## Machiavellianism in a Synergistic Tax Climate

by Nur Cahyonowati

Submission date: 16-Mar-2023 10:03AM (UTC+0700)

**Submission ID: 2038251154** 

**File name:** 3.\_JAFEB\_Cahya\_Dwi\_Totok.pdf (430.04K)

Word count: 7533

Character count: 41875

#### Machiavellianism in a Synergistic Tax Climate\*

Nur CAHYONOWATI1, Dwi RATMONO2, Totok DEWAYANTO3

Received: September 10, 2020 Revised: November 02, 2020 Accepted: November 16, 2020

#### Abstract

This research examines the personal (i.e., Machiavellianism) and situational factors (i.e., tax climate) that are believed to be psychologically salient aspects in tax compliance. To the best of our knowledge, no research has been carried out to investigate the interaction effect of the two factors. This study uses a paper-and-pencil laboratory experiment 2x2 between-subject factorial design that involved 158 participants. The results indicate that a taxpayer who has a low Machiavellianism score or who is in a high synergistic tax climate reports a higher level of income. In the high synergistic tax climate, where tax norms apply, personal ethics do not play a significant role in tax compliance decisions. Where the synergistic relationship between taxpayer and authorities is low, personal ethics play an important role, i.e., low Machiavellians report a higher reported income than high Machiavellians do. This research contributes to the literature that deviates from the traditional model of tax compliance. Taxpayers are not always rational, but they might pay tax for reasons other than financial motives (Alm, 1991, 2018), that is, personal ethics in this study. This research implies the need for policymakers to consider other approaches rather than only relying on audits and fines.

Keywords: Machiavellianism, Synergistic Tax Climate, Tax Compliance

JEL Classification Code: H24, H26, H30

#### 1. Introduction

Tax compliance is a crucial issue for almost all nations to support government spending (Le et al., 2020). It is of interest to practitioners, academicians, and governments. Every nation faces the challenge of overcoming tax evasion, for example, by revealing the shadow economy, detecting unreported income, and promoting honest tax returns (Kirchler, 2007). However, tax compliance is notoriously difficult to research (Alm, 2018). Research in this area still

\*Acknowledgements:

This research is funded by the Faculty of Economics and Business, Diponegoro University, Indonesia

First Author and Corresponding Author, Lecturer, Accounting Department, Faculty of Economics and Business, Diponegoro University, Indonesia [Postal Address: Jl. Prof. Soedarto, SH., Tembalang, Semarang, 1269, Indonesia]

Email: nurcahyonowati@live.undip.ac.id <sup>2</sup>Lecturer, Faculty of Economics and Business, Diponegoro University, Indonesia. Email: dwi.ratmono2@gmail.com

Faculty of Economics and Business, Diponegoro University, Indonesia. Email: totokdewayanto@gmail.com

This is an OpenAccess article distributed under the terms of the Creative Commons Attribution Non-Commercial License (https://creativecommons.org/licenses/by-nc/4.0/) which permits Non-Commercial License (https://creativecommons.org/licenses/by-nc/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

reaches little consensus (Devos, 2014; Durham et al., 2014; Gobena & Van Dijke, 2016; Muehlbacher et al., 2011).

Tax compliance research began with Allingham and Sandmo's (1972) seminal paper. Allingham and Sandmo's model assumes all taxpayers are always rational, selfish, and utility-maximizing individuals and, therefore, the only compliance strategy is to force taxpayers to pay with the threat of audits and fines. However, this model ignores the psychological aspects of taxpayers (Niesiobedzka, 2014). Moreover, it is difficult to reach a conclusion about the effectiveness of audits and fines to deter tax evasion (Kirchler, 2007).

This research investigates tax compliance under a fiscalpsychological approach. This approach is important because the empirical literature shows that individual taxpayer's decisions about paying taxes are driven by factors other than the deterrence factors (i.e., audits and fines), for example, trust in authority (Kogler et al., 2015; Wahl et al., 2010), justice (Kim & Lee, 2020; Wenzel, 2002), social norms (Bobek et al., 2013; Cullis et al., 2012), and ethics (Eisenhauer et al., 2011; Ghosh & Crain, 1996; Henderson & Kaplan, 2005; Soliz, 2015). This literature states that taxpayers are not fully rational, as described in the traditional model of tax compliance (Alm, 1991, 2018; Alm & Torgler, 2011). Nguyen et al. (2020) argued that knowledge of tax compliance behavior goes far beyond deterrent factors and

economic factors as described in Allingham and Sandmo's (1972) model.

This research investigates Machiavellianism as part of one's personal ethics that might contribute to a tax compliance decision. Machiavellianism is a personal factor that shows moral or ethical standards that are believed by individuals. Machiavellianism has received much attention from social science research into ethical and deviant behavior, but Shafer and Wang (2017) stated that Machiavellianism still receives less attention from tax compliance empirical research. Some empirical literature shows that Machiavellianism plays an important role in understanding taxpayers' decisions (Blanthorne & Kaplan, 2008; Ghosh & Crain, 1996; Murphy, 2012; Shafer & Simmons, 2008; Shafer & Wang, 2017; Soliz, 2015).

This study also examines the synergistic tax climate in the relationship between taxpayers and authorities. Synergy in the relations between these two parties will create a relationship of mutual trust between them, then the taxpayers' cooperative behavior will occur. The slippery slope theory states that, in a synergistic tax climate, the taxpayers trust that the authorities manage taxes properly, in the public interest. On the other hand, the authorities trust the taxpayer is willing to pay his/her taxes honestly (Kirchler, 2007; Kirchler, et al., 2008; Wahl et al., 2010). The existence of trust in the relation between authorities and taxpayer will create cooperative behavior. Trust also implied social norm of paying tax (Wenzel, 2004b).

The literature strongly supports that these two factors positively affect tax compliance. In the decision-making process, individuals consider internal factors and situational factors (Trevino, 1986). When making decisions, individuals use their ethical standards and also consider the situation at hand. Ethical standards and the tax climate when taxpayers relate to the authorities can exert an interaction effect on tax compliance. Some of the literature suggests that individual and situational factors may have an interaction effect on decision making (Ghosh & Crain, 1996; Trevino, 1986). However, no empirical research has investigated the interaction between Machiavellianism and tax climate. The compliance decision of a Machiavellian might depend on the synergistic level of the tax climate, but to the best of our knowledge this issue is unanswered yet. Therefore, this study aims to fill this gap.

