 1. Development of Tax Revenue in Indonesia 2019-2023**

Source: Oktaviyoni (2024)

The highest source of tax revenue throughout 2023 was from non-oil and gas income tax (PPh), amounting to IDR993.0 trillion or 101.5 percent of the target, reflecting a growth of 7.9 percent. In addition, tax revenue from value added tax and luxury goods sales tax (PPN & PPNBM) reached IDR764.3 trillion or 104.7% of the target, marking an increase of 11.2%. Land and building tax (PBB) and other levies reached IDR43.1 trillion, representing 114.4% of the projected target, marking an increase of 39.2%. In contrast, tax revenue from oil and gas PPh decreased, reaching IDR68.8 trillion and only reaching 96% of the target, which was caused by the decline in oil and gas commodity prices (Oktaviyoni, 2024).

The largest tax structures are Income Tax (PPh) and Value Added Tax (PPN). PPh is dominated by non-oil and gas PPh, which consists of Corporate PPh and Individual PPh (OP). Indonesia's corporate income tax contribution of 29% is greater than personal income tax of only 9%. In contrast to the average OECD country which has a personal income tax contribution of 24%, greater than corporate income tax of 9%. Therefore, there is the greatest potential to find breakthroughs to increase taxpayer compliance, especially in personal income tax. In this case, there are still many personal incomes tax that have not entered the tax system, especially the informal sector. The level of personal income tax compliance in 2022 is also still 83.2% so that increasing personal income tax revenue needs to be prioritized in order to increase the tax ratio if we learn from the experiences of other countries (Ginting, 2023).

The lower level of individual taxpayer compliance (PPh OP) compared to corporate taxpayers is a challenge for the tax authorities in Indonesia, so it is interesting to be used as an object of study in this study. The low level of inadequate personal tax compliance can be associated with various interrelated factors as previously studied by researchers. The study of tax compliance has developed with various theoretical approaches that try to explain the elements that influence taxpayer behavior. Most previous studies have explored tax compliance and grouped it into factors in the Fisher model which is able to provide a comprehensive framework for understanding the determinants of tax compliance which include (1) perceptions and attitudes (fairness of the tax system); (2) demographics (gender, education, and age); (3) tax system/structure (tax system, complexity of tax rates, and the possibility of penalty detection); and (4) opportunities for non-compliance (occupation, source and level of income) (Chan, Troutman, & O’Bryan, 2000); (Chau & Leung, 2009); (Lawan & Salisu, 2017).

In 2009, Chau and Leung modified and developed the Fischer tax compliance framework (Fischer Model) by adding cultural variables as new factors. These cultural variables include social norms and ethical values, which have a significant influence on tax compliance (Chau & Leung, 2009). Thus, this study will analyze predictors in tax compliance related to demographic variables, namely age, gender, and education; noncompliance opportunity variables, namely income; attitudes and perceptions, namely peer influence in the form of the environment; tax system/structure, namely in the form of institutional perception; and adding social norms and ethics value variables in the form of tax morale and religiosity.

Regarding the predictor of tax compliance in the form of age, it is known that the socialization of the older generation is different from the younger generation: social values, attitudes towards the state and towards taxes can change from one age group to another. Research on different age groups shows that socialization can take different routes (Riley, Foner, & Warner, 1988). As taxpayers age, they also gain experience with their business, with taxes and tax authorities (Nordblom & Zˇamac, 2012). Previous researchers have found that age positively affects tax compliance; in simpler terms, as taxpayers age, their compliance with the tax obligations they are responsible for is also likely to increase (Shiferaw & Tesfaye, 2020); (Irnanda, Krisnandi, & Digdowiseiso, 2004). However, there is inconsistency in the findings of other studies because they prove that age is not able to predict tax compliance (Florentina & Nugroho, 2021); (Mulyani, Budiman, & Sakinah, 2020).

In general, women are found to behave more morally than men and are less likely to break the law (Betz, O’Connell, & Shepard, 1989). This is supported by the results of an ultimatum game in which women offered a higher share of their assets to an anonymous interaction partner than men (Eckel & Grossman, 2001). The hypothesis that women are more tax compliant than men is also based on the finding that women tend to be less willing to take risks in financial decision making (Barber & Odean, 2001). Women may perceive sanctions for non-compliant behavior as more severe and threatening than men. Therefore, female taxpayers should be more tax compliant than men (Croson & Gneezy, 2009). Previous study findings show that female gender positively influences tax compliance (Peter, 2023), in other words, female gender is more aware of tax payments than male gender (Idowu, Oluwatoyin, & Nguavese, 2020). However, there is inconsistency in the findings of other studies which state that gender is not able to predict the level of tax compliance (Paleka, Karanović, & Štambuk, 2023); (Vincent, Stevenson, & Owolabi, 2023).

Low levels of education are associated with low tax compliance (Bobek, Roberts, & Sweeney, 2007). However, it was also found that high tax complexity, thus, limited understanding of one's tax obligations and high insecurity, encourage compliance (Kirchler, 2007). The findings of previous studies that education positively influences tax compliance; in simpler terms, as the level of education of taxpayers increases, it will increase compliance with tax payments that are their obligations (Ogoun & Ekpulu, 2020); (Indrati & Marceggiani, 2023). However, there is inconsistency in the findings of studies conducted by previous researchers which state that education is not able to predict tax compliance (Alamien, Mulyono, Astuti, & Suswati, 2023); (Susanti, Susilowibowo & Hardini, 2020). High income is associated with low compliance. People with high incomes pay taxes absolutely and relatively higher than people with low incomes and are at risk of higher fines if detected to be evading taxes which should result in risk avoidance (Ahmed & Braithwaite, 2004; Chung & Trivedi, 2003). The findings of the study conducted by Twum, et al., (2020) and Remali, et al., (2020) show that income positively affects tax compliance, in other words, the higher the level of taxpayer income, the greater the compliance of tax payments that are their obligations. However, there is inconsistency in the findings of the study conducted by Bhagaskara, et al., (2023) and Dewi, et al., (2022) which states that income is not able to be a predictor of tax compliance.

