

The Mediating Effect of Trust in Authority on the Relationship between Tax Audit, Tax Penalty, and e-Commerce Business Enforced Tax Compliance

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Abstract

This study aims to examine the mediating effect of trust in authority on the relationship between tax audit, tax penalty and enforced tax compliance among e-Commerce business taxpayers in Malaysia. This study posited tax audit, tax penalty, and trust in authority, as determinants to e-Commerce enforced tax compliance. The study also proposed the mediating influent of trust in authority on the relationships between tax audit, tax penalty, and e-commerce-enforced tax compliance. A self-administered questionnaire was distributed to 339 e-Commerce business taxpayers as respondents. The results revealed a significant and positive relationship between tax penalty and e-commerce enforced compliance. On the other hand, tax audit has an insignificant direct relation with e-commerce enforced compliance, but has a significant relationship with mediating effect of trust in authority, indicating that there is a full mediation effect between the relationship. The findings of this study showed how trust in authority can impact enforced tax compliance among e-Commerce business taxpayers. The result of this study would facilitate the stakeholders such as tax authorities, tax practitioners, and academicians to improve the understanding of the determinants that affect tax compliance of e-commerce business taxpayers.

Keywords: e-Commerce Business, Enforced Tax Compliance, Trust in Authority, Tax Audit, Tax Penalty.

Introduction

The marketplace nature is changing due to e-commerce. An information-based economy began to emerge at the end of the 20th century, with the supply of services contributing to more than half of all economic activity in developed countries. Furthermore, global business behavior has been significantly impacted by the pandemic Coronavirus Disease 2019 (COVID-19) outbreak, which started in early December 2019. Businesses start to adopt a new method of operation. Regular activities have moved from offline to online settings, which affects the entire business. Coronavirus has changed the nature of commerce and affected it globally. A study by Akram and Khan (2020) found that 52% of consumers stay

clear of physical stores and crowded areas. In addition, 36% of buyers are avoiding physical purchases until they receive the coronavirus vaccine (Akram and Khan, 2020). In the context of Malaysian companies, e-Commerce businesses (e-CB) have shown consistent growth and are anticipated to grow favorably in the future. The e-Commerce sector has developed into one of Malaysia's most significant and competitive industries in 2018 (Malaysia Investment Development Authority, 2019) and is statistically supported by a survey from the Department of Statistics Malaysia (DoSM). The survey by DoSM revealed that between 2015 and 2017, the revenue from e-Commerce transactions climbed by 6% annually, amounting to an increase in revenue of around RM50 billion. Moreover, the Malaysian e-Commerce market produced US\$3.68 billion (RM15.2 billion) in sales in 2019, with annual market growth predicted to reach 11.8 percent by 2023, according to the online statistics data portal Statista.

Despite of its remarkable growing, The obstacle that tax authority frequently face is the failure of e-CB taxpayers to declare or disclose the taxes they owe as a consequence of their profits. They believe that borderless transactions, make it impossible for tax authorities to track their online business profits (Hamid *et al.*, 2019). Additionally, the e-CB taxpayers believed that the business conducted online differs from other conventional forms of physical trade and is considered not taxable income (Turban *et al.*, 2018). Moreover, there is no necessity to create an audited account and there is no proof of the transaction in the e-CB, which raises the possibility of hidden transactions. The internet does not leave any traces that could help tax authorities find the locations of e-Commerce players, making taxation a flaw. In order to verify that the relevant authorities are unable to monitor the situation, e-Commerce penetrators continue to probe government jurisdictions, resulting in the loss of millions of dollars in tax revenue (Mohammad, 2019).

Hence, this study examines the e-CB enforced tax compliance determinants and mediating effect of trust in authority on the relationship between tax audit, tax penalty, and e-CB enforced tax compliance in Malaysia. The remainder of this paper is organized as follows. The next section proceeds to review related literature. Section 3 provides the research method. This is followed by empirical results and discussions. The final section concludes this paper.

Literature Review and Theoretical Framework

Theoretical Foundation

The economic deterrence model has been widely discussed among scholars and practitioners because of its relationship with tax compliance. The compliance models were developed using the economic theory that emphasizes deterrence which can be achieved through several methods namely punitive and persuasive including increasing the probability of detection, increasing the tax rate, or imposition of higher penalties (Fischer *et al.*, 1992). Furthermore, it can indicate enhanced education, increased awareness, more advertising, and incentives (Hite, 1988). The economic deterrence model has undergone numerous changes and extensions over the years, and it is still applicable in most studies on taxpayer compliance. Becker (1968) developed economic deterrent models based on an economic model for analyzing illegal behavior. However, at the early stage of the study, there was a limit where enforcement became ineffective and social loss occurred.

