




Patriarchy, economic values, and tax morale in Indonesia

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ABSTRACT

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This research aims to examine the influence of patriarchal ideology, economic values, age, gender, marital status, education level, employment status, and religion on the tax morale of Indonesian citizens. This cross-sectional research adopts a quantitative approach and utilizes World Value Survey (WVS) VII data collected in 2017. The respondents to WVS VII were 3,200 (three thousand two hundred) Indonesian citizens who were over 17 (seventeen) years old and spread across several provinces. STATA 17 processed the data and used logistic regression techniques for analysis. Researchers found that only patriarchal ideological orientation, education level, and religion had a significant impact on citizens' tax morale. Only patriarchal ideologies have a negative relationship with citizens' tax morale. Researchers recommend that the government should intensify mass education on gender justice, enhance the quality of education, and support various religious institutions, particularly Islam, to instill religious values in society.

Contribution/Originality: The study provides a new empirical finding on the negative effect of patriarchal ideology and strengthens the previous research findings on the effect of education and religious institutions on citizen's tax morale.

1. INTRODUCTION

Abstract scientific concepts such as ideological orientation, economic values, and tax morale are not directly observable. Ideology encompasses a set of values and beliefs that guide individuals or groups in various aspects of social life, including economic, political, and socio-cultural domains. In this context, economic values are integral to ideology, representing the principles and priorities that shape economic behavior and decision-making. To better understand these concepts, it's essential to delve into the nuances of ideological orientation, particularly focusing on patriarchal ideology. Patriarchal ideology is characterized by a system of values and beliefs that prioritize male dominance and authority in various spheres of life (Connell, 2020). This ideology influences economic values by shaping attitudes towards work, income distribution, and financial responsibility within a household or community. For instance, in a patriarchal society, economic values may emphasize male breadwinning roles and female economic dependency, impacting the allocation of resources and opportunities (Bittman, England, Sayer, Folbre, & Matheson, 2003; Kabeer, 2002; Ridgeway & Correll, 2016).

Economic values derived from patriarchal ideology can manifest in various ways, such as preferences for certain types of employment, investment in male-dominated industries, or the marginalization of women's economic

contributions. These values not only affect individual economic choices but also influence broader economic policies and practices, reinforcing gender disparities in economic participation and outcomes. Moreover, economic values play a crucial role in shaping tax morale. Individuals who prioritize communal welfare and social equity may view tax payments as a means to support public goods and services, thereby foster a sense of collective responsibility. Conversely, those who emphasize individual economic gain and minimal government intervention may exhibit lower tax morale, perceiving taxes as a burden rather than a contribution to the common good (Alm & Benno, 2006; Cummings, Martinez-Vazquez, McKee, & Torgler, 2009; Torgler, 2007).

The importance of this research stems from three key factors. First, Indonesian citizens' exhibits low tax morality. In 2021, of the total state budget of Rp1,743.6 trillion, tax revenue contributions reached Rp1,444.5 trillion (82.84%), non-tax state revenues reached Rp298.2 trillion (17.10%), and 0.9 trillion grants. Meanwhile, state expenditure reached Rp2,750, consisting of central government spending (Rp1,954.5) and transfers to the regions and village funds (Rp795.5 trillion). That is, there is a deficit of Rp1,006.4 (5.70% of GDP/Gross Domestic Product) (Ministry of Finance Republic of Indonesia, 2021). Although the tax contribution has reached 80 percent, the achievement is not pure due to high tax morale. Conversely, Jokowi-Ma'ruf's four-fold tax amnesty policy set him off (Hamilton-Hart & Schulze, 2016).

Second, from the perspective of patriarchal ideology, Indonesia holds a significant position. Like many countries in the world, Indonesia is considered a nation that adheres to a patriarchal ideology. The core of this ideology is a superior man than women. In fact, patriarchal ideology persists in some ethnic groups adhering to the matrilineal system, such as the *Semendo* in South Sumatra Province, the *Minangkabau* in West Sumatra Province, *Enggano* in Bengkulu Province, *Petalangan* and *Sakai* in Riau Province, *Aneuk Jamee* in Nangroe Aceh Darussalam. Patriarchal ideology is one of the big challenges for the process of empowering women in Indonesia. The Human Development Report Document 2021/2022 released shows the Gender Development Index (GDI) score of 0.941 and the Gender Inequality Index (GII) of 0.444. In comparison, Indonesia was inferior to Vietnam, which had a score of 0.296 (GII) and 1,002 (GDI), respectively (UNDP (United Nations Development Program), 2022).