Social norms operate as implicit guidelines and criteria that individuals in a group recognize as limits and parameters for social behavior when law enforcement is absent. Feelings of guilt arise when an individual recognizes that their actions are irresponsible and violate social rules and norms. When people believe that others are honest, their likelihood of paying taxes generally increases. The findings of studies conducted by Hikmah, et al., (2021) and Alhempi, et al., (2020) show that the environment positively influences tax compliance, in other words, if taxpayers are surrounded by a positive social environment for tax awareness and have subjective norms for awareness, it will increase their tax payment compliance which is their obligation. However, there is inconsistency in the findings of studies conducted by Primasari (2022) and Primasari & Mutmainah (2022) which state that the environment is not able to predict tax compliance. Institutional perception is a predictor of tax compliance.

The importance of institutional factors in improving tax morale. An unfair tax system can increase the tendency to justify dishonest actions (Torgler, 2003). The findings of studies conducted by previous researchers that institutional perception has a positive effect on tax compliance, in other words, the better the institutional perception, the more it will increase compliance with tax payments that are its obligations (Hassan, Naeem, & Gulzar, 2021); (Batool, Hasan, & Kousar, 2022). However, there is inconsistency in the findings of previous studies which state that institutional perception is not able to be a predictor of tax compliance (Masunga, Mapesa, & Nyalle, 2020); (Fossung & Warah, 2022).

The next predictor in tax compliance is tax morale. The self-assessment system in reality relies heavily on taxpayers to assess themselves and be responsible for their own tax reporting. However, taxpayers tend to avoid taxes because of negative perceptions of the fairness and equality of the system (Thuc, 2013). The findings of previous studies by researchers stated that tax morale has a positive effect on tax compliance, in other words, if taxpayers have basic non-economic motivations as a mechanism for tax compliance, it will further increase tax compliance which is their obligation (Jusoh, Mansor, Razak, & Noor, 2021); (Hardika, Wicaksana, & Subratha, 2020). However, there is inconsistency in the findings of previous studies that tax morale is unable to be a predictor of tax compliance (Prastiwi, 2021); (Sudarmayasa, Partika, & Sarjana, 2022).

The last predictor in influencing tax compliance in this study is religiosity. Religion serves as an important foundation for community cohesion and prevention of deviant behavior, including tax evasion (Tittle, 1980). The findings of previous studies show that religiosity positively influences tax compliance, which will further increase tax compliance which is their obligation (Hidayat, Utama, Nimran, & Prasetya, 2023); (Agbetunde, Raimi, & Akinriola, 2021). However, there is inconsistency in the findings of previous studies which found that religiosity is not able to predict tax compliance (Ogiedu, 2020); (Utama, Nimran, Hidayat, & Prasetya, 2022)

Based on the literature review, the findings of previous studies show inconsistencies regarding the predictors that can influence tax compliance through the Fisher Model. On this basis, this study will conduct a theoretical justification regarding the predictors that can influence tax compliance of individual taxpayers (PPh OP) against the research object in the form of boarding house businesses in Semarang City.

Based on Table 1, it can be seen that the number of boarding houses in Semarang City continues to experience significant changes from 2018 to 2022, with fluctuations in tax revenues. In 2018, there were 205 boarding houses recorded which contributed tax revenues of IDR 774,664,379, while in 2022, there was a significant spike, with the number of boarding houses jumping to 673 units and tax revenues increasing sharply by 51% to reach IDR 1,273,413,696. These data show that although there are fluctuations in tax revenues, the increase in the number of boarding houses is an important factor in influencing the potential for tax revenues in Semarang City.

**Table 1. Tax Revenue Data from Boarding House Businesses in Semarang City 2018-2022**

|  |  |  |  |
| --- | --- | --- | --- |
| **Tahun** | **Jumlah Unit Kos** | **Penerimaan Pajak** | **Peningkatan/Penurunan** |
| 2018 | 205 unit kos | Rp774.664.379 | - |
| 2019 | 355 unit kos | Rp1.103.901.774 | 43%. |
| 2020 | 386 unit kos | Rp850.889.100, | -23% |
| 2021 | 398 unit kos | Rp843.631.467 | -1% |
| 2022 | 673 unit kos | Rp1.273.413.696 | 51% |

Source: Nurhidayah (2022)

Taxes on boarding houses have significant potential to generate income for the Semarang City Government. This potential can be seen from the number of universities located in Semarang City, which attracts the attention of enthusiasts not only from within Central Java, but also from various other regions. Most of the students studying in Semarang City come from outside Semarang City so they need accommodation (boarding houses). This is what causes the demand for housing, especially boarding houses, to increase. This surge in demand then encouraged the development of housing initiatives in various areas of Semarang City such as Tembalang, Ngaliyan, Gunungpati, Kaligawe, Sampangan, Central Semarang, and South Semarang which are strategic locations due to the presence of these universities. In addition to educational factors, the demand for housing is also influenced by economic factors, especially related to job opportunities, both in the industrial zone of Semarang City and in various formal and informal work sectors. However, the potential for tax revenue from boarding houses in Semarang City is closed because boarding houses are no longer one of the objects of hotel tax as regulated in Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (HKPD) and Semarang City Regulation No. 10 of 2023 concerning Regional Taxes and Regional Retributions.

With the enactment of this legislation, boarding house owners will only be subject to income tax (PPh OP) based on the final rental income. This is outlined in Government Regulation Number 34 of 2017 Article 2, which stipulates that income obtained from renting land and/or buildings, either in part or in whole, received or obtained by individuals or entities is liable for final Income Tax. The imposition of Income Tax for boarding house business owners (PPh OP) follows the provisions of Article 60 of Government Regulation Number 55 of 2022 concerning Adjustments to Regulations in the Income Tax Sector, which states that the final type of Income Tax (PPh) is applied to boarding house owners who are registered as Individual Taxpayers and have a gross turnover of not more than IDR 4.8 billion in one tax year, which is assessed at a rate of 0.5%. However, if the boarding house owner's annual gross income falls below IDR 500 million, then income tax will not be imposed, thus further narrowing the efforts of the Semarang City government to increase revenue from the income tax (PPh) side.