The limitations of the pure economic deterrence model have been the focus of extensive study in the 1990s and 2000s, which led to multiple improvements. According to Alm *et al* (1992), the economic deterrence theory would indicate that most taxpayers would evade taxes because of self-interest behavior since it is uncertain that the avoider would be caught and penalized. This point of view explains that if taxpayers are not detected by the authorities when they chose not to pay the actual tax from their income, they will fare much better than if they chose to declare their actual income. However, if taxpayers are proven to have failed to report their actual income, it will result in punishment, and their records will be worse (Devos, 2014). In conclusion, taxpayers will pay their taxes if they believe there is a high probability that they will be found avoiding taxes, but if their assessment indicates that failing to do so would result in good advantages even if they are caught, they will continue to evade taxes.

Apart from the economic deterrence model, the Slippery Slope framework would also be utilized in this study to examine the relationship between tax audit, tax penalty, and trust in authority with e-CB enforced tax compliance. The Slippery Slope Framework, which implies that increasing trust in authorities and their power will increase tax collections, identified trust as one of the important elements that shape tax compliance (Kirchler *et al.*, 2008). Taxpayers believe that the tax authority would administer the tax system efficiently and that they will distribute taxes in a trustworthy manner for the benefit of the country's development.

Enforced Tax Compliance

Enforced tax compliance describes taxpayers as egoistic, disobedient, and profit-driven individuals who must be forced to contribute to taxation (Kirchler *et al.*, 2008) and fulfilling their tax commitments (Valerie *et al.*, 2007). Tax authorities enforced compliance with the law by utilizing their powers, such as audits and fines, which can cause individuals to feel constrained, distrust the tax authority, and act uncooperatively (Kirchler *et al.*, 2008). Moreover, the tax authority can achieve enforce tax compliance by increasing the power of authority which defines as the capacity to detect and punish tax crimes, in line with the increase in tax revenue. If the authorities exercise their power, taxpayers are more likely to compare the advantages of evasion against the costs of evasion and pay their taxes. Taxpayers may feel forced to comply, but this perception will affect their resistance and tendency for strategic behavior. Indeed, this situation mainly illustrates how people would pay taxes to avoid being audited and punished.

Tax Audit and e-Commerce Business Enforced Tax Compliance

According to Gupta and Nagadevara (2007), tax audit is defined as an assessment of a taxpayer's tax filing and financial information to ensure that information is correctly declared under tax regulations and that the amount of tax is correctly reported. Tax Audit is a tax structure determinant that has the potential to be a significant enforcement instrument for tax compliance (Fischer, 1993; Kirchler *et al.*, 2008). Based on the previous study, mixed findings are recognized with most of the studies supporting the positive effect of audit on tax compliance. Tax audit has a positive relationship with tax compliance and it was supported by some recent studies such as (Palil, 2011; Loo *et al.*, 2010; Olaoye and Ekundayo, 2019).

Palil and Rusyidi (2013) supported earlier studies by Shanmugam (2003); Dubin (2004) that suggested audits have a positive effect on tax compliance and according to these findings, tax audit is the main factor in boosting voluntary compliance in self-assessment systems. According to Palil and Rusyidi (2013), audit rates may encourage taxpayers to be more diligent when completing their tax forms, disclosing all income, and claiming all appropriate deductions to determine their estimated tax liability. On the other hand, taxpayers who have never had an audit may be more likely to overstate their income and make incorrect deduction claims.

Tax audits have been shown by Palil and Rusyidi (2013) to change compliance behavior from negative to positive. These results complement the research done by (Witte and Woodbury, 1985; Beron et al., 1988). Witte and Woodbury's study of sole proprietors discovered that tax audits play a significant effect on tax compliance while Beron *et al* (1988) revealed the contrary result. They concluded there was no significant correlation between audits and compliance in the categories they studied. Audits work better at attracting taxpayers into making over-claiming deductions than at encouraging them to accurately declare their income (Beron *et al.*, 1988).

Olaoye and Ekundayo (2019) in their recent study have examined the effects of tax audits on remittance and tax compliance in Nigeria. This study examined how tax compliance and revenue remittance were affected by desk audits, field audits, back duty audits, and registration audits. A closed-ended questionnaire was used to collect the data, and multiple regression and a correlation matrix were used to evaluate the results. The study's findings demonstrated that all types of tax audits significantly affect tax compliance. Tax non-compliance attempts will decline as tax audit activity increase.

The economic deterrence model states that taxpayers compare the advantages of non-compliance action with the penalty charge if they are found guilty in order to maximize the benefits from their compliance decision. According to Allingham and Sandmo (1972), taxpayers will always declare their income correctly if the probability of being audited is high. While Slemrod, Blumenthal, and Christian (1998) examined the relationship between the probability of being audited and the responses of taxpayers indicated that the result of the study supported prior research which shows that taxpayer evasion behavior depends on the probability of being audited. Hence, taxpayers that perceive high chances of being audited tend not to engage in tax evasion, which literally will increase tax compliance levels (Hauptman et al., 2014).

Consequently, from the literature reviews and in line with deterrence theory, most studies supported the positive significant effect of audit on tax compliance (Allingham and Sandmo, 1972; Palil, 2011; Palil *et al.*, 2013; Shanmugam, 2003; Dubin, 2004; Loo *et al.*, 2010; Olaoye and Ekundayo, 2019). Therefore, based on deterrence theory and the previous studies, this study hypothesizes that

H1 : Tax Audit have a significant positive relationship with e-Commerce Business Enforced Tax Compliance.