Individuals may make tax payments on moral grounds (Andreoni et al., 1998). However, how individuals with different levels of ethical standards make compliance decisions in the different levels of a synergistic tax climate remains unanswered. Therefore, this study aims to examine the compliance decisions of Machiavellian types in the situation where there is synergy between taxpayers and authorities.

This study argues that the role of personal ethics is important in increasing tax compliance when the authorities do not have a synergistic relationship with taxpayers. Since some taxpayers pay taxes because they believe that cheating

is wrong (Alm, 1991), personal ethics might prevent a taxpayer engaging in tax evasion in a low synergistic tax climate. Therefore, personal ethics may have a more significant role in a low synergistic climate, rather than in a high one. We argue that in a low synergistic tax climate, low Mach will show higher tax compliance rates than high Mach.

When there is a synergic relationship between the taxpayer and the government, each party has understood his rights and obligations to the state, including paying taxes, so tax compliance becomes a generally accepted norm and therefore, the role of personal ethics is insignificant. There is no significant difference in the level of compliance between high Mach and low Mach in synergistic conditions, because there is the norm of trust in this climate. Conversely, in a low synergistic climate, there is no trust-based relationship between people and the government, and because not all people behave rationally and selfishly (Alm, 2018), ethics plays an important role in increasing compliance.

This study uses an experimental approach with a 2x2 factorial design between subjects. The research participants were undergraduate accounting students at Diponegoro University, Indonesia. The results showed that the existence of a synergistic climate and Machiavellianism had a significant effect on tax compliance. In a high synergistic tax climate, there was no difference in the level of compliance between high Mach and low Mach. Conversely, in a low synergistic climate, low Mach showed a higher level of compliance compared to high Mach. The results of this study indicate that personal ethics become a key factor of compliance when the institutional environment does not show social norms that support tax compliance. The results of this study support the statement that individuals do not always behave rationally, or selfishly, but individuals still use ethical considerations (Alm et al., 1992; Alm & Torgler, 2011; Andreoni et al., 1998; James & Alley, 2002).

The research contributes to the personal-situational interaction model proposed by Trevino (1986). This study provides empirical evidence about the interaction effect of Machiavellianism as a measure of the personal ethics and situational factors represented by a synergistic tax climate on tax compliance decisions. This research model also confirms the empirical model of Ghosh and Crain's (1996) research, that individual and situational factors are factors that influence tax non-compliance. This research provides recommendations for policymakers to consider, especially alternative compliance strategies instead of audits and fines.

#### 2. Literature Review and Hypothesis Development

Tax compliance research can be divided into three approaches — economic deterrence, social-psychology, and fiscal-psychology (Parlaungan, 2017: 17). This study examines the fiscal-psychological aspects of individuals

by examining Machiavellianism in making tax decisions in a synergistic tax climate. The synergistic tax climate represents the relationship between the taxpayers and the authorities, based on their trust in each other. In this climate, all taxpayers agree that paying taxes is a form of contributing to the state, and there is justice in the taxation system. The authorities treat taxpayers as clients who must be served with respect (Kirchler, 2007; Wahl et al., 2010). We classify our research as a fiscal-psychological approach since we consider the interaction climate of taxpayers and authorities.

#### 2.1. Machiavellianism

Machiavellianism depicts individuals as having manipulative, cold, and calculating personalities who pay very little attention to moral or ethical standards (Christie & Geis, 1970). A Machiavellian justifies opportunistic behavior for personal gain. These individuals are less motivated to contribute for the public good, and have lower ethical standards than non-Machiavellian individuals. With these characteristics, a Machiavellian tends to engage in unethical behavior in a variety of situations, including in the area of tax reporting (Shafer & Wang, 2017).

Individuals with high Machiavellianism scores indicate insensitivity to social values and the likelihood of performing manipulative behavior. The individual is also less concerned with moral issues such as justice, and prefers to pursue personal interests. The Machiavellianism instrument is considered appropriate for investigating ethics in taxation because taxation is a social issue and deliberate tax noncompliance is manipulative behavior (Ghosh & Crain, 1996). A non-Machiavellian tends to be more obedient to the tax laws than Machiavellian individuals (Ghosh & Crain, 1996; Shafer & Wang, 2017).

#### 2.2. Synergistic Tax Climate

The interaction of all the actors in the taxation system creates a tax climate. Interaction based on the good intentions of all the various parties and trust will foster a synergistic tax climate. Synergy in the relationship between the tax authority and the taxpayer is characterized by, among others, justice in the taxation system, transparency, and the taxpayer's trust in the authority. The tax authority also trusts that the taxpayers are citizens who have an awareness to contribute for the public good. Balliet and Lange (2012) stated that the literature generally shows that trust is a strong determinant for reaching cooperative behavior, including in this case tax compliance.

The tax climate reflects the style of the interaction between the taxpayer and the government or state, including in this case the management of tax revenue funds and fairness in taxation. The taxpayer's trust in the tax authority will foster awareness for tax compliance.

In a synergistic climate, social norms accept the rules, and that paying taxes is the right behavior to contribute to the public good (Wahl et al., 2010). All taxpayers also believe that they pay taxes based on the principle of justice (Kirchler et al., 2008). The presence of social norms can be a constraint on the behavior of individuals who are in social groups, without going through law enforcement (Bobek et al., 2013). Therefore, taxpayers in the synergistic climate tend to show cooperative behavior.

#### 2.3. Hypothesis Development

#### 2.3.1. Synergistic Tax Climate and Tax Compliance

In a highly synergistic climate, the interaction between taxpayers and authorities are based on trust. Trust has a strong relationship with cooperative behavior (Balliet & Van Lange, 2013; Bornman, 2015; Braithwaite & Makkai, 1994; Kirchler, 2007). Trust shows a relationship in which the other parties will keep their promises, there is a commitment based on honest communication, understanding the needs of the other parties, holding to each other's fair rules, and prioritizing cooperation (Braithwaite & Makkai, 1994).