Based on the phenomenon of the elimination of boarding houses as a regional tax object in 2024 so that boarding house owners are only subject to personal income tax (PPh OP) and the inconsistent findings of previous studies, it is important to conduct this study to examine the factors that influence tax compliance of boarding house owners in Semarang using the Fisher model and a modification of the Chau & Leung model. Determinants of tax compliance include demographic factors (age, gender and education); opportunity factors for non-compliance (income and occupation); tax system factors (complexity of the tax system, possibility of detection and tax sanctions and tax rates); behavioral and perception factors (fairness of the tax system and peer influence); and cultural factors (social norms and ethical values).

1. **Research Design and Method**

The research method is quantitative with the dependent variable being tax compliance and the independent variables being age, gender, education level, income, occupation, complexity of the tax system, possibility of tax detection and sanctions, tax rates, fairness of the tax system, business community friends, social norms, ethical values, institutional perceptions and religiosity. The population in this study were boarding house owners in Semarang City with a sample of 100 boarding house owners taken by purposive sampling, namely a sample selection method based on certain characteristics possessed by the respondents. The characteristics of the respondents in this study are: 1) boarding house owners who have boarding houses in the Semarang City area (Tembalang District; Gunungpati District; Ngalian District; Genuk District and Pedurungan District which are the centers of boarding houses for students and workers); 2) classification of boarding houses with more than 10 (ten) rooms; 3) boarding houses have been established for at least 2 (two) years; 4) have reports of boarding house income and expenses both monthly and annually; and, 5) are boarding houses with a price range of more than IDR 1,000,000.00 (one million rupiah).

The data used are primary data obtained by distributing questionnaires to research respondents. Logistic regression analysis in this study was carried out with the help of the STATA software program version 17. Logistic regression functions as a regression model designed to examine studies in which the dependent variable is binary or dichotomous, which reflects the probability of two outcomes ranging between 0 and 1 (Gujarati & Porter, 2015). The logistic regression equation model used in this study is as follows:

$$Log it=In\left(\frac{p}{1-p}\right)=B0+B1X1+…+BpXp+e$$

p denotes the logistic probability derived from the logistic regression probability equation. The equation is described as follows:

$$p=\frac{1}{1+e^{-(B0+B1X1+…+BpXp)}}$$

Information:

p = probability of tax compliance 1-p = probability of non-tax compliance

B0 = Constant

B = Variable Coefficient

Y = Tax Compliance

X1 = Age

X2 = Gender

X3 = Education Level

X4 = Income

X5 = Occupation

X6 = Complexity of Tax System

X7 = Probability of Tax Detection and Sanctions

X8 = Tax Rate

X9 = Fairness of Tax System

X10 = Business Community Friends

X11 = Social Norm

X12 = Etical Value

X13 = Institutional Perception X14 = Religiosity

e = Error

1. **Results and Discussion**

***Statistical Result***

Data analysis in this study uses regression analysis with Stata 17, but before conducting hypothesis testing, prerequisite tests must be carried out to ensure that the data meets the basic assumptions of the selected statistical analysis, namely in the form of a model feasibility test (Hosmer and Lemeshow's Goodness of Fit test) and coefficient of determination (pseudo r square).

**Table 2. Hosmer and Lemeshow Test**

|  |  |
| --- | --- |
| **Number of Observasi** | 100 |
| **Hosmer and Lemeshow chi2 (8)** | 5.00 |
| **Prob > chi2** | 0.7577 |

Source: Data Processing Results with Stata 17, 2024

The results of the model feasibility test (Table 2) show a chi-square probability of 0.7577 > 0.05. It can be concluded that H0 is accepted and H1 is rejected or no difference (fit) is found in the observation data in this study, so it can be said that the regression model is suitable for use in this study.

**Table 3. Coefficient of Determination Test (Pseudo R-square)**

|  |  |
| --- | --- |
| **Pseudo R-square** | 0.2605 |

Source: Data Processing Results with Stata 17, 2024

Table 3 shows the Pseudo R-square value of 0.2605 or 26.05% of the independent variables can explain the dependent variable, namely tax compliance, and the other 73.95% is explained by other variables not included in the model.

**Table 4. Partial Test Result**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **y** | **Coefficient** | **Std. Err.** | **z** | **P >│z│** | **[95% conf.** | **Interval]** |
| x1 | .2036436 | .2223934 | 0.92 | 0.360 | -.2322394 | .6395266 |
| x2 | -.4248664 | .3161804 | -1.34 | 0.179 | -1.044.569 | .1948358 |
| x3 | .5103455 | .3636401 | 1.40 | 0.160 | -.202376 | 1.223.067 |
| x4 | .1572932 | .1851312 | 0.85 | 0.396 | -.2055572 | .5201437 |
| x5 | -.5872361 | .2574927 | -2.28 | 0.023 | -1.091.912 | -.0825598 |
| x6 | -.1474012 | .0702059 | -2.10 | 0.036 | -.2850022 | -.0098002 |
| x7 | .0794465 | .0468841 | 0,089583333 | 0.090 | -.0124447 | .1713376 |
| x8 | -.009161 | .0509664 | -0.18 | 0,595138889 | -.1090534 | .0907313 |
| x9 | .0501908 | .0557022 | 0,0625 | 0,255555556 | -.0589835 | .1593652 |
| x10 | .3272128 | .1063631 | 03.08 | 0.002 | .118745 | .5356806 |
| x11 | -.1629182 | .0692097 | -2.35 | 0.019 | -.2985667 | -.0272698 |
| x12 | -.0031737 | .0501463 | -0.06 | 0,659722222 | -.1014587 | .0951113 |
| x13 | -.0108792 | .0230723 | -0.47 | 0,442361111 | -.0561001 | .0343417 |
| x14 | -.0933379 | .0362893 | -2.57 | 0.010 | -.1644636 | -.0222122 |
| \_cons | 1.600.071 | 2.223.542 | 0,05 | 0,327777778 | -2.757.991 | 5.958.134 |

Source: Data Processing Results with Stata 17, 2024

Based on Table 4, the partial test results can be explained as follows. The age variable (X1) statistically shows a z value of 0.92 and a significance of 0.360 > 0.05. These results indicate that age does not affect the tax compliance of boarding house owners in Semarang City so that Ha1 in this study is rejected.