Tax Penalty and e-Commerce Business Enforced Tax Compliance

In order to ensure tax compliance, penalties are a crucial part of the tax system (Chau & Leung, 2009) which is also another tax determinant and an important enforcement tool for increasing tax compliance (Kirchler *et al.*, 2008). However, empirical research on the impact

of penalties on tax compliance has produced mixed findings. Numerous studies have employed a range of methodologies to analyze the theoretical constructs in various contexts and present empirical evidence regarding the impact of penalties on tax compliance. According to Allingham and Sandmo (1972), an increase in the probability of being audited and tax penalties can lead to a higher declaration of income. Evidence supporting the positive significant effect of the penalty on tax compliance has been reported by (Bărbuță-Mișu, 2011; Nuridayu *et al.*, 2017; Alkhatib *et al.*, 2019; Youde and Lim, 2019). Similarly, according to a previous study by Chau and Leung (2009), tax compliance could be maximized by increasing the tax penalties related to it.

A recent study by Alkhatib *et al* (2019) focuses on the income tax of SMEs in Palestine and uses the Deterrence Theory to examine the relationship between the probability of being audited, tax penalty, tax rate, and income tax non-compliance. The findings revealed that the probability of being audited and tax penalties are negatively associated with income tax evasion which is in line with the previous studies.

In the Malaysian context, a study by Nuridayu *et al* (2017) evaluate the relationship between tax penalties and taxpayer compliance behavior, specifically among SMEs. To determine the impact of each factor on tax compliance behavior, the components of tax penalties, including rate and penalty, knowledge and education, as well as taxpayer psychological behavior, were examined. The result demonstrates that tax penalties have a significant effect on tax compliance behavior. Therefore, the study proved the role of tax penalties in increasing tax compliance behavior in Malaysia.

Moreover, according to Allingham and Sandmo (1972), the tax penalty has a positive relationship with an increase in tax compliance. Some research validates the assumption of the deterrence theory by reporting a positive effect of the penalty on enforced compliance (Bărbuță-Mișu, 2011; Nuridayu *et al.*, 2017; Alkhatib *et al.*, 2019; Youde and Lim, 2019; Chau and Leung, 2009; Srinivasan, 1973; Weigel *et al.*, 1987; Kirchler *et al.*, 2008). Hence, based on the above discussion and from the principle of the deterrence theory, the subsequent hypothesis is proposed

H2 : Tax Penalty have a significant positive relationship with e-Commerce Business Enforced Tax Compliance.

Mediation of Trust in Authority

Trust is a unique relationship between interacting partners who are driven to maintain the relationship by utilizing each other's positive attributes (Chong and Arunachalam, 2018), as well as a set of shared ideas that establish a common expectation of honest behavior (Bjørnskov, 2007). In the context of tax compliance, trust in authority refers to the level of confidence and belief that individuals have in the tax authorities, such as the government or tax agencies, to administer the tax system fairly and effectively.

Individuals are more likely to voluntarily comply with tax regulations when they trust the tax authorities since they believe their tax payments will be beneficial and they feel the authority's performance for the welfare of the people, despite the system being transparent and equitable. Contrarily, people may be more likely to avoid taxes or participate in non-compliance behavior if they do not trust the tax authorities. This is in line with Kirchler *et al* (2008) who claimed that a synergistic tax environment results from mutual trust between the government and the taxpayers. In a cooperative environment, the government treats

taxpayers with respect and courtesy because it is confident that they pay their taxes on time and honestly. In return, taxpayers pay their fair amount of taxes because they believe that government will provide them with quality services.

Based on Robbins (2016), trust has several dimensions. There are five key dimensions of trust which are: 1) integrity, 2) competency, 3) consistency, 4) loyalty, and 5) openness. Individuals would be willing and enthusiastic to pay their taxes if a government is considered to be trustworthy due to its integrity. Competence is the second dimension of trust which is related to the interpersonal, technical skill, and knowledge a leader should have. A trustworthy leader is often considered to walk the talk, which means doing or taking action as they say they will do. Competence as one of the measurements of trust has a significant impact on the perception of trust. This is because taxpayers believe their government is trustworthy in managing their tax revenue and not misusing the tax money will encourage them to achieve a high level of tax compliance (Ya'u & Saad, 2018).

Consistency is the third component of trust, and it is related to individual predictability, reliability, and good judgment in dealing with the issue. The citizen would have more confidence in the government if it is considered to be consistent and does what it promises to do, and in return will cooperate with the tax authority with transparency. They will cooperate since they experience the government keeping its promise and enforcing a national policy that aligns public's needs. The fourth dimension is loyalty, which states faithfulness or commitment to someone or some persons. A citizen becomes more loyal to the government when there is mutuality which means that the government's provision of goods and services should align with the benefits of the citizen. A citizen will become increasingly loyal and eventually compliant in exchange for the provision of these facilities.