The existence of psychological contract implies that each party understands their rights and obligations and therefore, tax compliance can be achieved by emphasizing the fiscal exchange between citizens and the government. Feld and Frey (2002) showed that when taxpayers are treated fairly, then their good intentions in fulfilling their obligations will lead to a higher level of compliance.

When there is a synergistic relationship between the taxpayer and government, each party has good intentions regarding taxation, realizing each other's rights and obligations to commit to fulfilling the tax obligations (Kaplanoglou & Rapanos, 2015; Wahl et al., 2010). Therefore, in highly synergistic conditions, individuals show higher tax compliance compared to individuals in low synergistic conditions.

H1: Individuals in a high synergistic tax climate are more likely to comply than individuals in a low synergistic tax climate

#### 2.3.2. Machiavellianism and Tax Compliance

In general, Ghosh and Crain (1996) defined ethics as moral principles or values that are owned by individuals based on the internalization of beliefs and ways of thinking. Tax payments are exchanges between individual purchasing power and government services. Individuals always have the urge to cheat by not paying their taxes, because it is more "profitable" than having to hand over money to the government. However, Alm and Torgler (2011) believed that individuals are not always selfish, rational, and self-centered, as assumed in the standard neoclassical paradigm. Alm (1991: 584) showed that some individuals report their

taxes honestly because they believe that tax evasion is wrong. Wenzel, (2004) showed that individuals with personal norms who do not believe in tax evasion, rarely avoid paying.

Tax compliance decisions are decisions that involve ethical considerations. Machivellianism is a relatively stable measurement for individual ethical standards (Christie & Geis, 1970). Machiavellians tend to behave opportunistically without considering ethics (low ethical standards). When faced with ethical dilemmas, a Machiavellian tends to be calculative, and uses fewer ethical principles or social conventions. For example, Soliz (2015) and Ghosh and Crain (1996) showed that subjects with low Mach IV scores (i.e., high ethical standards) are more tax-compliant than subjects with high Mach IV scores.

**H2:** Individuals with high ethical standards (low Mach) are more likely to comply than individuals with low ethical standards (high Mach).

#### 2.3.3. The Interaction Effect of Machiavellianism and Synergistic Tax Climate

Shafer and Wang (2017) showed that Machiavellianism is related to individual perceptions about the prevailing social norms. Furthermore, it is important to conduct experimental research to investigate whether Machiavellianism also influences the effectiveness of social norms on tax compliance (Shafer & Wang, 2017). From the perspective of the slippery slope theory, tax norms in a synergistic climate provide guidance so that taxpayers pay taxes in a fair and equitable taxation system, which makes paying taxes the right thing to do (Kirchler, 2007; Wahl et al., 2010). Based on the results of Shafer and Wang's research (2017), this study argues that Machiavellianism plays an important role as a tax compliance determinant, especially in low synergistic conditions. Since there is no social norm that believes that tax fraud is unethical behavior, the decision to comply relies more on individual ethical standards. Individuals believe that tax evasion is cheating and this may prevent them from reporting less of their income (Alm, 1991).

When there are no social norms regarding tax compliance, tax compliance can be achieved if individuals believe in their personal norms and that tax fraud is unethical behavior. Not all individuals behave rationally or selfishly, maximizing their personal utility (Alm et al., 1992; Kirchler, 2007), and some individuals even comply with tax rules based on moral considerations (Andreoni et al., 1998). Therefore, in a low synergistic climate, personal beliefs about tax compliance become an important factor in compliance.

In the high synergistic climate, social norms provide guidance that tax evasion is unethical behavior and taxpayers are aware of taxation rights and obligations. Psychological contracts between individuals and tax authorities in a synergistic climate give rise to the commitment and tax awareness of each party, so they get to trust each other. The existence of trust

implies that tax compliance has become a generally accepted norm of citizenship. Social norms create boundaries of behavior without having to go through applicable law enforcement (Bobek et al., 2013). When social norms believe tax evasion is wrong behavior, this will inhibit the manipulative behavior that tends to be done by Machiavellian characters. Since individuals with high Mach and low Mach scores interpret social norms in the same way, then there will be no difference in compliance between these two kinds of personalities.

2 H3: In a high synergistic climate, the tax compliance levels of high Mach and low Mach individuals are not significantly different, whereas in the low synergic climate, the tax compliance levels of high Mach and low Mach individuals are significantly different, i.e., low Mach individuals are more likely to comply than high Mach individuals.

#### 3. Methods

The subjects were undergraduate accounting students from Diponegoro University, Indonesia. The experiment was conducted while the subjects attended a taxation course. They were asked to join the experiment voluntarily. They were told that they were allowed not to participate in this study, and this choice would not bring any negative consequence. However, all subjects decided to participate voluntarily.

This study used a laboratory experimental approach with a 2x2 factorial design between subjects. The synergistic tax climate was manipulated into two conditions (i.e., high synergistic climate vs low synergistic climate). The scenario for manipulating the tax climate was adapted from Wahl et al. (2010).

Subjects were asked to read the description of Varosia, a fictitious country. The scenario in high synergistic climate describes that Varosia's tax authorities are highly trustworthy, act in service-oriented ways. In high synergistic climate, the scenario also describes that all taxpayer in Varosia commit that paying tax is the right thing to do and that few politicians embezzle tax revenue. In low synergistic climate, the scenario describes that Varosia's tax authorities are untrustworthy, not service oriented. The scenario also describes that many politicians embezzle tax money and Varosia's citizen do not commit to the norm that paying tax is right (Wahl et al., 2010).

Machiavellianism is a non-random assignment. The subjects were asked to fulfill the Mach IV instrument, which has been widely used in research into ethics. The subjects responded to the Mach IV instrument using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Each subject was categorized as low Mach or high Mach by the median split. Mach scores below the median were categorized as low Mach or high ethical standards and vice versa (Soliz, 2015).

The dependent variable of this study was tax compliance. The subjects were given a scenario adapted from Brizi et al. 1

(2015). They were asked to pretend to be citizens of Varosia who worked and earned an additional income of 10,000 Kron (the currency in Varosia) as a consultant. The scenario also created the dilemma that the additional income could be used to buy a new car. The higher the amount of income reported, the greater the tax burden and the less money to buy a new car. The subjects had the discretion to determine the amount of income each one reported. The higher the reported income, the higher the compliance level.