The gender variable (X2) statistically shows a z value of -1.34 and a significance of 0.179 > 0.05. These results indicate that gender does not affect the tax compliance of boarding house owners in Semarang City so that Ha2 in this study is rejected.

The education level variable (X3) statistically shows a z value of 1.40 and a significance of 0.160 > 0.05. These results indicate that education level does not affect the tax compliance of boarding house owners in Semarang City so that Ha3 in this study is rejected.

The income variable (X4) statistically shows a z value of 0.85 and a significance of 0.396 > 0.05. These results indicate that income does not affect tax compliance of boarding house owners in Semarang City, so Ha4 in this study is rejected.

The employment variable (X5) statistically shows a z value of -2.28 and a significance of 0.023 <0.05. These results indicate that employment has a significant negative effect on tax compliance of boarding house owners in Semarang City, so Ha5 in this study is accepted.

The tax system complexity variable (X6) statistically shows a z value of -2.10 and a significance of 0.036 <0.05. These results indicate that the complexity of the tax system has a significant negative effect on tax compliance of boarding house owners in Semarang City, so Ha6 in this study is accepted.

The variable of the possibility of detection and tax sanctions (X7) statistically shows a z value of 1.69 and a significance of 0.090> 0.05. These results indicate that the possibility of detection and tax sanctions does not affect tax compliance of boarding house owners in Semarang City, so Ha7 in this study is rejected.

The tax rate variable (X8) statistically shows a z value of -0.18 and a significance of 0.857 > 0.05. These results indicate that the tax rate does not affect the tax compliance of boarding house owners in Semarang City so that Ha8 in this study is rejected.

The tax system fairness variable (X9) statistically shows a z value of 0.90 and a significance of 0.368 > 0.05. These results indicate that the fairness of the tax system does not affect the tax compliance of boarding house owners in Semarang City so that Ha8 in this study is rejected.

The business community friends variable (X10) statistically shows a z value of 3.08 and a significance of 0.002 < 0.05. These results indicate that business community friends have a significant positive effect on the tax compliance of boarding house owners in Semarang City so that Ha10 in this study is accepted.

The social norm variable (X11) statistically shows a z value of -2.35 and a significance of 0.019 < 0.05. These results indicate that social norms have a significant negative effect on tax compliance of boarding house owners in Semarang City, so Ha11 is accepted in this study.

The ethical value variable (X12) statistically shows a z value of -0.06 and a significance of 0.950> 0.05. These results indicate that ethical value does not affect tax compliance of boarding house owners in Semarang City, so Ha12 is rejected in this study.

The institutional perception variable (X13) statistically shows a z value of -0.47 and a significance of 0.637> 0.05. These results indicate that institutional perception does not affect tax compliance of boarding house owners in Semarang City, so Ha12 is rejected in this study.

The religiosity variable (X14) statistically shows a z value of -2.57 and a significance of 0.010 <0.05. These results indicate that religiosity has a significant negative effect on tax compliance of boarding house owners in Semarang City, so Ha14 is accepted in this study.

***Discussion***

The findings of this study identified that there was no effect of age on tax compliance of boarding house owners in Semarang City. This finding indicates that the age of boarding house owners, both younger and older, does not contribute directly to determining their level of compliance with tax obligations. Thus, age level is not a key factor in shaping taxpayer compliance in this study. The absence of an effect of age on tax compliance of boarding house owners in Semarang City is in line with previous researchers who also found that taxpayer age does not affect tax compliance, especially when tax awareness and knowledge are quite evenly distributed across age groups (Florentina & Nugroho, 2021) (Mulyani et al., 2020). This implies that efforts to improve tax compliance may be more effective if directed at tax education and understanding, rather than an approach based on age categories. However, this is different from previous researchers who found that age positively affects tax compliance; in essence, as the age of taxpayers increases, the higher the compliance with tax payments that are their obligations will be (Shiferaw & Tesfaye, 2020); (Irnanda et al., 2004). Gender has no effect on tax compliance of boarding house owners in Semarang City. This finding indicates that both male and female boarding house owners have similar levels of tax compliance, with no significant differences based on gender. The absence of gender influence determines that tax compliance factors tend to be more influenced by other factors that are universal/general. In other words, the gender variable is not the main determinant in encouraging or inhibiting tax compliance for boarding house owners. Women were found to behave more morally than men and tend not to break the law. However, this study is in line with several previous studies that classified gender as unable to be a predictor of tax compliance (Paleka et al., 2023); (Vincent et al., 2023). In contrast to studies conducted by others which found that female gender has a positive effect on tax compliance, in other words, female gender is more aware of paying taxes than male gender (Idowu et al., 2020); (Peter, 2023)