The fifth component of trust is openness, which refers to a person's or leader's ability to tell you the reality. It's one of the most difficult things to do because, most of the time, the sensitive nature of reality and people's interpretations of it may differ. As the government becomes more transparent about its operations and citizens perceive and understand the government's intentions, openness develops a high level of trust. The most important element in openness encourages a high level of trust, as the government becomes more transparent about its operations and people interpret and understand the government's objectives. Taxpayers will be able to comply with the tax law as a result of this process, which will gradually improve voluntary tax compliance. The above mention dimensions tend to be relevant in this study since the study going to use trust in authority as a mediating variable.

Numerous academics have examined the relationship between trust and tax compliance. A prior study based on data from national and international surveys found a positive correlation between tax compliance and trust in the tax authority (Murphy, 2009; Torgler, 2013; Wahl *et al.*, 2010; Bornman, 2015; Jimenez & Iyer, 2016). In line with these studies, Van Dijke and Verboon's (2010) study supported the result, which demonstrated the moderating role of trust in authorities in the positive influence of tax office procedural fairness on tax compliance. Moreover, Gobena and Van Dijke's (2016) study also examined the mediating roles of the tax authority's legislative and coercive power in the relationship between procedural justice, trust in the tax authorities, and tax compliance. The result of this research on Ethiopian company owners supported most predictions that procedural justice raises voluntary tax compliance as clarified by the SSF theory. A more recent study conducted by Ya'u and Saad (2018); Albab and Suwardi (2021) has confirmed that trust has a positive effect as a mediating variable in the relationship with tax compliance. Hence, the following

hypotheses are made in accordance with these previous studies and in line with the Slippery Slope Framework:

H3 : Trust in Authorities have a significant positive relationship with e-Commerce Business Enforced Tax Compliance.

H4 : Trust in Authority positively mediates the relationship between tax audit and e-Commerce Business Enforced Tax Compliance.

H5 : Trust in Authority positively mediates the relationship between tax penalty and e-Commerce Business Enforced Tax Compliance.

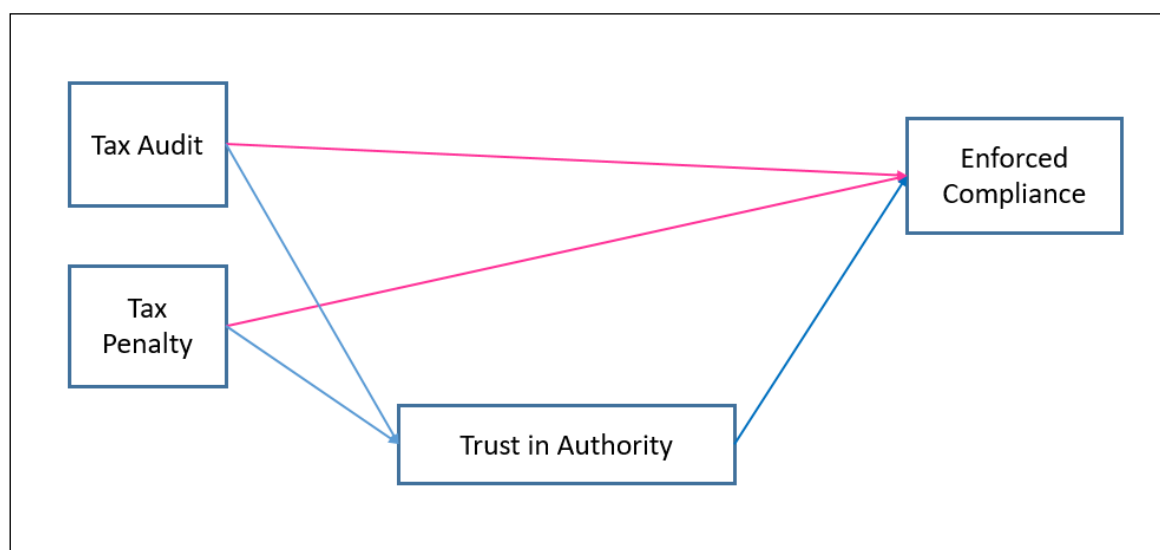


Figure 1: Theoretical Framework

Methodology

Participant and Procedure

This study explored the mediating impact of trust in authority in the interaction between tax audit and tax penalty with e-CB enforced tax compliance. The researcher administered a hardcopy and online survey to 750 registered e-commerce taxpayers with the Inland Revenue Board of Malaysia (IRBM). Questionnaires were distributed to IRBM branches in four states representing the largest distribution of e-Commerce businesses, namely the Wilayah Persekutuan, Selangor, Penang, and Johor. However, the researcher manages to meet 339 of the final amount of respondents with an effective response rate of 45.2%.