Third, from the point of view of economic values, Indonesia normatively positioned itself in the middle position between the two major ideologies of the world (socialism and liberalism), which is the source of inspiration for countries to organize their economic systems. Several Jokowi-Ma'ruf policies, at the policy level, demonstrate Indonesia's middle position. The central government, for example, allows the private sector, both domestic and foreign, to manage the coal mining sector, which has been controlled by the state through state-owned enterprises. This policy reflects the ideology of liberalism, which gives a greater role to the private sector in economic life. At the same time, the government also poured a variety of social assistance schemes to protect the poor, which reflects the ideology of socialism. Tax moral researchers in Indonesia rarely reveal the extent to which state-level economic values influence citizens' economic values and shape their tax morale.

This study contributes to scientific debates on tax morale by positioning tax morale as the dependent variable. Ideological orientation, particularly patriarchal ideology and citizens' economic values serve as the independent variables. These two independent variables were chosen because they were relevant to the Indonesian situation, which was still colored by patriarchal ideology and changes in the orientation of economic values that were very dynamic at the state level. Outside of these four independent variables, researchers also include socio-demographic variables (for example, age, sex, location of residence, education level, etc.) as a control variable. This study will also contribute to understanding of the achievement of Sustainable Development Goals, especially gender equality (Goals 5), responsible consumption and production (Goals 12), as well as peace, justice, and strong institutions (Goals 16).

Scientists have extensively studied tax morale as a subject of research. As a dependent variable, the moral tax is associated with the life satisfaction of citizens (Ciziceno & Pizzuto, 2022; Erina, Martina, & Saptawan, 2024) the form of social networking of taxpayers (Di Gioacchino & Fichera, 2020) corruption practices by public officials (Erina et al., 2024; Jahnke & Weisser, 2019) citizens attitude towards ethnic diversity (Belmonte, Roberto, & Désirée, 2018),

level of taxpayer education (Rodriguez-Justicia & Theilen, 2018), age, and gender (Cyan, Koumpias, & Martinez-Vazquez, 2016). As an independent variable, tax morale are related to tax avoidance behavior (Kemme, Parikh, & Steigner, 2020) and illegal economic activity (Marè, Motroni, & Porcelli, 2020). Some researchers have explored the relationship between ideological factors, particularly political ideology (Gatchair, 2015; Lozza, Kastlunger, Tagliabue, & Kirchler, 2013) and tax compliance. However, no one has attempted to elucidate how ideology, particularly patriarchal ideology, contributes to tax compliance. Some researchers use the term gender equality (D'attoma, Volintiru, & Steinmo, 2017; Grown, 2014; Vijayarasa, 2021) as an antithesis of patriarchal ideology to explain its effect on tax compliance and not the effect on tax morale.

To fill this gap, this research attempts to answer the question, what is the effect of patriarchal ideology and economic values on the tax morale of Indonesian citizens? We also included socio-demographic attributes (age, gender, marital status, education level, employment status, and religion) as control variables in the regression model. We have divided this article into four sections to address this question. The first part will explain theoretical concept and hypothesis development. The second part outlines research methods. The third part describes the result and discussion. Finally, the fourth part contains the research conclusion.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Tax Moral

Tax morale are intrinsic motivation to pay taxes. Tax morale represent attitudes, whereas tax compliance represents behavior. The focus of the tax morale questions is directed at the question of why someone or taxpayer does not try to avoid the tax charged to them or why someone obediently pays taxes (Torgler, 2002, 2007). Tax morale are influenced by many factors such as trust in formal institutions and vertical trust (i.e., socio-political, fiscal policy, economic growth, level of corruption, development inequality, quality of democracy, immigration levels, and centralization), informal institutions and horizontal trust (i.e., culture, religion, patriotism, citizen participation, social stigma, trust among fellow citizens), personal values and socio-demographic characteristics (i.e., age, gender, marriage status, economic status, life satisfaction, classroom social, employment status, education level, moral norms, and attitudes towards diversity) (Horodnic, 2018).

2.2. Patriarchy Ideology and Tax Moral

Ideology is a system of thinking or belief that is relatively coherent and influences a variety of social, political, and economic actions inherent in certain individuals, groups, or institutions (Thompson, 2001). Patriarchy refers to the practice of men dominating, subordinating, and exploiting women in various social institutions such as families, companies, public organizations, and so on (Lerner, 1987; Walby, 1990). The patriarchal concept contains beliefs about how we explain and understand social life. In the context of the men and women's relationships, manifestations of these beliefs can include questions such as: Is sex the same as gender? Are men and women naturally different? Are men rational creatures and women emotional creatures? The patriarchal concept also contains values (what we think is good, not good, good, bad, interesting, etc.). In the context of the relationship between men and women, the value can be a statement: women who work outside are bad for the development of children, women are equivalent to men, and so on (Enloe, 2017). Due to institutionalization of this belief and value within the social system, including both social processes and institutions, patriarchy is no longer a cultural phenomenon. In the social system, both social processes and institutions, patriarchy is not a cultural phenomenon. Conversely, patriarchy is a massive, silent, and systematic structural violence against women with a variety of socio-economic and institutional contexts. Patriarchy imposes unfair and inhumane treatment on women.