The subjects were randomly assigned to either the high synergistic climate or low synergistic climate groups. Before the experimental session, the subjects signed informed consent forms. The experimental session began with the subjects completing the Mach IV instrument. The scenario of the tax climate was presented after all of the subjects had finished the Mach IV instrument. Each subject then decided the amount of income to report after reading the scenario. All subjects were informed the income tax rate was 25%, audit probability was 25%, and fine in case of detected evasion was 100%. Finally, the subjects filled out their demographic data. Three subjects were randomly chosen to receive IDR 50,000 in each study session. Gifts are prepared for each of the subjects.

During the experimental session, the subjects were neither allowed to communicate with each other, nor to leave the classroom during the experimental session. Overall, the experiment took about 30 minutes and was carried out in four different class sessions.

#### 4. Results and Discussion

A total of 198 students participated in this study. Forty subjects did not respond to the manipulation check correctly, and therefore, our final sample was 158 subjects, which was dominated by female students (75.9%) (Table 1). All subjects are categorized into high Mach and low Mach by using median split of Mach score (Hartmann & Maas, 2010; Murphy, 2012; Soliz, 2015). The median value for Mach score is 46. Seventy-eight subjects are grouped into high Mach; eighty subjects are grouped into low Mach.

For checking the manipulation, the subjects responded to the question "The citizens of Varosia do not trust the authorities" using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). In the low synergistic climate, the mean score of the subjects' responses was 4.45 while, in the high synergistic climate, the mean average score was 1.6. These two means differ significantly (t = 35.98, t = 0.000). These results indicate the subject did understand the given scenario.

In a high synergistic climate, taxpayers show greater levels of compliance (average = 8,547.62) than in a low synergistic climate (average = 6,256.76). This result indicates that the style of the interaction between authorities and taxpayers can be an important consideration in the tax compliance decision. Personal ethics might become another important factor for the compliance decision. Low Mach individuals (average = 8,287.5) show greater compliance than high Mach ones (average = 6,641.03). Overall, the subjects reported an average income of 7,474.68 (Table 2).

Table 2: Means (standard deviations) of tax compliance

	High synergistic climate	Low synergistic climate	Total
Low Mach	8,837.21	7,648.65	8,287.50
	(2,468.18)	(2,720.46)	(2,639.49)
	N = 43	N = 37	N = 80
High Mach	8,243.9 (2,826.49) N = 41	4,864.86 (3,690.55) N = 37	6,641.03 (3,660.86) N = 78
Total	8,547.62	6,256.76	7,474.68
	(2,649.87)	(3,511.47)	(3,280.32)
	N = 84	N = 74	N = 158

Table 1: Descriptive Statistics

Variable	Min	Max	Mean	Standard Deviation	Total	%
Tax compliance	0	10,000	7,474.68	3,280.32		
Age	17	23	19.78	0.940		
Mach Score	35	59	46.53	4.896		
Male					38	24.1
Female				3	120	75.9
High Mach					78	49.4
Low Mach					80	50.6

ANOVA shows that the synergistic climate is a significant determinant for compliance (F=23.714; p=0.000) (Table 3). These results indicate that the synergistic climate, which is the basis for the realization of trust in the interactions between taxpayers, the government and the tax authorities, can significantly increase tax compliance. In this climate, taxpayers certainly do not refuse to pay taxes. This result supports Hypothesis 1.

Machiavellianism represents the personal ethics that underlie taxpayers' decisions. AVONA showed that any manipulative behavior embedded within taxpayers' personality traits plays a significant role in the compliance decision (F = 12.964; p = 0.001). These results indicate that low Mach individuals who believe in high ethical values are more likely to comply than high Mach individuals who tend to be opportunistic, selfish, and believe in lower ethical values. This result supports Hypothesis 2.

ANOVA showed the interaction effect of a synergistic climate and Machiavellianism on tax compliance (F = 5.454; p = 0.021). These results indicate that the interpretation of the social norms that exist within each level of the tax climate interacts with Machiavellianism. Further analysis in Table 4 showed that there was no difference in the compliance level between low Mach and high Mach individuals in a high synergistic tax climate (t = 1.026). In a low synergistic climate, low Mach individuals show a greater compliance level than high Mach individuals (t = 3.693; p = 0.000). The results of this test support Hypothesis 3.

In a high synergistic climate (high trust), the compliance level of high Mach and low Mach did not significantly differ. While, in a low synergistic climate (low trust), the compliance level of high Mach and low Mach did differ significantly (Figure 1). Figure 1 depicts our prediction about the interaction effect between Machivellianism and tax climate.

Table 3: ANOVA and ANCOVA test. Dependent variable: tax compliance

Variable	ANOVA F-value (p-value)	ANCOVA F-value (p-value)
Trust	23.714 (0.000)***	27.626 (0.000)***
Mach	12.964 (0.001)***	12.194 (0.001)***
Trust*Mach	5.454 (0.021)**	4.420 (0.037)**
Age		1.535 (0.217)
Gender		9.583 (0.002)***

<sup>\*\*\*</sup> significant at 1%, \*\* significant at 5%

Table 4: t-test low Mach vs high Mach at different levels of synergistic tax climate

High synergistic climate		Low synergistic climate	
Low Mach	High Mach	Low Mach	High Mach
8,837.21	8,243.9	7,648.65	4,864.86
t=1.026		t=3.693***	

<sup>\*\*\*</sup> significant at 1%

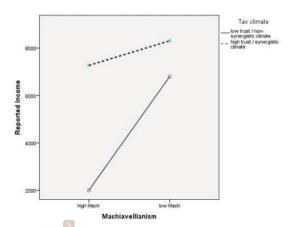


Figure 1: The interaction effect of synergistic tax climate and Machiavellianism on tax compliance

In high trust condition where synergistic climate exist, it is likely that low Mach and high Mach tend to commit for tax compliance. Therefore, there is no significant difference of reported income among them. Both low Mach and high Mach have higher reported income in high trust condition compared to low trust condition.

In low trust condition where synergistic climate does not exist, low Mach is more likely to comply than high Mach. Low Mach reports higher income compared to high Mach. However, both of them report lower income in low trust condition compared to high trust condition (Figure 1).