Based on the result from the demographics analysis, the majority of the respondents were aged below 56 years (91.4%) and the remaining respondents were 56 years and above (8.6%). The ratio of gender was roughly balanced with 55.8% male and 44.2% female with the majority being married status (59.9%). Chinese were the largest proportion of the total respondents (45.1%), followed by Malay (38.6%) and Indian (14.7%). Based on these ethnic groups, all Malay were Muslim (38.9%) while Chinese and Indian respondents were prominently Buddhist (14.5%), Hindus (20.1%), and Christian (26.5%) respectively. In terms of educational background, most of the respondents were highly educated with almost 52.8% at an undergraduate and postgraduate level while 26% at a diploma level, and 21.2% at SPM and equivalent level. The designation of respondents were mostly business owners (49.6%) followed by accountants or finance officers (22.4%), and managers (14.2%). This study also

categorized the e-CB taxpayers based on their type of business namely retail and wholesale trading, manufacturing, management, and consulting services, food and beverage business, and others. Most of the respondents were involved in retail and wholesale trading (29.2%), management and consulting services (24.5%), and food and beverage businesses (23.6%). The number of years of operation or age of business was categorized in this study and the result shows that the majority of the business had been established between two to five years of operation (41.3%), and around 44.2% had been established more than six years and above. Only 14.5% were established in less than two years. In terms of the level of income, the biggest group of respondents were those who earned between RM 70,000 to RM 99,000 per annum (39.2%), followed by RM 100,000 and above (31.6%). The remaining portions were from those who made RM35,000 to RM 69,999 per annum income (24.2%) and less than RM35,000 per annum (5%).

Measurement

The instrument was designed for collecting data that comprise three main sections. Section A comprises questions focusing on the demographic profiles of participants, such as gender, age, educational qualifications, and type of business. Section B comprises questions related to measuring enforced tax compliance while section C measures the independent variables and mediating variables which are tax audit, tax penalty, and trust in authority.

A tax audit is measured in this study as an analysis of a taxpayer's tax return, accounts, and financial information to ensure that information is correctly reported under the tax laws and to validate that the amount of tax is reported correctly. Three items were adapted from Faridy (2018) which was done in the specific context of e-Commerce tax, and one item was adapted from (Badra, 2012). While the tax penalty is defined in this study as the sanctions and fines imposed on e-Commerce business taxpayers who commit income tax fraud offenses. For the measurement of tax penalty in the current study, two items are adapted from Palil (2010), one from Braithwaite (2009), and two from (Loo, 2006).

For the independent and mediator variable, trust in authority is measured by five items adapted from (Kartikaputri, 2013; Ali, 2011; Palil, 2010). Trust in authority was defined as the common opinion of people and social groupings that the tax authorities concerned and serve the public good Kirchler *et al* (2008) that includes five key dimensions of trust which are integrity, competency, consistency, loyalty, and openness (Robbins, 2016).

Enforced tax compliance, which is a dependent variable in this study, was evaluated using five questions adopted from (Kirchler and Wahl, 2010). The enforced compliance operationally defines taxpayers as egoistic, uncooperative, and profit-driven individuals who must be forced to contribute to taxation and meet tax obligations. All the items were scored using a five-point Likert scale with the responses ranging from 1 (strongly disagree) to 5 (strongly agree).

Data Analysis

Measurement Model

The first part of PLS-SEM is to assess the measurement model, containing convergent and discriminant validity. The latent variables in a given study are further defined by the measurement model. It analyzes the validity and reliability of the items. The model examines the item convergence, or, more precisely, determines whether certain items strongly converge to represent the constructs that they are supposed to measure (Hair *et al.*, 2015).

Convergent validity testing has three components which are loadings, average variance extracted (AVE), and composite reliability (CR).

The factor loading is used to measure the items on their reliability acceptance in measuring a construct of interest. The value of loading should be from 0.5 to 0.9 with values above 0.7 indicating a higher degree of confidence in the item's convergence. In terms of reliability, AVE and CR are the aspects to be analyzed. The threshold value of both AVE and CR must at least achieve 0.5 and 0.7 respectively (Hair et al., 2015).

Table 1 shows the convergent validity of this study. Most of the loadings have values exceeding 0.7, with only three items (TA1, TP4, and TIA2) having values below 0.7 but meet the requirement of exceeding more than 0.5. Four items have been deleted, having a value less than 0.5 (TP1, TP3, TIA1, and TIA3). The AVE of the entire construct is accepted having to range from 0.564 to 0.638. The CR also met the threshold value ranging from 0.788 to 0.860.

Table 1

Convergent Validity

Construct	Item	Loadings	CR	AVE
Enforced Compliance (EC)	EC1	0.752	0.860	0.553
	EC2	0.700		
	EC3	0.789		
	EC4	0.780		
	EC5	0.700		
Tax Audit (TA)	TA1	0.611	0.802	0.504
	TA2	0.734		
	TA3	0.711		
	TA4	0.774		
Tax Penalty (TP)	TP2	0.842	0.838	0.638
	TP4	0.623		
	TP5	0.903		
Trust in Authority (TIA)	TIA2	0.652	0.788	0.621
	TIA4	0.854		
	TIA5	0.841		

To determine the discriminant's validity, Fornell and Larcker's (1981) criterion is used. Fornell and Larcker method was achieved by comparing the square roots of AVE with correlations among the constructs. In this method, the square root of each latent construct's AVE should be greater than its highest correlation with any other latent construct. Table 2 shows that all the square roots of AVE ranged between 0.710 and 0.805 and were higher than their correlations with other latent constructs, suggesting that the required discriminant validity has been achieved (Chin, 1998).