Patriarchy is associated with the way society organizes authority and power (Kochurani, 2019). One form of power organization is a state or government that has the authority to design fiscal systems and policies. The government's fiscal policy is also inseparable from gender bias (more in favor of men than women). The form of

gender bias can be: (a) explicitly, for example, when there are special tax regulations that apply men and women differently; or (b) implicit, for example, a tax policy that results in a different impact for men and women. Each country's cultural norms will determine the pattern of gender bias, including the form of discrimination and the necessary change agenda (Stotsky, 1996).

The gender bias in fiscal policy serves as a gateway to understanding the impact of patriarchal ideology on tax morale. Intuitively, when fiscal policy is very gender biased, the tax morale among female taxpayers will decline and vice versa. However, how far the gender fiscal policy affects the morale of tax among male taxpayers will greatly be influenced by how far gender awareness is among male taxpayers. Tax morale among men who are gender aware (anti-patriarchal ideology) may decline when fiscal policy is gender biased. This decline must be understood as a form of social protest against gender-biased fiscal policies that are not in harmony with the preferences of citizens who want gender equality. Meanwhile, men who are unconscious of their gender and adhere to a pro-patriarchal ideology will have higher tax morale, as these gender-biased fiscal policies tend to benefit male taxpayers.

So far, several previous studies have shown differences in gender effects on citizens' tax morale. In Pakistan, young female taxpayers have high tax morale compared to young men. However, the tax morality of older women taxpayers is lower than the mandatory tax morality of older men (Cyan et al., 2016). This finding is consistent with Torgler and Valev (2010) research, which shows that women do not like tax avoidance, but is contrary to the case in Albania, which confirms the absence of gender influence on tax avoidance (Gërzhani, 2007). Meanwhile, cases in the Caribbean and Latin American countries show that although many people's culture and views are gender biased, this situation does not affect the attitude of men and women towards tax morale (Gerstenbluth, Natalia, Juan, & Maximo, 2012). This controversy became the basis for researchers to formulate the 1st hypothesis (H1) as follows: *There is a significant relationship between the patriarchal ideology and the tax morale of Indonesian citizens.*

2.3. Economic Values and Tax Moral

Several scientific disciplines interpret the term value differently. Sociology and anthropology, for example, understand the value as "everything that individuals or social groups want to achieve for certain reasons" (Thome, 2015). Every culture, society, and social system must have a collection of values that bind members, institutions, and social processes that occur in the social system. Unlike the sociology and anthropology, the discipline of economics, although still both social sciences, understands value as: (a) the level of usefulness related to the level of individual satisfaction due to consuming goods/services in a particular context; (b) total production costs incurred to produce one unit of goods/services (Blomquist, 2015).

When a set of values is bound to each other into a coherent belief system that guides thinking (descriptive or prescriptive), behaving, and acting of a person or group of people in various domains of social life (Dubois, 2015) then at that time a collection of values is transformed into ideology. Many ideologies live in society, ranging from empiricism, idealism, Marxism, post-Marxism, modernism, post-modernism, colonialism, nationalism, post-colonialism, feminism, liberalism, neo-liberalism, socialism, communism, and so on (Hawkes, 2003). Among these variants, socialism and liberalism are two major ideologies that affect many citizens around the world and the order of global society. This condition is the impact of World War II, which gave birth to a cold war between the Allied blocks led by the United States (liberalism) and the axis block led by the Soviet Union (socialism).

The core idea of liberalism is individual freedom, individual rights, limiting state power, and the crucial role of market institutions in economic life. Today, liberalism transforms into neo-liberalism, which is trying to inject market mechanisms (demand vs. supply) as a basis for regulating social interaction in all sectors of human life. Whereas socialism, especially the variants of social democracy that are widely practiced in many countries, still adopts liberal democracy, places state institutions over market institutions, and prioritizes the collective work of various components of society to achieve a better society (Schwarzmantel, 2008). The point is that liberalism emphasizes individualism and socialism emphasizes collectivism. Several studies show that people who are leaning to

individualism have high tax morale (Andriani, Randolph, Elodie, & Paulina, 2022) and some research results show the opposite (Tsakumis, Curatola, & Porcano, 2007). This controversy is the basis for researchers to formulate the 2nd hypothesis (H2): *individualism has a positive and significant effect on the tax morale of Indonesian citizens.*