Education level does not affect tax compliance of boarding house owners in Semarang City. This means that the difference in education level between boarding house owners with low education and those with higher education does not directly affect their level of compliance with tax obligations. The absence of an effect of education level on the level of compliance shows that tax understanding and awareness are not solely influenced by formal educational background. The findings of this study are in line with previous studies which found that education was not able to predict tax compliance (Alamien et al., 2023); (Susanti, Susilowibowo & Hardini, 2020). Both studies show that, although education is considered to play a role in increasing taxpayer knowledge and understanding, this does not always have an impact on their compliance in fulfilling tax obligations. Thus, this study strengthens the view that formal education is not always a determining factor in tax compliance, and other factors such as understanding tax regulations, perception of sanctions, and social awareness are more influential in encouraging the level of tax compliance. Income has no effect on tax compliance of boarding house owners in Semarang City. This means that along with the increase or decrease in the income of boarding house owners, it is not able to make them more compliant or non-compliant. This is in contrast to the classical tax theory which states that taxes reduce the amount of income available, which can be more detrimental to low-income people (Allingham & Sandmo, 1972). Based on this theory, individuals with lower incomes tend to have more difficulty paying taxes, because the taxes imposed reduce the income they receive for daily needs. However, in the context of boarding house owners in Semarang City, although there is variation in income, this does not appear to have a direct effect on their level of tax compliance. The absence of an effect of income on tax compliance is inconsistent with the theory that increases in income are generally associated with a decrease in tax compliance (Ahmed & Braithwaite, 2004); (Chung & Trivedi, 2003). Based on this theory, individuals with higher incomes are expected to have more motivation to avoid taxes through various means, because the greater the income earned, the greater the amount of tax that must be paid.

The complexity of the tax system has a negative effect on the tax compliance of boarding house owners in Semarang City. This means that the tax system that is perceived or seen as increasingly complicated and complex, directly reduces the level of tax compliance by boarding house owners. This finding is in line with previous studies that show a positive effect, because a more efficient and easier tax system allows taxpayers to understand and fulfill their tax responsibilities more easily, thereby eliminating the tendency towards non-compliance (Endrasti & Prastiwi, 2023). On the other hand, other studies state a detrimental relationship between the complexity of the tax system and the level of tax compliance. They argue that the more complex the tax system, the greater the difficulty faced by taxpayers in fulfilling their tax obligations, which can reduce the level of compliance (Farhah, Pahala, & Muliasari, 2021). The complexity of the tax system has a negative effect on the tax compliance of boarding house owners in Semarang City, meaning that the more complicated or difficult the tax procedures that boarding house owners must go through, the lower their level of compliance in fulfilling their tax obligations. A complex tax system often causes confusion, both in terms of calculating the tax to be paid and in understanding the applicable provisions and procedures. Lack of understanding or difficulty in carrying out tax administration can make boarding house owners reluctant or even late in carrying out their tax obligations. As a result, the level of tax compliance is low due to obstacles in understanding and implementing the existing tax system.

The possibility of detection and tax fines do not affect the tax compliance of boarding house owners in Semarang City. This indicates that the greater the possibility of boarding house owners being detected for tax evasion, or the higher the fine imposed, it is unable to influence their level of compliance in fulfilling tax obligations. This result is inconsistent with previous findings that avoiding paying tax obligations is normal human behavior, and the only reason why they cannot do so is when there is a possibility of being detected (Lawan & Salisu, 2017).

In this context, although there is a potential risk of detection or fines, it is not enough to affect the tax compliance behavior of boarding house owners in Semarang. One possible reason is ignorance or lack of understanding of the importance of tax compliance, or perhaps the perception that the risk of detection is very small, so they feel they do not need to worry about sanctions. Thus, these findings suggest that other factors, such as the complexity of the tax system or awareness of tax obligations, may have a greater influence on tax compliance than the likelihood of detection of violations or penalties that may be imposed.

Tax rates have no effect on tax compliance of boarding house owners in Semarang City. This suggests that high and low tax rates are ineffective in influencing taxpayer compliance among boarding houses in Semarang City. Although in theory, high tax rates are often considered to influence taxpayer behavior to avoid their tax obligations, the results of this study indicate that the tax rate factor is not the main driver in determining the extent to which boarding house owners comply with their tax obligations. This may be due to several factors, such as low awareness of the importance of tax compliance, the perception that tax rates are not too burdensome, or even the lack of clarity regarding the use of tax funds collected. Boarding house owners may be more focused on managing their boarding house business and do not feel burdened by the existing tax rates, so that it does not affect their level of compliance.

The absence of an effect of tax rates in this study is inconsistent with the theory that states that the third main construct of the tax system/structure in the Fischer model is the tax rate. A taxpayer who perceives a high tax rate tends to have a greater motivation to be aggressive in tax reporting. This is especially true if the taxpayer is faced with a progressive tax system, where the tax rate increases with high income. In this condition, taxpayers may feel that they must find ways to reduce their tax obligations, which can encourage tax avoidance behavior. Conversely, taxpayers who perceive their tax rates as low tend to have less motivation to report taxes aggressively, because they feel less burdened by existing tax obligations (Chau & Leung, 2009). The fairness of the tax system has no effect on the tax compliance of boarding house owners in Semarang City. This finding is inconsistent with previous studies (Darmawan & Pusposari, 2020) which show that individuals who perceive their tax contributions as unfair tend to have their motivation to act non-compliantly affected, and vice versa. Fairness is the levy imposed on taxpayers relative to the ability and benefits enjoyed by taxpayers (Sondakh, Sabijono, & Pusung, 2019). Fair tax collection involves treating individuals or organizations in the same economic position (e.g., those with the same annual income) equally, while offering varying treatment to those in different financial situations (Sondakh et al., 2019).