Table 2

Discriminant Validity (Fornell and Larcker, 1981)

EC= Enforced Compliance, TA= Tax Audit, TIA= Trust in Authority, TP= Tax Penalty

	EC	TA	TIA	TP
EC	0.7436			
TA	0.4892	0.7102		
TIA	0.5552	0.5121	0.7877	
TP	0.452	0.6053	0.4249	0.7986

Structural Model

The next step in SEM-PLS modeling, known as structural model analysis, was carried out after analyzing and evaluating the measurement model analysis and met the reliability and validity conditions. By running a bootstrapping procedure with a resample of 5000, the hypotheses were tested. To evaluate the structural model, Hair *et al.*, (2014) suggested focusing on the path coefficient (β), the coefficient of the determinant (R^2), and the corresponding t-value. The path coefficients of the model without the mediator are presented in Table 3. Hypothesis 1(H1) predicted that there would be a positive relationship between the tax audit factor and e-CB-enforced tax compliance. Surprisingly, H1 is not supported because the path coefficient from tax audit to e-CB enforced compliance (coefficient = 0.081, p-value- 0.268) is not significant. In addition, Hypothesis 2(H2) predicted that there would be a positive relationship between the tax penalty factor and e-CB-enforced tax compliance. H2 is supported because the path coefficient from tax penalty to e-CB enforced tax compliance (coefficient = 0.203) is significant ($p < 0.01$). Besides, Hypothesis 3(H3) predicted that there would be a positive relationship between the trust in authority factor and e-CB enforced tax compliance. The path coefficient from trust in authority to e-CB enforced tax compliance is 0.370 which is significant ($p < 0.01$), therefore H3 is also supported.

Table 3

Result of Hypothesis (Without Mediator)

Hypothesis	Relationship	Beta	T-Values	P values	Supported	R ²
H1	TA → EC	0.081	1.108	0.268	No	0.405
H2	TP → EC	0.203	3.020	0.003	Yes	
H3	TIA → EC	0.370	7.240	0.000	Yes	

Table 4 summarized the assessment of the relationship between tax audit and tax penalty and e-CB enforced compliance by the mediating effect of trust in authority. The assessment determined the significance of all the indirect and direct relationships in the model. In this research, hypotheses H4 and H5 were to determine the mediating effect of trust in authority on the relationship between tax audit and tax penalty as independent variables and enforced compliance as dependent variables.

Table 4

Result of Hypothesis (With Mediator)

Hypothesis	Mediator	Trust In Authority			
		Indirect Effect (a x b)	Direct Effect c'	Interpretation	Type of mediation/ non-mediation
H4	Tax Audit → Trust in Authority → Enforced Compliance	0.096 Significant	0.053 Not Significant	Full Mediation (Indirect Only)	-
H5	Tax Penalty → Trust in Authority → Enforced Compliance	0.042 Significant	0.217 Significant	Partial Mediation	Complimentary