2.4. Socio-Demographic Attribute and Tax Moral

This study involved six control variables that represent the socio-demographic characteristics of research respondents, namely: gender (SEX), age (AGE), marriage status (MAR), education level (EDU), employment status (EMP), and religion (REL). Researchers formulate the 3rd hypothesis (H3) and the 8th hypothesis (H8) as follows: (a) SEX has a significant and positive effect on tax moral of Indonesian citizens (H3); (b) AGE has a significant and positive effect on tax morale of Indonesian citizens (H4); (c) MAR has a significant and positive effect on tax morale of Indonesian citizens (H5); (d) EDU has a significant and positive effect on tax morale of Indonesian citizens (H6); (e) EMP has a significant and positive effect on tax morale of Indonesian citizens (H7); (f) REL has a significant and positive effect on tax morale of Indonesian citizens (H8).

3. RESEARCH METHOD

3.1. Research Design

This research uses the World Value Survey (WVS) VII collected by the World Value Survey Association (WVSA) in the 2017-2020 period representing Indonesia (Haerper et al., 2022). Despite the existence of WVS since 1981, WVS VII only includes Indonesia as a sample. It's meant that WVS VII data in Indonesia is a cross-sectional data. Until 2024, only WVS VII data is available for Indonesia.

3.2. Population and Sample

The population of WVS VII in Indonesia was the total Indonesian population in 2017: 255.108,3 people (National Development Planning Agency, Statistics-Indonesia, & United Nations Population Fund, 2008). Based on this population, WVS VII determines the sample size of 3,200 people. This sample was distributed across 20 out of the 34 provinces in Indonesia. The Central Bureau of Statistics classified villages and cities into urban and rural categories in each province. The same number of rural and urban areas were selected at each selected province. Targeted villages/cities were selected with simple random sampling from each group, i.e., the village (rural area) and cities (urban area), except for DKI Jakarta, which has no rural areas. By contrast, in Papua and West Papua provinces, where the ratio of rural to urban population was highest, the number of rural areas that were chosen was increased relative to the number of urban areas (The World Values Survey Association, 2017).

We first obtained a list of administrative areas under each village, known as *Rukun Warga* or RW, and then listed the households in each selected village or city. RWs were selected randomly (simple random). we obtained the list of households in each selected RW from the head of the RT, also known as *Rukun Tetangga* or neighborhood. The list contained the household head name, number of households, and member age (18-35, age 36-50, age 50+) by age group. Completion of the household listing at an early stage was considered an advantage since it made sample more accurate, and sample replacement was also able to be planned in advance. At the end of the listing exercise, the responsible organization obtained a sampling frame of households with members 18 years and older by age group and gender from which a sample for the village/city was drawn. We interviewed 10 respondents per primary sampling unit. We employed random sampling to select the respondent where there were multiple individuals of the same group and and gender (The World Values Survey Association, 2017).

3.3. Data Collection and Variable

Survey meter Indonesia conducted the fieldwork for the 7th wave of WVS. However, the University of Melbourne team also audited sample design, reviewed the pilot study, and attended in person the pre-fieldwork training week for

interviewers in Yogyakarta to ensure consistency and verify questionnaire validity. The survey fieldwork took place from June to August 2018. The target population consisted of Indonesian private household residents over the age of 18. A total of 3,200 individuals were interviewed. Interviews were conducted face-to-face with a laptop or tablet, in the respondent's household. A CAPI (Computer-Assisted Personal Interview) system was used. The data entry program was designed as soon as the translated survey instrument had been finalized, which gave sufficient time to test the program to be ready for the training of editors and interviewers (The World Values Survey Association, 2017).

The dependent variable in this study is the tax morale of Indonesian citizens (TAX). The study extracts TAX from the Q180 question, which asks whether fraud in tax payment can be justified or not. We asked the respondents to select a number ranging from 1 (non-justified) to 10 (very justified). The number 1 shows high tax morale, while the number 10 shows a low tax moral number. This data is then converted into binary data: 1 = high tax morale (score 1 to 5) and 0 = low tax morale (score 6 to 10).