As an additional test, this study conducted an ANCOVA by including the subjects' age and gender as covariates. Gender showed a significant effect on tax compliance. The female subjects reported a greater amount of income (average = 7,841.67) than the males did (average = 6,315.79). The main effect and interaction effect were still consistent after considering the covariates.

Overall, this research provides empirical evidence that a taxpayer who shows a low Machiavellianism score or who is in a highly synergistic tax climate will have higher tax compliance and vice versa. This study also provide empirical evidence that these two variables partly moderate each other's effect, with tax compliance being particularly different when a low Machiavellian (low Mach) and a high Machiavellian (high Mach) are in a low synergistic tax climate. In a high synergistic tax climate, there is no difference in compliance decisions between low Mach and high Mach.

In the decision-making process, individuals consider internal factors and situational factors (Trevino, 1986). Since internal factor is related to psychological aspect, then Machiavellianism could be representing factor that indicate personal ethical believe. Some previous studies have suggested that these two factor might interact in the decision making process (Ghosh & Crain, 1996; Shafer & Wang, 2017)

This study confirms the person-situational model for ethical decision-making (Ghosh & Crain, 1996; Trevino, 1986). Shafer and Wang (2017) suggested that the individual interpretation of social norms is related to Machiavellianism. In the climate where taxpayer and tax authorities build their relationship based on trust, the social norm of taxation agreed that paying tax is the right thing to do. Wenzel (2004) suggested that trust between taxpayer and authorities will arise social norm of taxation. This study concludes that personal and situational factors interact with each other for tax compliance decisions. The role of personal ethics becomes important in a low synergistic tax climate, while in a high synergistic climate, the social norms of compliance and trust between all the actors determine the role of personal ethics in making compliance decisions.

These findings imply the importance of building trust in the relation between taxpayers and authorities. Once trust exists in this relationship then each party agrees to the norm that paying taxes is the right thing to do and tax evasion is illegal behavior. This norm could protect honest taxpayers from the possibility of free-riders among them. This study shows that a high synergistic climate can be a constraint on manipulative behavior. Taxpayers with low ethical standards are more likely to comply in a high synergistic climate. This implies the need for tax campaigns that inform and educate taxpayers about the wise use of tax revenues and the role of taxation for the nation. Regulators should consider the trust build in a synergistic tax climate as another strategy for increasing compliance, since the traditional strategies for compliance are more expensive (Murphy 2004).

Alm and Torgler (2011) stated that tax compliance research should be carried out by employing the trust paradigm. This is because an individual is not always rational or selfish, as depicted in the neo-classical model.

Alm and Torgler's (2011) thinking was in line with the assumption of the slippery slope framework put forward by Kirchler (2007). Kirchler (2007) suggested that individuals are not always rational and that even individuals can pay taxes voluntarily when there is a synergistic relationship between an individual and the government. Some literature supports the premise that trust is a strong determinant of cooperative behavior (i.e., Balliet & Lange, 2012; Bornman, 2015; Kirchler, 2007). Balliet and Lange (2012) stated that many theories have discussed the importance of trust in relationships involving conflicts of interest. A synergistic climate provides a supporting condition for trust building between taxpayers and the authorities (Wahl et al., 2010).

Alm and Torgler (2011) also emphasized the importance of considering the ethical dimension in understanding tax compliance. Individuals believe in their personal ethics so they feel they bear the psychic cost when free-riding (i.e., not paying taxes while other individuals pay taxes). This moral conviction makes individuals feel good when they are virtuous individuals and pay their taxes. The empirical literature shows that ethics plays a significant role in taxpayers' decisions not to evade paying their taxes (Bobek et al., 2013; Chung & Trivedi, 2003; Ghosh & Crain, 1996; Henderson & Kaplan, 2005; Soliz, 2015; Wenzel, 2004a). This study confirms the importance of trust and ethical dimension in examining taxpayer behavior.

A synergistic tax climate represents the fairness of the tax system, the wise use of tax revenues, and social norms that create boundaries for tax evasion. In this climate, psychological contracts exist between the taxpayers and the authorities, with each party understanding their rights and obligations to the nation. This all creates a perception for the taxpayers that the authorities have been benevolent in managing taxation and further, it creates awareness of the need to fulfill personal tax obligations (Kirchler, 2007; Kirchler et al., 2008).

In the synergistic climate, social norms accept the notion that paying tax is an approved behavior and then, this might prevent the manipulative behavior of taxpayers. Individuals with low ethical standards (high Mach) will be pushed to pay tax. In a highly synergistic climate, the social norms are favorable for cooperation (Kirchler, 2007) and all the taxpayers agree to pay taxes for the public good (Wahl et al., 2010). Shafer and Wang (2017) showed that the individual interpretation of social norms is related to Machiavellianism. This study extends Shafer and Wang's (2017) research by investigating Machiavellianism in making tax compliance decisions in a synergistic climate, where taxpayers believe that compliance is widespread and such behavior is approved by their reference group (Kirchler et al., 2008; Wahl et al., 2010).

#### 5. Conclusion

This study aims to provide empirical evidence regarding the role of personal ethics, i.e., Machiavellianism and a situational factor, i.e., the tax climate, as important determinants of tax compliance. In short, this study provides empirical evidence that these two factors partly moderated each other. An interesting finding is that personal ethics do not have a significant role when tax social norms decide that tax evasion is not an acceptable form of behavior, i.e., in a synergistic tax climate. Nevertheless, personal ethics do play a significant role when the climate does not support the building of trust in the relationship between taxpayers and the authorities. When the social norm does not agree that paying tax is the right thing to do, then the decision to comply relies on one's personal ethics.

The results of this study confirm Andreoni et al. (1998) and Alm and Torgler (2011), that taxpayers might decide to comply because of their moral considerations. Individuals are not always rational concerning taxation problems, even in conditions where there is no fairness in taxation. In a low synergistic climate, some taxpayers still believe that tax compliance is the right behavior. In a low synergistic climate, the decision to comply might be dominated by personal considerations of ethics rather than social norms that identify tax evasion as incorrect behavior.