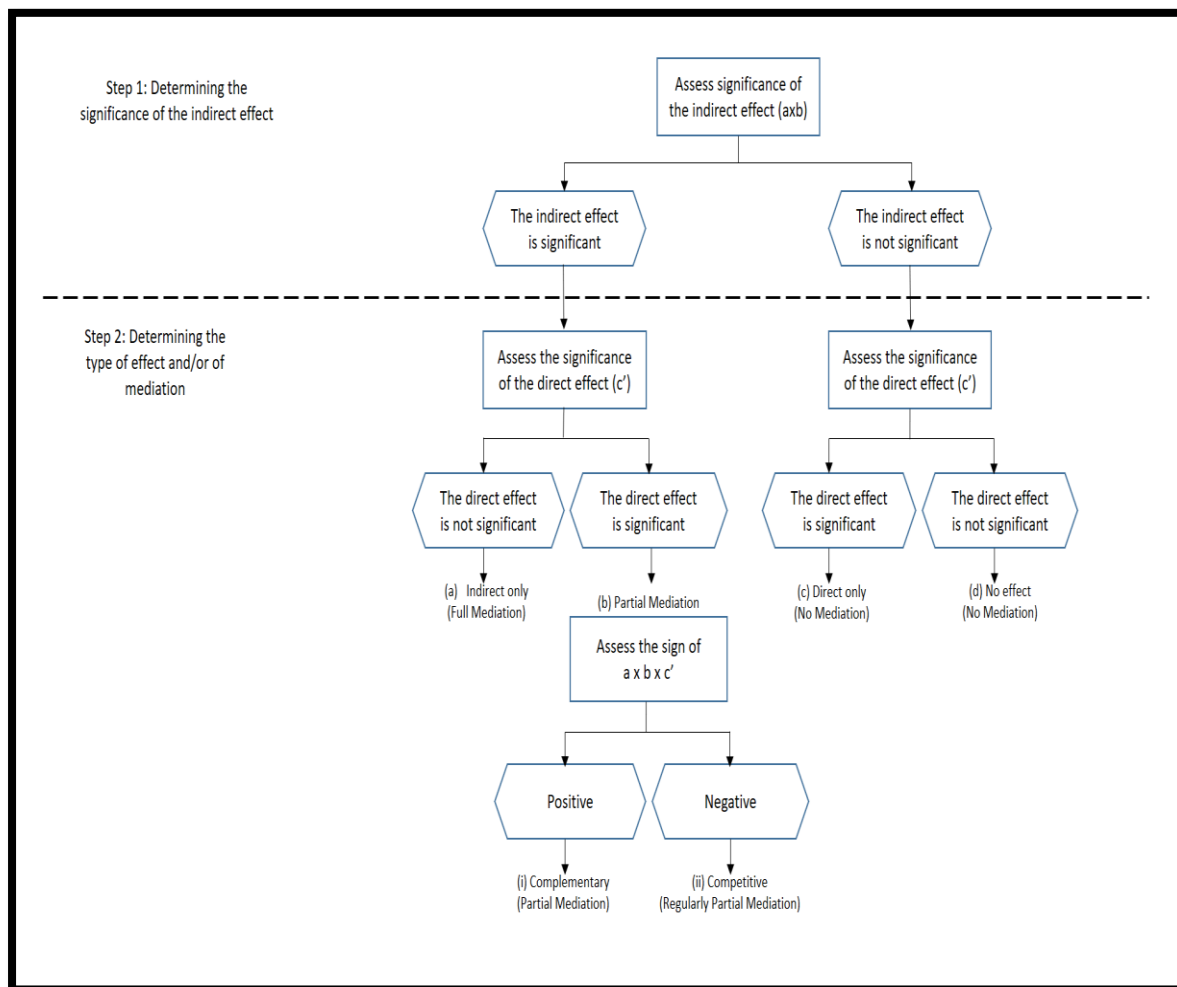
This study applies the bootstrapping analysis and adopts the mediator analysis procedure based on Zhao et al (2010) for mediating analysis. Table 5 summarized the type of mediation and non-mediation based on (Zhao *et al.*, 2010).

Table 5

Type of Mediation

Mediation	
Type	Characterize
Complementary mediation	The indirect effect and the direct effect are significant and point in the same direction.
Competitive mediation	The indirect effect and the direct effect are significant but point in opposite directions.
Indirect -only mediation	The indirect effect is significant, but not the direct effect.

Figure 2 shows how the analyses must be performed to determine the type of mediation in a model, according to (Zhao et al., 2010).



Source: Zhao et al (2010) Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206

Figure 2: Mediator Analysis Procedure

According to the results, the direct effect path coefficient of tax audit and enforced compliance was 0.053 with a p-value is 0.513, which is not significant. However, the estimated path coefficients from the PLS analysis demonstrated that the indirect effects were statistically significant within all these variables (tax audit and tax penalty) on enforced tax compliance with a mediator, trust in authority. Hypothesis 4 (H4) was to find out the mediating effect of trust in authority on the relationship between tax audit and enforced compliance. Tax audit was having significant indirect effect path coefficient (0.096, $p < 0.05$) towards enforced tax compliance with trust in authority mediation, and its direct effect path coefficient (0.053, $p = 0.513$) was insignificant. Based on the results obtained from the contemporary approach according to Zhao *et al* (2010), the indirect effect was significant whereas the direct effect was insignificant, revealing that trust in authority fully mediated the effect of tax audit on the e-CB enforced compliance. Thus, H4 result is supported.

Hypothesis 5 (H5) was to find out the mediating effect of trust in authority on the relationship between tax penalty and enforced tax compliance. Both the direct effect path coefficient (0.217, $p < 0.05$) and indirect path coefficient (0.042, $p < 0.05$) were significant. In this situation, the direct effect and indirect effect point in the same direction (positive),

hence the type of mediation that occurs is complementary mediation. The mediation analysis shows that trust in authority partially mediates between tax penalty and enforced tax compliance. Hence, H5 result is supported.

Discussion

The current study examined the relationship between tax audit, tax penalty, trust in authority, and enforced tax compliance. The findings revealed that trust in authority significantly mediates the relationship between tax audit and tax penalty with e-CB enforced tax compliance. The study has found the tax penalty and trust in authority have a significant positive effect with e-CB enforce tax compliance, while tax audit was not significant. According to research hypothesis H1, the results demonstrate that tax audit was insignificant to Malaysia's e-CB-enforced tax compliance and the finding was contrary to previous studies by Allingham and Sandmo (1972); Evans *et al* (2006); Palil (2011); Palil *et al* (2013); Shanmugam (2003); Dubin (2004); Loo *et al* (2010); and Olaoye and Ekundayo (2019) that emphasized tax audit has a significant effect on tax compliance.