The independent variable comprises several components. The initial variable is the orientation of the patriarchy ideology (OPI). We extract OPI data from a Likert scale question, which comprises five questions: (a) when a mother works outside the home to earn income, the children will suffer (Q28); (b) overall, men are more able to become good political leaders than women (Q29); (c) education at the university level is more important for boys than girls (Q30); (d) overall, males are better than women to become company executives in the private sector (Q31); (e) being a housewife is the same as working to get a salary (Q32). This question contains four answers: (1) strongly agree; (2) disagree; (3) agree; and (4) strongly agree. The data was converted into a binary variable containing two values: 0 = disagree (combined answers 3 and 4) and 1 = agree (combined answers 1 and 2). The reliability test was conducted by calculating the Alpha Cronbach (α) score with the provisions: $\alpha > 0.50$ = reliable and $\alpha < 0.50$ = not reliable. We conduct the validity test by examining the correlation score among the question items.

Next, we extract the variable of economic values (VEV). we extracted the data for the VEV variable from questions Q106 through Q110. Respondents were asked to choose one number among numbers 1 to 10 in each statement containing two conflicting statements: (a) income must be made evenly versus there must be a large incentive for individual efforts; (b) private sector ownership in the business and industrial sectors must be increased versus government ownership in the business and private sectors must be increased; (c) the government must be given a greater responsibility to ensure that everyone can meet their needs versus everyone must be given the responsibility to meet their own needs; (d) the competition is good versus the competition is bad; (e) in the long run, hard work will usually make life better versus hard work does not give birth to success. Success is the luck and fruit of various connections.

Referring to the question Q106, those who choose numbers 1-5 reflect the economic values that apply in the socialist country that reflect collectivism, while respondents who choose the number 6-10 are more inclined to liberalism. Guided by this provision, the Q108 will be coded in accordance with Q106, and Q107, and Q109, and Q110 will be coded in reverse code. The average respondent value of the questions Q106-Q110 will be the final value of the respondent for the VEV variable. The data is converted into a binary variable containing two values: 1 = liberalism (combination of answers 6-10) and 0 = other (combination of answers 1-5). Previously, the Likert scale reliability test will be done by calculating the Alpha Cronbach (α) score with the provisions: $\alpha > 0.70$ = reliable and $\alpha < 0.70$ = not reliable. While the validity test with the correlation score between the question items with the provisions: $r > 0.30$ = valid and $r < 0.30$ = invalid (Acock, 2014).

Third, the SEX variable is extracted from a question "What is your sex?". The data is changed to 1 = male and 0 = other. Fourth, the AGE variable extracted from the question "How old are you now?". Fifth, the MAR variable is extracted from the question, "What is your current marriage status?". This question has six answer options: (1) married; (2) living together without marriage ties; (3) divorce; (4) separated; (5) widow/widower; (6) single. Data is converted to binary data with a value of 1 = marriage (combined data 1, 2, 3, 4, and 5) and 0 = other (coded from answer 6).

Sixth, the EDU variable is extracted from the question (Q275A): “What is the last level of education you have ever completed?”. This data will be converted into binary data: 1 = higher or equal to high school/equivalent; and 0 = other. *Eighth*, employment status (EMP) is extracted from the question (Q279), “Are you currently working to get income?”. The respondent’s answer is recoded into a binary variable, where 1 = working and 0 = other. *Tenth*, religion variable (REL) is extracted from the question (Q289), “What is your religion?”. REL data converted into a binary variable: 1 = Muslim and 0 = Other.

3.4. Data Analysis

STATA 17 processes data in three stages: univariate analysis (frequency distribution), bivariate analysis (cross tabulation), and multivariate analysis (logistics regression). Bivariate test is used to filter out the independent variables that can be included in the multivariate analysis. Only the independent variables have $p < 0.25$ which will be included in the multivariate analysis (Hosmer Jr, Lemeshow, & Kokoh, 2013). The data interpretation will use the logistics regression coefficient indicator and the odds ratio (OR). After the estimate, researchers conduct a goodness-of-fit of the final model using Hosmer-Lemeshow (C) test.

4. RESULT AND DISCUSSION

4.1. Result

According to Table 1, the study’s respondents exhibit the following characteristics: Having high tax morale, pro with patriarchal ideology, tends to have economic values originating from the ideology of liberalism, aged 40 years old, Muslims, the majority educated under high school/equivalent, female, working, and married.

Table 1. Summary of bivariate analysis.