Business community friends have a positive effect on tax compliance of boarding house owners in Semarang City. This finding shows that the existence of social relationships or the influence of friends that are increasingly high in the business community can increase tax compliance of boarding house owners in Semarang City. This finding is certainly in line with previous researchers that taxpayers who are in a group of non-compliant peers can also become non-compliant as long as the same behavior is normal behavior and expectations in that community group (Lawan & Salisu, 2017). However, it is not in line with previous research findings that peers have a significant positive effect on tax avoidance (Al-Rahamneh & Bidin, 2022). The presence of this positive influence indicates that social interaction and support from fellow business actors in the community can encourage boarding house owners to be more compliant with their tax obligations. In a business community, boarding house owners tend to share information, experiences, and provide advice to each other on how to fulfill their tax obligations properly. This support can increase their awareness of the importance of tax compliance and provide motivation to follow applicable regulations. In addition, the existence of social pressure and norms in the community can also play a role in encouraging boarding house owners to be more responsible in fulfilling their tax obligations. A previous survey found that people who commit tax non-compliance are more likely to discuss tax issues with their colleagues (Chau & Leung, 2009). In the context of boarding house owners in Semarang City, this discussion can create mutual understanding or even a sense of togetherness in overcoming difficulties related to tax obligations. This allows boarding house owners to exchange information on how to manage taxes or even strategies to reduce their tax burden. However, such discussions can also reinforce non-compliance behavior if the information shared does not comply with applicable provisions or encourage boarding house owners to find legal loopholes to avoid taxes. However, if this discussion leads to a better understanding of tax obligations, it can have a positive impact on increasing tax compliance among members of the community.

Social norms have a negative effect on tax compliance of boarding house owners in Semarang City. This finding shows that social norms that apply in the environment around boarding house owners tend to influence their behavior in fulfilling tax obligations, but with a negative impact. This means that even though there are social norms that support tax compliance, the influence is not strong enough or even in the opposite direction to expectations, so that boarding house owners in Semarang tend to be less compliant with their tax obligations. This finding is in line with previous researchers who also found that social norms generally influence tax compliance behavior (Bobek et al., 2007). With more intensive education about the benefits of taxes and the negative impacts of tax avoidance on development, social norms can be directed to support tax compliance behavior.

Religiosity has a negative effect on tax compliance of boarding house owners in Semarang City. This finding contradicts previous studies which showed that religiosity positively affects tax compliance. In previous studies, such as those conducted by previous researchers who found that a high level of religiosity can increase moral awareness and social obligations of a taxpayer to pay taxes, thereby contributing to increased tax compliance (Hidayat et al., 2023); (Agbetunde et al., 2021). Boarding house owners in Semarang City have different views regarding tax obligations in their religious teachings, which causes them to feel no need to comply with tax regulations even though they have a high level of religiosity. This view arises because of the perception that taxes collected by the government are not always used for interests that are in line with religious values or social goals that they consider more important. Some boarding house owners may consider that zakat or other donations that are more directly directed at helping others have more spiritual value than paying taxes to the government. In addition, distrust of the tax system and management of public funds that are considered less transparent can cause them to doubt the effectiveness of using taxes in promoting social good or public welfare. This creates a mismatch between religious views and tax obligations that should be complied with as part of their civic responsibility. As a result, even though they have a high level of religiosity, this does not automatically encourage them to comply with applicable tax obligations.

1. **Conclusions**

Based on the results of the research and discussion that have been described previously, it can be concluded that work, social norms, religiosity, and peer communities have a significant positive effect on tax compliance. This means that the higher or better the work, social norms, religiosity, and peer communities, the more taxpayer compliance will increase in paying their taxes. The complexity of the tax system has a negative effect on tax compliance, meaning that the more complex the existing tax system, the less compliant taxpayers will be. However, factors such as age, gender, education level, possibility of tax detection and sanctions, tax rates, fairness of the tax system, ethical values, and institutional perceptions do not affect the tax compliance of boarding house owners in Semarang City.

**Reference**

**Serial/journal article (online with DOI):**

Agbetunde, L. A., Raimi, L., & Akinriola, O. O. (2021). Moderating influence of religiosity on the causality between taxpaying attitudes and tax compliance behaviour of entrepreneurial firms in Nigeria. *International Journal of Ethics and Systems*, 1(1), 2541–2559. <https://doi.org/10.1108/IJOES-07-2021-0152>

Ahmed, E., & Braithwaite, V. (2004). When tax collectors become collectors for child support and student loans: jeopardizing the revenue base? *Kyklos*, 57(1), 303–326. <https://doi.org/10.1111/j.0023-5962.2004.00256.x>

Al-Rahamneh, N. M., & Bidin, Z. (2022). The effect of tax fairness, peer influence, and moral obligation on sales tax evasion among Jordanian SMEs*. Journal of Risk and Financial Management*, 15(9), 1–16. <https://doi.org/10.3390/jrfm15090407>

Alamien, S. F., Mulyono, S., Astuti, R., & Suswati, E. (2023). The effects of tax education and tax supervision during the covid-19 pandemic on tax revenue through tax compliance. *International Journal of Economics Development Research*, 4(2), 925-943. <https://doi.org/10.37385/ijedr.v4i3.3316>

Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: a theoretical analysis. *Journal of Public Economics*, 1(1), 323–338. [https://doi.org/10.1016/0047-2727(72)90010-2](https://doi.org/10.1016/0047-2727%2872%2990010-2)

Barber, B. M., & Odean, T. (2001). Boys will be boys: gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, 116(1), 261–292. <https://doi.org/10.1162/003355301556400>

Batool, A., Hasan, H., & Kousar, S. (2022). Influence of tax awareness, simplicity, and knowledge on voluntary tax compliance in pakistan: the mediating and moderating role of tax fairness and social norms. *Pakistan Journal of Economic Studies*, 5(1), 53–91.