In conclusion, this research supports the assumption that deviate from traditional model of tax compliance. While the traditional model assumes that taxpayers are always rational, this study provide empirical evidence that some taxpayers are motivated to pay for reason other than financial motives (Alm, 1991, 2018). By understanding the psychological aspects of taxpayers, the tax authority is expected to be able to apply interaction patterns that are in line with taxpayers' expectations. This research shows that ethics can be an individual reason for paying taxes, therefore the authorities need to carry out tax compliance campaigns that emphasize the ethical side of fulfilling individual taxpayer's tax obligations. The relationship between policy makers and taxpayers needs to be built based on trust, in which both parties commit to the norm of paying taxes and the wisely use of tax money.

Some limitations to this study exist. First, the subjects were mostly female. This is a characteristic of social science schools, which are generally dominated by women. However, the results are still robust after considering gender as covariate. Second, the use of students as the surrogates for taxpayers may cause debate over our results. However, the literature suggests that the use of students in tax compliance experiments is common (Ashton & Kramer 1980; Mittone 2006; Soliz 2015). Students and the real subjects have similar cognition processes. Besides, this study emphasizes the subjects' cognitive processes to understand the given scenario, rather than the experiences of the subject in fulfilling their tax obligations.

Tax compliance is usually viewed from an individual's income tax (Alm, 2018). However, the firm is also an important object to understand on tax reporting. Instead of individual taxpayer, future research is encouraged to examine the firm's behavior in tax reporting. Although some tax compliance research has already examine tax compliance at firm level (i.e., Le et al., 2020; Lin Mei & Xiaoqian, 2016; Nguyen et al., 2020), the empirical literature on firm evasion is still limited (Alm, 2018).

#### References

- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: a theoretical analysis. *Journal of Public Economics*, 1(3-4), 323-338. https://doi.org/10.1016/0047-2727(72)90010-2
- Alm, J. (1991). A Perspective on the Experimental Analysis of Taxpayer Reporting. The Accounting Review, 66(3), 577.
- Alm, J. (2018). What Motivates Tax Compliance? Journal of Economic Surveys, 00(0), 1-36. https://doi.org/10.1111/joes.12272
- Alm, J., McClelland, G. H., & Schulze, W. D. (1992). Why do people pay taxes? *Journal of Public Economics*, 48(1), 21-38. https://doi.org/10.1016/0047-2727(92)90040-M
- Alm, J., & Torgler, B. (2011). Do Ethics Matter? Tax Compliance and Morality. *Journal of Business Ethics*, 101(4), 635-651. https://doi.org/10.1007/s10551-011-0761-9
- Andreoni, J., Erard, B., & Feinstein, J. (1998). Tax compliance. Journal of Economic Literature, 36(2), 818-860.
- Ashton, R. H., & Kramer, S. S. (1980). Students as surrogates in behavioral accounting research: Some evidence. *Journal of Accounting Research*, 18(1), 1-15. https://doi. org/10.2307/2490389
- Balliet, D., & Van Lange, P. A. M. (2013). Trust, conflict, and cooperation: A meta-analysis. *Psychological Bulletin*, 139(5), 1090-1112. https://doi.org/10.1037/a0030939
- Blanthorne, C., & Kaplan, S. (2008). An egocentric model of the relations among the opportunity to underreport, social norms, ethical beliefs, and underreporting behavior. *Accounting, Organizations and Society*, 33(7-8), 684-703. https://doi. org/10.1016/j.aos.2008.02.001
- Bobek, D. D., Hageman, A. M., & Kelliher, C. F. (2013). Analyzing the Role of Social Norms in Tax Compliance Behavior. *Journal* of Business Ethics, 115(3), 451-468. https://doi.org/10.1007/ s10551-012-1390-7
- Bornman, M. (2015). The Determinants and Measurement of Trust in Tax Authorities As a Factor Influencing Tax Compliance Behaviour. *Journal of Economic and Financial Sciences*, 8(3), 772-789.
- Braithwaite, J., & Makkai, T. (1994). Trust and compliance. Policing and Society, 4(1), 1-12. https://doi.org/10.1080/1043 9463.1994.9964679
- Brizi, A., Giacomantonio, M., Schumpe, B. M., & Mannetti, L. (2015). Intention to pay taxes or to avoid them: The impact of

- social value orientation. *Journal of Economic Psychology*, 50, 22-31. https://doi.org/10.1016/j.joep.2015.06.005
- Christie, R., & Geis, F. (1970). Studies in Machiavellianism (L. Festinger & S. Schachter (Eds.). Cambridge, MA: Academic Press. Inc.
- Chung, J., & Trivedi, V. U. (2003). The Effect of Friendly Persuasion and Gender on Tax Compliance Behavior. *Journal of Business Ethics*, 47, 133-145.
- Cullis, J., Jones, P., & Savoia, A. (2012). Social norms and tax compliance: Framing the decision to pay tax. *Journal of Socio-Economics*, 41(2), 159-168. https://doi.org/10.1016/j. socec.2011.12.003
- Devos, K. (2014). Factors Influencing Individual Taxpayer Compliance Behaviour. New York, NY: Springer.
- Durham, Y., Manly, T. S., & Ritsema, C. (2014). The effects of income source, context, and income level on tax compliance decisions in a dynamic experiment. *Journal of Economic Psychology*, 40, 220-233. https://doi.org/10.1016/j.joep.2012.09.012
- Eisenhauer, J. G., Geide-Stevenson, D., & Ferro, D. L. (2011). Experimental estimates of taxpayer ethics. Review of Social Economy, 69(1), 29–53. https://doi.org/10.1080/ 00346760802714867
- Feld, L. P., & Frey, B. S. (2002). Trust breeds trust: How taxpayers are treated. Economics of Governance, 3(2), 87–99. https://doi. org/10.1007/s101010100032
- Ghosh, D., & Crain, T. L. (1996). Experimental investigation of ethical standards and perceived probability of audit on intentional noncompliance. *Behavioral Research in Accounting*, 8.
- Gobena, L. B., & Van Dijke, M. (2016). Power, justice, and trust: A moderated mediation analysis of tax compliance among Ethiopian business owners. *Journal of Economic Psychology*, 52, 24-37. https://doi.org/10.1016/j.joep.2015.11.004
- Hartmann, F. G. H., & Maas, V. S. (2010). Why Business Unit Controllers Create Budget Slack: Involvement in Management, Social Pressure, and Machiavellianism. *Behavioral Research* in Accounting, 22(2), 27-49. https://doi.org/10.2308/bria.2010. 22.2.27
- Hasseldine, D. J., & Bebbington, K. J. (1991). Blending economic deterrence and fiscal psychology models in the design of responses to tax evasion: The New Zealand experience. *Journal of Economic Psychology*, 12(2), 299-324. https://doi. org/10.1016/0167-4870(91)90018-O
- Henderson, B. C., & Kaplan, S. E. (2005). An Examination of the Role of Ethics in Tax Compliance Decisions. *The Journal of* the American Taxation Association, 27(1), 39-72. https://doi. org/10.2308/jata.2005.27.1.39
- James, S., & Alley, C. (2002). Tax Compliance, Self-Assessment and Tax Administration. *Journal of Finance and Management* in Public Services, 2(2), 27-42.
- Kaplanoglou, G., & Rapanos, V. T. (2015). Why do people evade taxes? New experimental evidence from Greece. *Journal of Behavioral and Experimental Economics*, 56, 21-32. https://doi.org/10.1016/j.socec.2015.02.005