No.	Variable	Description
1.	TAX	High tax moral: 2,795 (87.40%) Other: 403 (12.60%)
2.	OPI	Pro patriarchy: 2,557 (79.96%) Other: 641 (20.04%)
3.	VEV	Liberalism: 2,519 (78.77%) Other: 679 (21.23%)
4.	AGE	Mean = 40 years old SD = 13,52 Min = 18 Max = 87
5.	REL	Muslim: 2,661 (83.21%) Other: 537 (16.79%)
6.	EDU	> High school/Equivalent: 323 (10.10%) Other: 2,875 (89.90%)
7.	SEX	Male: 1,446 (45.22%) Other: 1,752 (54.78%)
8.	EMP	Working: 2,386 (74.61%) Other: 812 (25.39%)
9.	MAR	Married: 2,453 (76.70%) Other: 745 (23.30%)

Bivariate analysis produces four independent variables that could be included in multivariate analysis. Two independent variables (OPI and EDU) have significant relationship with TAX during bivariate analysis. Two independent variables (REL and MAR) could be included in multivariate analysis due to $p < 0.25$ (Hosmer, Stanley, & Rodney, 2013). The multivariate analysis excludes four variables (SEX, EMP, VEV, and AGE) due to their lack of significant relationship with TAX.

Multivariate analysis is carried out in as many as four stages. The researcher includes the independent variable in sequence according to the amount of chi-square score (X^2). Multivariate analysis produces a final model that

contains three independent variables: OPI, EDU, and REL. The MAR variable, which is included in the logistics regression phase four, must be removed because it does not significantly affect the tax. As shown in Table 2, the final model produced by this study can explain the TAX variable of 2% (Pseudo R² = 0.0208) significantly, $p < 0.05$ (prob > chi² = 0.000). The OPI variable has a negative effect significantly, $p < 0.05$ ($P > | Z | = 0.000$), with TAX, as shown, the logistic regression coefficient number is -0.794. That is, those who are pro-patriarchy tend to have lower tax morale. An OPI value of 4.516 indicates that pro-patriarchal respondents have a possibility of 54.84% [(Odds Ratio - 1) x 100] or 4,516 times to have low. The EDU variable has a positive effect (Coef. = 0.913) and is significant ($p < 0.05$) with TAX. Those who are educated >high school/equivalent have a chance of 149% [(Odds Ratio - 1) x 100] percent or 2,493 times to have high tax morale. In addition to the EDU variable, the REL variable also has a positive effect (Coef. = 0.351) and significant ($p < 0.05$) with TAX. Muslim respondents are more likely to have high tax morale, with a probability of 42% [(odd ratio - 1) x 100] or 1,421 times higher.

Table 2. The final model of logistic regression.

Independent variable	Dependent variable: TAX	
	Coefficient	Odds ratio
OPI	-0.795*** (0.170)	4,516
EDU	0.914*** (0.257)	2,493
REL	0.352** (0.138)	1,421
Constant	2.255*** (0.186)	
Observations	3,198	

Note: Standard errors in parentheses.
*** $p < 0.01$, ** $p < 0.05$.

Goodness-of-fit test aims to see whether the regression model produced is in harmony/suitable/in accordance with existing data or not (Liu, 2016). The result of goodness-of-fit test using the Hosmer-Lemeshow test indicates that this final model is in harmony with data because $p > 0.05$ (Prob > Chi² = 0.4059). The same result, $p < 0.05$, was also shown by the likelihood ratio test. The final model containing three independent variables can predict 87.40% of TAX correctly.

4.2. Discussion

This research is focusing on two independent variables: OPI and VEV. The VEV variable is detected to not have a statistical effect with the TAX at the bivariate analysis. This finding becomes the basis for researchers to reject the 2nd hypothesis: there is a significant relationship between individualism and morale tax of Indonesian citizens. This finding is contrary to the results of previous research that indicates a significant statistical relationship between ideological orientation and tax morale (Andriani et al., 2022; Brink & Thomas, 2016; Tsakumis et al., 2007).

Besides VEV, other insignificant independent variables are MAR, SEX, EMP, and AGE. This finding becomes the basis for researchers to reject some hypotheses: *First*, there is a significant relationship between sex and tax (H3). These findings are contrary to several previous research results that indicate a significant statistical relationship between gender, both women (Alm & Benno, 2006; Daude, Hamlet, & Angel, 2013) and men (Lago-Peñas & Lago-Peñas, 2010) against tax morale. *Second*, there is a significant relationship between AGE and TAX (H4). The absence of significant statistical relationships between age and morale of tax is opposite to previous research that indicates the opposite relationship (Bilgin, 2014; Filippin, Carlo, & Eliana, 2013). *Third*, there is an important relationship between MAR and TAX (H5). The findings of researchers are opposed to previous research that showed a significant effect of marital status on tax morale (Alm & Benno, 2006; Ibrahim, Musah, & Abdul-Hanan, 2015). *Fourth*, there is a

significant relationship between EMP and TAX (H7). These findings are contrary to several previous research findings that show a significant relationship between employment status and tax morale (Alm & Benno, 2006; Filippin et al., 2013).