Betz, M., O’Connell, L., & Shepard, J. M. (1989). Gender differences in proclivity for unethical behavior. *Journal of Business Ethics*, 8(1), 321–324. <https://doi.org/10.1007/BF00381722>

Bobek, D. D., Roberts, R. W., & Sweeney, J. T. (2007). The social norms of tax compliance: evidence from Australia, Singapore, and the United States*. Journal of Business Ethics*, 74(1), 49–64. <https://doi.org/10.1007/s10551-006-9219-x>

Chan, C. W., Troutman, C. T., & O’Bryan, D. (2000). An expanded model of taxpayer compliance:empirical evidence from United States and Hong Kong. *Journal of International Accounting, Auditing and Taxation*, 9(2), 83–103. [https://doi.org/10.1016/S1061-9518(00)00027-6](https://doi.org/10.1016/S1061-9518%2800%2900027-6)

Chau, G., & Leung, P. (2009). A critical review of Fischer tax compliance model: A research synthesis. *Journal of Accounting and Taxation*, 1(2), 034–040. [http://dx.doi.org/10.5897%2FJAT09.021](http://dx.doi.org/10.5897/JAT09.021)

Chung, J., & Trivedi, V. (2003). The effect of friendly persuasion and gender on tax compliance behavior. *Journal of Business Ethics*, 47(1), 133–145. [https://doi.org/10.1023/A:1026004716676](https://doi.org/10.1023/A%3A1026004716676)

Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature*, 47(1), 448–474. <https://doi.org/10.1257/jel.47.2.448>

Darmawan, A. S., & Pusposari, D. (2020). Pengaruh tarif, kemudahan, dan keadilan pajak terhadap kepatuhan wajib pajak. *Jurnal Ilmiah Mahasiswa FEB*, 8(2), 1–16. Retrieved from <https://repository.ub.ac.id/id/eprint/185504/>

Eckel, C. C., & Grossman, P. J. (2001). Chivalry and solidarity in ultimatum games. *Economic Inquiry*, 39(1), 171–188. <https://doi.org/10.1111/j.1465-7295.2001.tb00059.x>

Endrasti, N. R., & Prastiwi, D. (2023). Pengaruh kompleksitas sistem perpajakan terhadap kepatuhan wajib pajak orang pribadi dengan gender sebagai variabel moderasi. *Jurnal Analisa Akuntansi Dan Perpajakan*, 7(2), 200–219. <https://doi.org/10.25139/jaap.v7i2.6579>

Farhah, S., Pahala, I., & Muliasari, I. (2021). Faktor-faktor yang mempengaruhi kepatuhan wajib pajak reklame di DKI Jakarta. *Jurnal Akuntansi, Perpajakan dan Auditing*, 2(3), 537–557. <https://doi.org/10.21009/japa.0203.04>

Fitriyani, D., Prasetyo, E., Yustien, R., & Hizazi, A. (2014). Pengaruh gender, latar belakang pekerjaan, dan tingkat pendidikan terhadap kepatuhan wajib pajak. *InFestasi*, 10(2), 115–122. Retrieved from <http://journal.trunojoyo.ac.id/infestasi/article/view/530/500>

Florentina, & Nugroho, V. (2021). Pengaruh usia, pendidikan, tingkat pendapatan, dan sanksi pajak terhadap kepatuhan wajib pajak. *Jurnal Multiparadigma Akuntansi*, 3(2), 612–619. <https://doi.org/10.24912/jpa.v3i2.11709>

Fossung, M. F., & Warah, C. N. (2022). An assessment of tax digitalisation and tax compliance relationship in Cameroon: The mediating role of behavioural intentions. *Journal of Finance and Accounting*, 10(1), 30–45. <https://doi.org/10.11648/j.jfa.20221001.14>

Ginting, A. M. (2023). Strategi meningkatkan tax ratio dengan menggali potensi pajak penghasilan orang pribadi. *In Buletin APBN* (Vol. 8). Jakarta. Retrieved from <https://berkas.dpr.go.id/pa3kn/buletin-apbn/public-file/buletin-apbn-public-187.pdf>

Gujarati, D. N., & Porter, D. C. (2015). *Dasar-Dasar Ekonometrika. In Basic Econometrics*. Jakarta: Salemba Empat.

Hardika, N. S., Wicaksana, K. A., & Subratha, I. N. (2020). The impact of tax knowledge, tax morale, tax volunteer on tax compliance. *Advances in Social Science, Education and Humanities Research*, 544(1), 1–13. <https://doi.org/10.2991/assehr.k.210424.020>

Hassan, I., Naeem, A., & Gulzar, S. (2021). Voluntary tax compliance behavior of individual taxpayers in Pakistan. *Financial Innovation*, 7(21), 1–9.

Hidayat, K., Utama, M. S., Nimran, U., & Prasetya, A. (2023). The efect of attitude and religiosity on tax compliant intention moderated by the utilization of e filing. *Journal of Financial Services Marketing*, 28(1), 712–723. <https://doi.org/10.1057/s41264-022-00171-y>

Idowu, A. S., Oluwatoyin, A. H., & Nguavese, N. M. (2020). Gender diversity and tax compliance in Lagos State. *Journal of Academic Research in Economics*, 12(2), 24–48. Retrieved from <https://www.ceeol.com/search/article-detail?id=982855>

Indrati, M., & Marceggiani, S. (2023). Kesadaran, pengetahuan, dan tingkat pendidikan terhadap kepatuhan pajak. *Jurnal E-Bis: Ekonomi Bisnis*, 7(2), 766–783. <https://doi.org/10.37339/e-bis.v7i2.1413>.

Irnanda, P. N., Krisnandi, H., & Digdowiseiso, K. (2004). Effect of age, gender, and tax rates on tax compliance (Case study at KPP Pratama Jakarta Tanah Abang Dua). *Journal of Social Science*, 5(1), 1–15. <https://doi.org/10.46799/jss.v5i1.790>

Jusoh, Y. H., Mansor, F. A., Razak, S. N., & Noor, W. N. (2021). The effects of tax knowledge, tax complexity and tax morale towards tax compliance behaviour among salaried group in Malaysia. *Advances in Business Research International Journal*, 7(2), 250–266. Retrieved from <https://ir.uitm.edu.my/id/eprint/56427/>

Kirchler, E. (2007). *The Economy Psycholocy of Tax Behavior*. Cambridge: Cambridge University Press.