- Kim, H.-S., & Lee, H.-A. (2020). Associations among procedural fairness, tax compliance, and tax re-audits. *Journal of Asian Finance, Economics and Business*, 7(7), 187–198. https://doi. org/10.13106/jafeb.2020.vo17.no7.187
- Kirchler, E. (2007). The Economic Psychology of Tax Behaviour. New York, NY: Cambridge University Press.
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic Psychology*, 29(2), 210-225. https://doi. org/10.1016/j.joep.2007.05.004
- Kogler, C., Muehlbacher, S., & Kirchler, E. (2015). Testing the "slippery slope framework" among self-employed taxpayers. *Economics of Governance*, 16(2), 125-142. https://doi. org/10.1007/s10101-015-0158-9
- Le, H. T. H., Tuyet, V. T. B., Hanh, C. T. B., & Do, Q. H. (2020). Factors affecting tax compliance among small-and mediumsized enterprises: Evidence from vietnam. *Journal of Asian Finance, Economics and Business*, 7(7), 209-217. https://doi. org/10.13106/jafeb.2020.vol7.no7.209
- Lin Mei, T., & Xiaoqian, L. (2016). SMEs tax compliance: a matter of trust? Australian Tax Forum, 31(May), 527-555.
- Mittone, L. (2006). Dynamic behaviour in tax evasion: An experimental approach. *The Journal of Socio-Economics*, 35, 813-835. https://doi.org/10.1016/j.socec.2005.11.065
- Muehlbacher, S., Kirchler, E., & Schwarzenberger, H. (2011).
  Voluntary versus enforced tax compliance: Empirical evidence for the "slippery slope" framework. European Journal of Law and Economics, 32(1), 89-97. https://doi.org/10.1007/s10657-011-9236-9
- Murphy, K. (2004). The role of trust in nurturing compliance: A study of accused tax avoiders. Law and Human Behavior, 28(2), 187-209. https://doi.org/10.1023/B:LAHU.0000022322.94776.ca
- Murphy, P. R. (2012). Attitude, Machiavellianism and the rationalization of misreporting. Accounting, Organizations and Society, 37(4), 242-259. https://doi.org/10.1016/j. aos.2012.04.002
- Nguyen, T. T. D., Pham, T. M. L., Le, T. T., Truong, T. H. N., & Tran, M. D. (2020). Determinants influencing tax compliance: The case of Vietnam. *Journal of Asian Finance, Economics and Business*, 7(2), 65-73. https://doi.org/10.13106/jafeb.2020.vol7.no2.65
- Niesiobedzka, M. (2014). Relations between Procedural Fairness, Tax Morale, Institutional Trust and Tax Evasion. *Journal of Social Research & Policy*, 5(1).
- Parlaungan, G. (2014). The Tax Morale of the Individual Taxpayers in Indonesia by Demographic Factors. PhD Dissertation. Curtin University. Australia. https://www.business.unsw.edu. au/About-Site/Schools-Site/Taxation-Business-Law-Site/ Documents/Parlaungan-The-Tax-Morale-of-the-Individual-Taxpayers-in-Indonesia-by-Demographic-Factors.pdf
- Shafer, W. E., & Simmons, R. S. (2008). Social responsibility , Machiavellianism and tax avoidance A study of Hong Kong tax professionals. Accounting, Auditing & Accountability Journal, 21(5), 695-720. https://doi.org/10.1108/09513570810872978

- Shafer, W. E., & Wang, Z. (2017). Machiavellianism, social norms, and taxpayer compliance. *Business Ethics: A European Review*, July, 1-14. https://doi.org/10.1111/beer.12166
- Soliz, A. B. (2015). Tax compliance: ethical orientation, risk perception and the role of the tax preparer (Issue December). The University of Mississippi.
- Trevino, L. K. (1986). Ethical Decision Making in Organizations: A Person-Situation Interactionist Model. The Academy of Management Review, 11(3), 601-617.
- Wahl, I., Kastlunger, B., & Kirchler, E. (2010). Trust in authorities and power to enforce tax compliance: An empirical analysis of
- the "slippery slope framework."  $\it Law$  and  $\it Policy, 32(4), 383-406.$   $\it https://doi.org/10.1111/j.1467-9930.2010.00327.x$
- Wenzel, M. (2002). The impact of outcome orientation and justice concerns on tax compliance: The role of taxpayers' identity. *Journal of Applied Psychology*, 87(4), 629-645. https://doi. org/10.1037//0021-9010.87.4.629
- Wenzel, M. (2004a). An analysis of norm processes in tax compliance. *Journal of Economic Psychology*, 25(2), 213-228. https://doi.org/10.1016/S0167-4870(02)00168-X
- Wenzel, M. (2004b). The Social Side of Sanctions: Personal and Social Norms as Moderators of Deterrence. Law and Human Behavior, 28(5), 547-567.