The OPI variable, which is the focus of this research, has a significant negative effect on tax morale. Those who are pro-patriarchy have an opportunity or possibility of 4.516 times, or 54.84%, to have low tax morale. This finding became the basis for the researcher to receive the 1st hypothesis (H1) which reads: There is a significant relationship between the patriarchal ideology and the moral tax of Indonesian citizens. This significant relationship occurs in the context of Indonesia, where, as shown by the results of univariate analysis, many respondents (79.96%) are pro-patriarchy. The attitude of this respondent indicates that Indonesian society is a patriarchal society.

Research findings regarding the significance of OPI to the moral of tax in the Indonesian patriarchal context are contrary to the results of the research of Gerstenbluth et al. (2012) in the Caribbean and Latin America, which shows that although many cultures and views are gender biased, this situation does not affect the attitude of men and women towards tax morale. In Indonesia, as shown by this research, pro-patriarchy attitudes have a significant negative effect on tax morale. Researchers suspect this is due to: (a) taxes burden the finances of pro-patriarchy groups. This financial burden can reduce their capacity to perpetuate the practices of dominance, exploitation, and subordination relations; (b) pro-patriarchy groups have low tax morale because they disagree with a variety of government fiscal policies that are trying to promote gender justice which will ultimately undermine a patriarchal system that benefits pro-patriarchy groups.

Besides OPI, two other independent variables that significantly affect the TAX are EDU and REL. This finding becomes the basis for the researcher receiving a hypothesis that reads: (a) There is a significant relationship between EDU and TAX (H6); (b) There is a significant relationship between REL and TAX (H8). These findings reinforce several previous research findings that show a significant relationship between the level of education (Bilgin, 2014; Rodriguez-Justicia & Theilen, 2018) and religious identity (Alasfour, Martin, & Roberta, 2016) against tax morale. At the same time, the study rejected the argument of Kanninen and Pääkkönen (2010) regarding the absence of statistical relations between religious identity and tax morale.

EDU has a positive effect on TAX. Those who are educated >high school/equivalent have a chance of 149% [(Odds Ratio - 1) x 100] percent, or 2.493 times, to have high tax morale. Why do those who are educated above high school/equivalent tend to have high tax morale? Researchers suspect this phenomenon is due to two factors: (a) the higher the level of education, the level of awareness of a person's citizenship tends to be better; (b) the higher the level of education, the greater the chance of a person to work in a formal sector that is familiar with various types of taxes. Practical implications, the government needs to continue to pay attention to the world of education in Indonesia, both formal, non-formal, and informal. Although the Net Enrollment Rates (NER) continue to improve in primary and secondary education, the proportion of the younger generation that continues to the level of higher education is still small, only 26.73% (NER in university) in urban areas and 15.59% (NER in university) in rural areas (Statistics Indonesia, 2022).

The REL variable also has a positive effect (Coef. = 0.351) and is significant ($p < 0.05$) with TAX. Muslims tend to have a probability of 42% [(odd ratio - 1) x 100] or 1.421 times of have high tax morale. This finding does not imply that individuals who do not practice Islam have low tax morale. There are two logical explanations that support this empirical finding. *First*, paying a tax is a manifestation of obedience to the leader (government). In Islam, obedience to the leader (*ulil amri* or *umaro*) is one of the explicit commands contained in the Alquran: “*O people who believe! Obey Allah and obey the Apostle (Muhammad) and Ulil Amri (holder of power) between you. Then, if you have different opinions about something, then return it to Allah (the Alquran) and the Apostle (His sunnah), if you believe in Allah and the day later. This is more important (for you) and better consequences.*” (QS. An-Nisa [4]: 59). *Second*, sincere (voluntary) tax principles without direct rewards align with the institutionalized practices of zakat, infaq, and alms (ZIA) payments in Islam.

5. CONCLUSION

This study mapped the effect of eight independent variables on the tax morale of Indonesian citizens. Out of the eight independent variables, we cannot include four (SEX, EMP, VEV, and AGE) in logistic regression due to their lack of significant relationship during bivariate analysis. Only four independent variables (OPI, EDU, REL, MAR) were included in logistics regression. The final logistics regression consists of three independent variables (OPI, EDU, and REL) and can explain the tax moral of Indonesian citizens by 2% significantly, $p < 0.05$. Of these three variables, two (EDU and REL) have a positive effect, and one variable (OPI) has a negative effect. Researchers received H1, H6, and H8 and rejected H2, H3, H4, H5, and H7. Univariate analysis shows that citizens of the Republic of Indonesia have high tax morale (87.40%). This empirical fact provides encouragement as the government works to restore post-COVID-19 economic growth. Tax morale of citizens will increase if, as shown by the findings of this research, citizens get better access to education (at least high school and above). In fact, the average number of Indonesian schools aged <15 years in 2022 was 9.28 years (male) and 8.87 years (female) (Statistics Indonesia, 2022). That is, most Indonesian people only receive junior high/equivalent education and do not continue to high school/equivalent.