Lawan, J. U., & Salisu, U. (2017). A review of Fischer tax compliance model: A proposal for Nigeria. International *Journal of Advanced Academic Research | Social & Management Sciences* |, 3(7), 2488–9849. Retrieved from [www.ijaar.org](http://www.ijaar.org)

Masunga, F. J., Mapesa, H. J., & Nyalle, M. A. (2020). Quality of e-tax system and its effect on tax compliance (Evidence from large taxpayers in Tanzania. *International Journal of Commerce and Finance*, 6(2), 145–158. Retrieved from <http://ijcf.ticaret.edu.tr/index.php/ijcf/article/view/209>

Mulyani, S., Budiman, N. A., & Sakinah, R. M. (2020). Analisis pengaruh faktor-faktor demografi terhadap kepatuhan perpajakan*. Jurnal Dinamika Ekonomi dan Bisnis*, 17(1), 9–21. <https://doi.org/10.34001/jdeb.v17i1.1080>

Nordblom, K., & Zˇamac, J. (2012). Endogenous norm formation over the life cycle-the case of tax morale. *Economic Analysis & Policy*, 42(1), 153–170. [https://doi.org/10.1016/S0313-5926(12)50017-2](https://doi.org/10.1016/S0313-5926%2812%2950017-2)

Nurhidayah, H. (2022). *Pahami Pajak untuk Bisnis Kos-Kosan*. Pajak.Com. Retrieved from <https://www.pajak.com/pajak/pahami-pajak-untuk-bisnis-kos-kosan/>

OECD. (2024). Revenue Statistics in Asia and the Pacific 2024 ─ Indonesia. Retrieved from <https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/global-taxrevenues/revenue-statistics-asia-and-pacific-indonesia.pdf>

Ogiedu, K. O. (2020). Effects of religiosity on tax compliance in Nigeria. *Singaporean Journal of Business Economics, and Management Studies (SJBEM)*, 7(2), 1–14. Retrieved from [https://singaporeanjbem.com/pdfs/SG\_VOL\_7\_(2)/6.pdf](https://singaporeanjbem.com/pdfs/SG_VOL_7_%282%29/6.pdf)

Ogoun, S., & Ekpulu, G. A. (2020). Educational level and tax compliance: empirical evidence from Nigeria. *International Journal of Accounting and Financial Reporting*, 10(1), 1–14. <https://doi.org/10.5296/ijafr.v10i1.16106>

Oktaviyoni, A. (2024). *Statistik Penerimaan Pajak Tahun 2023 dalam Angka*. Jakarta. Retrieved from <https://pajak.go.id/index.php/id/artikel/statistik-penerimaan-pajak-tahun2023-dalam-angka>

Paleka, H., Karanović, G., & Štambuk, A. (2023). The direct and moderating effect of sociodemographic variables on tax compliance behaviour. *South East European Journal of Economics and Business*, 18(2), 34–48. <https://doi.org/10.2478/jeb-2023-0017>

Peter, O. I. (2023). Gender and income tax compliance among small and medium enterprises in Uganda. *Journal of Economics and Business Aseanomics*, 8(2), 1–14. <https://doi.org/10.33476/jeba.v8i2.4119>

Prastiwi, D. (2021). Profile of tax compliance research in Indonesia. *Media Riset Akuntansi, Auditing & Informasi*, 21(2), 245–272. <http://dx.doi.org/10.25105/mraai.v21i2.9793>

Riley, M., Foner, A., & Warner, J. (1988). *Sociology of age*. In N.J. Smelser (Ed.), Handbook of sociology. Newbury Park: Sage.

Shiferaw, N., & Tesfaye, B. (2020). Determinants of voluntary rax compliance (The case category A and B taxpayers in Dire Dawa administration). *International Journal of Scientific and Research Publications*, 10(6), 1–23. <http://dx.doi.org/10.29322/IJSRP.10.06.2020.p102119>

Sihombing, S., & Alestriana, S. (2020). *Perpajakan Teori dan Aplikasi*. Bandung: Widina Bhakti Persada Bandung.

Sondakh, T. F. Y., Sabijono, H., & Pusung, R. J. (2019). Pengaruh keadilan pemungutan pajak, pemahaman perpajakan dan pelayanan aparat pajak terhadap tindakan penggelapan pajak (Studi empiris pada wajib pajak orang pribadi di KPP Pratama Manado) *Jurnal EMBA*, 7(3), 3109–3118. <https://doi.org/10.35794/emba.v7i3.24067>

Susanti, Susilowibowo, J., & Hardini, H. T. (2020). Apakah pengetahuan pajak dan tingkat pendidikan meningkatkan kepatuhan membayar pajak? *Jurnal Akuntansi Multiparadigma*, 11(2), 420–431. <https://dx.doi.org/10.21776/ub.jamal.2020.11.2.25>

Thuc, N. T. (2013). A review of factors impacting tax compliance. Open Science Repository Public Administration, (Open-Access), 1(1), 1–18. Retrieved from <https://www.ajbasweb.com/old/ajbas/2013/may/476-479.pdf>

Tittle, C. (1980). *Sanctions and Social Deviance: The Question of Deterrence*. New York: Praeger.

Utama, M. S., Nimran, U., Hidayat, K., & Prasetya, A. (2022). Effect of religiosity, perceived risk, and attitude on tax compliant intention moderated by e-filing. *International Journal of Financial Studies*, 10(8), 1–8. <https://doi.org/10.3390/ijfs10010008>

Vincent, O., Stevenson, A., & Owolabi, A. (2023). Do sociodemographic characteristics influence their tax compliance behaviour? *Journal of Economic Criminology*, 1(1), 1– 23. <https://doi.org/10.1016/j.jeconc.2023.100008>

**Thesis (online):**

Sudarmayasa, I. W., Partika, I. D., & Sarjana, I. M. (2022). *The effect of tax incentives and taxpayer morals on individual taxpayer compliance (Empirical study at the Gianyar primary tax service office)*. Repositori Politeknik Negeri Bali., 1(1), 1–23. Retrieved from <http://repository.pnb.ac.id/1993/>

Torgler, B. (2003). Tax Morale: Theory and Empirical Analysis of Tax Compliance. Disertasi. Retrieved from <https://edoc.unibas.ch/56>