### Machiavellianism in a Synergistic Tax Climate

ORIGINALITY REPORT

10% SIMILARITY INDEX

5%
INTERNET SOURCES

8%
PUBLICATIONS

%
STUDENT PAPERS

**PRIMARY SOURCES** 

Publication

Thu Hien Nguyen. "The Impact of Non-Economic Factors on Voluntary Tax Compliance Behavior: A Case Study of Small and Medium Enterprises in Vietnam", Economies, 2022

<1%

1 %

Czibor, A.. "Machiavellian people's success results from monitoring their partners",
Personality and Individual Differences, 201208

<1%

Meiryani Meiryani, Lidya Aliffiyah, Wendy Endrianto, Johan Muliadi Kerta, Meriana Meriana, Silvia Dewiyanti. "Factors Affecting Taxpayer's Ability To Pay Tax In Indonesia", 2022 13th International Conference on E-business, Management and Economics, 2022

Accounting Research Journal, Volume 27, Issue 1 (2014-09-16)

<1%

6	francoangeli.it Internet Source	<1%
7	bazybg.uek.krakow.pl Internet Source	<1%
8	Fany Inasius. "Factors Influencing SME Tax Compliance: Evidence from Indonesia", International Journal of Public Administration, 2018 Publication	<1%
9	publications.zalf.de Internet Source	<1%
10	"Psychological Perspectives on Financial Decision Making", Springer Science and Business Media LLC, 2020 Publication	<1%
11	Submitted to The Stockholm School of Economics in Riga Student Paper	<1%
12	Submitted to University Der Es Salaam Student Paper	<1%
13	Submitted to University of Venda Student Paper	<1%
14	W Widayat, T Darmawan, H Hadiyanto, R Ar Rosyid. "Preparation of Heterogeneous CaO	<1%

### Catalysts for Biodiesel Production", Journal of Physics: Conference Series, 2017

Publication

15	Katharina Gangl, Eva Hofmann, Barbara Hartl, Mihály Berkics. "The impact of powerful authorities and trustful taxpayers: evidence for the extended slippery slope framework from Austria, Finland, and Hungary", Policy Studies, 2019 Publication	<1%
16	eprints.nottingham.ac.uk Internet Source	<1%
17	theijbmt.com Internet Source	<1%
18	Aristidis Bitzenis, Vasileios Vlachos. "Tax Morale in Times of Economic Depression: The Case of Greece", Emerald, 2018	<1%
19	Erich Kirchler, Christoph Kogler, Stephan Muehlbacher. "Cooperative Tax Compliance", Current Directions in Psychological Science, 2014 Publication	<1%

Tereza Ryšavá, Hana Zídková. "What are the 20 factors of tax evasion? New findings in the EVS Study", Review of Economic Perspectives, 2021

Publication

- Ho Fai Chan, Uwe Dulleck, Jonas Fooken, <1% 21 Naomi Moy, Benno Torgler. "Cash and the Hidden Economy: Experimental Evidence on Fighting Tax Evasion in Small Business Transactions", Journal of Business Ethics, 2022 Publication Lisi, Gaetano. "The interaction between trust <1% 22 and power: Effects on tax compliance and macroeconomic implications", Journal of Behavioral and Experimental Economics, 2014. **Publication** Ramzi Benkraiem, Ali Uyar, Merve Kilic, <1% 23 Friedrich Schneider. "Ethical behavior, auditing strength, and tax evasion: A worldwide perspective", Journal of International Accounting, Auditing and Taxation, 2021 Publication
  - Syaiful Iqbal, Mahfud Sholihin. "The role of cognitive moral development in tax compliance decision making", International Journal of Ethics and Systems, 2019
    Publication
- ijbes.utm.my
  Internet Source

  1 %

<1%

SMEs", European Journal of Law and

Economics, 2016

Hang Yuan, Qinyi Long, Guangly Huang, Liqin <1% 33 Huang, Siyang Luo. "Different roles of interpersonal trust and institutional trust in COVID-19 pandemic control", Social Science & Medicine, 2022 Publication Janina Enachescu, Ziga Puklavec, Jerome <1% 34 Olsen, Erich Kirchler. "Tax compliance is not fundamentally influenced by incidental emotions: An experiment", Economics of Governance, 2021 **Publication** Lars P. Feld. "Tax Evasion and Voting: An <1% 35 Experimental Analysis", Kyklos, 05/2002 Publication Sahari Salawati, Nivakan Sritharan, Sharon <1% 36 Cheuk Choy Sheung, Ahmad Syubaili Mohamed. "Does Tax Knowledge Motivate Tax Compliance in Malaysia?", Research in World Economy, 2021 Publication Shahnaz Noorul Amin, Putri Zaqqeya Amin 37 Buhari, Abu Sofian Yaacob, Zuberi Iddy. "Exploring the Influence of Tax Knowledge in Increasing Tax Compliance by Introducing Tax Education at Tertiary Level Institutions", Open

Journal of Accounting, 2022

38	Stephan Muehlbacher, Erich Kirchler. "Tax Compliance by Trust and Power of Authorities", International Economic Journal, 2010 Publication	<1%
39	ebin.pub Internet Source	<1%
40	eujournal.org Internet Source	<1%
41	jefjournal.org.za Internet Source	<1%
42	nottingham-repository.worktribe.com Internet Source	<1%
43	othes.univie.ac.at Internet Source	<1%
44	psasir.upm.edu.my Internet Source	<1%
45	repository.petra.ac.id Internet Source	<1%
46	research.wu.ac.at Internet Source	<1%
47	van Dijke, M "Trust in authorities as a boundary condition to procedural fairness	<1%

# effects on tax compliance", Journal of Economic Psychology, 201002

Publication

48	www.asianinstituteofresearch.org Internet Source	<1%
49	www.bschool.nus.edu.sg Internet Source	<1%
50	Cinzia Castiglioni, Edoardo Lozza, Eric van Dijk, Wilco W. van Dijk. "Two sides of the same coin? An investigation of the effects of frames on tax compliance and charitable giving", Palgrave Communications, 2019	<1%
51	LARS P. FELD. "Tax Compliance as the Result of a Psychological Tax Contract: The Role of Incentives and Responsive Regulation", Law & Policy, 1/2007 Publication	<1%
52	"Agent-based Modeling of Tax Evasion", Wiley, 2018 Publication	<1%

Exclude matches

Off

Exclude quotes On Exclude bibliography On

## Machiavellianism in a Synergistic Tax Climate

GRADEMARK REPORT		
FINAL GRADE	GENERAL COMMENTS	
/0	Instructor	
PAGE 1		
PAGE 2		
PAGE 3		
PAGE 4		
PAGE 5		
PAGE 6		
PAGE 7		
PAGE 8		
PAGE 9		
PAGE 10		