5.1. Practical Implications

Because the level of education contributes to tax morale, researchers recommend that the government increase opportunities for schools to continue their education to high school level or equivalent. 9-year compulsory education policy, as stated in Government Regulation Number 47 of 2008 Article 12 paragraph 3, is time to be revised to be 12-year compulsory education.

Furthermore, given the data indicating that 54.84% of pro-patriarchy individuals had low tax morale, the government should prioritize promoting gender equality in education. Efforts to uphold gender equality are not only beneficial to meet pragmatic interests (so that citizens have high tax morale), but also in harmony with the global spirit as stated in the concept of SDGs (Sustainable Development Goals), especially the 5th goal (gender equality). Researchers also suggested that the government continue to pay attention to various aspects of the social life of Indonesian citizens, who briefly or clearly (for example, patriarchal ideology), do not contribute directly to economic development or strengthen the capacity of government organizations (for example, fiscal capacity). This research indicates that the government's efforts to collect taxes may be hindered if it does not intervene through various programs and policies to address citizens who are pro-patriarchy and have low tax morale. Finally, researchers recommend the government collaborate with various religious organizations in the process of taxpayer education. In addition, some expenses based on religious practice (*zakat*, *infaq*, *shodaqoh*, *derma*, one tenth) might be integrated in tax management. A separate study is needed on, for example, tax and ZIA integration, which is outside the research team's expertise. Thus, citizens/taxpayers are not too burdened with a variety of expenses that burden their household economy.

5.2. Research Limitations

Although the logistic regression could explain the effect of patriarchal ideological orientation, education level, and religion on tax morale of Indonesian citizens; however, this research has several limitations. *First*, the findings are based on a specific sample of Indonesian citizens, which may not fully represent the diverse demographic and socio-economic landscape of the entire population. *Second*, the study employs a cross-sectional design, capturing data at a single point in time. This limits the ability to draw causal inferences about the relationships between independent variables and tax morale. *Third*, while the study examined eight independent variables, other potentially influential factors such as income level, cultural attitudes, regional differences, and historical tax compliance behavior were not included. *Fourth*, there may be unmeasured confounding variables that affect both the independent variables and tax morale, leading to spurious associations. For example, factors such as trust in government, perception of tax fairness,

and social norms were not accounted for and could influence the findings. *Fifth*, the study found a positive effect of education on tax morale, but the categorization of educational attainment into broad levels (e.g., high school and above) might overlook nuances within educational experiences and quality. *Sixth*, the study was conducted in the specific context of pre-COVID-19 economic recovery, which may have influenced respondents' perceptions and behaviors related to tax morale. *Seventh*, the findings may not be fully applicable in different economic contexts or periods. *Eighth*, the study's findings are specific to Indonesia and may not be directly applicable to other cultural or national contexts. Comparative studies across different countries and cultures would provide insights into how contextual factors influence tax morale.

5.3. Future Research Suggestions

The research limitation suggests several future research directions to further explore and understand the factors influencing tax morale among Indonesian citizens. *First*, future studies could include additional variables that might impact tax morale, such as income level, urban vs. rural residence, occupational sectors, trust in government institutions, and cultural factors. *Second*, conduct longitudinal research to observe changes in tax morale over time, particularly in response to changes in economic conditions, government policies, or educational reforms, so that the research could identify trends and causal relationships more accurately. *Third*, investigate not only the level of education but also the quality of education and its content, particularly focusing on how education about civic duties, ethics, and governance affects tax morale. *Fourth*, examine how exposure to information and media, including social media, influences tax morale. Understanding the role of public awareness campaigns and media in shaping attitudes towards tax compliance could provide insights for policy interventions. *Fifth*, given the differences in education levels between males and females, future research could specifically focus on gender disparities and how they affect tax morale. *Sixth*, conduct studies that compare tax morale across different regions of Indonesia, considering regional socio-economic, cultural, and educational differences. *Seventh*, explore the effectiveness of behavioral interventions and incentives designed to improve tax morale through experiments with different types of tax reminders, public goods provision, and taxpayer recognition programs. *Eight*, combine quantitative research with qualitative studies to gain deeper insights into taxpayer motivations and attitudes. Interviews, focus groups, and case studies can provide richer data on the subjective factors influencing tax morale.

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