One explanation for the lack of support for the hypothesized correlations could be that the e-CB taxpayers assumed that is no possibility that they would be audited, making it unfeasible for them to believe that their online business has been their main source of income subject to taxation. This scenario has received substantial support from Palil *et al.*, (2020) that mentioned the focal problem in e-commerce transactions is the inability of the IRB to identify the transactions and payments conducted virtually by the e-CB taxpayer, especially in the situation of individuals who are not registered their business. Another reason for this contrary result is based on the effectiveness and efficiency of the tax audit procedure. The previous study in Malaysia by Zandi and Elwahi (2016) examined the tax audit as a component of the SAS compliance system and concluded that the tax administrator needed to conduct the tax audit more effectively in order to motivate taxpayers toward full compliance and reduce tax evasion.

The next hypothesis (H2) confirms the significant relationship between tax penalty and e-CB enforced tax compliance. This result shows that the finding aligned with the earlier studies found a significant positive relationship between tax penalty and tax compliance (Bărbuță-Mișu, 2011; Nuridayu *et al.*, 2017; Alkhatib *et al.*, 2019; Youde and Lim, 2019; Chau and Leung, 2009; Srinivasan, 1973; Weigel *et al.*, 1987; Kirchler *et al.*, 2008). As a result, it is suggested that e-CB compliance will be higher when the tax penalty was enforced more strictly. Tax penalty create a financial deterrent for the taxpayer who violates tax regulations, thus penalties can be an effective tool to ensure compliance. Taxpayers may decide to make sure they comply with regulations in order to avoid penalties and protect their finances.

The result of H3 shows that the relationship between trust in authority and e-CB enforced tax compliance was positive and significant. This result is consistent with the study by Torgler (2013); Ya'u & Saad (2018); Gobena & Van Dijke (2016); Sihotang (2020) regarding trust in authorities and tax compliance. As such, it is confirmed that tax compliance increases when taxpayers' trust in authority was high. The result is in line with the Slippery Slope Framework (Kirchler *et al.*, 2008), which contributed through their research that indicates individuals will reflect good behavior towards tax compliance if they believe the authority spends honestly for national development.

Finally, the results (H4 and H5) reveal a significant mediating role of trust in authority between tax audit and tax penalty with e-CB enforced tax compliance. In analyzing the

mediation effect of the trust in authority factor within tax audit and tax penalty with tax enforced compliance, all of the variables had a mediation effect. This is an indication that the trust of authority influences the perception of e-CB taxpayers about tax audit and tax penalty and it gives impact to enforced compliance. The significant result shows that trust between taxpayers and the government does exist, and it indicates that e-CB taxpayers believe that trust in authority would increase their compliance level through a tax audit and tax penalty. Although the direct effect between tax audit and e-CB enforced compliance was insignificant, the element of trust in authority mediating the relationship became significant and that shows the full mediation effect does exist. Based on the findings, it was determined that the e-CB taxpayers were contented with their tax audit, tax penalties, and trust in authority, which had an impact on their level of tax compliance.

Conclusion

This study has produced useful data that can be used by different sets of stakeholders concerning the tax compliance issue including the governments, tax authorities, policymakers, e-CB taxpayers, tax professionals, and academicians. The study contributes to the understanding and knowledge of e-CB enforced tax compliance determinants, providing insight for the tax authorities regarding the effect of deterrence elements namely tax audit and tax penalty. The study is expected to extend the literature dedicated to tax compliance among e-CBs, specifically in Malaysia, but it could also have global implications for e-CBs in general. In particular, at this time when e-commerce is rapidly mushrooming, this study offers valuable information for the formulation of precise and effective policies to improve e-CB tax compliance, avoid making distorted and detrimental decisions, and increase tax revenue contributions to the Malaysian government.

This study is unique as it provides a framework to explore the determinants of e-CB enforced tax compliance underpinning by two theories namely Economic Deterrence Theory and the Slippery Slope Framework. As tax authorities around the globe have experienced a difficult task in protecting the revenue bases of e-commerce transactions without limiting the advancement of new knowledge and the participation of the business community, this study would help the governments in understanding the determinants of e-CB taxpayers' compliance and to explore the reason of their non-compliance behavior towards tax regulations.

The study extended Slippery Slope Framework and considered the mediating role of trust in authority on the association between economic deterrence factors and e-CB enforced tax compliance. Future research might further expand the model of this study by taking into account possible variables that could affect e-CB taxpayers' tax compliance behavior. For example, by examining the possible moderating effect of various socio-psychological variables and conducting a study by incorporating theory related to the adoption of Information Technology (IT).

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References

- Akram, H., & Khan, A. U. (2020). E-commerce trends during COVID-19 Pandemic. *International Journal of Future Generation Communication and Networking*, 13(2), 1449-1452
- Albab, F. N. U., & Suwardi, E. (2021). The Effect of Tax Knowledge on Voluntary Tax Compliance with Trust as a Mediating Variable: A Study on Micro, Small, and Medium Enterprises (MSMEs). *The Indonesian Journal of Accounting Research*, 24(03), 381–406. <https://doi.org/10.33312/ijar.528>
- Alkhatib, A. A., Abdul-Jabbar, H., & Marimuthu, M. (2019). The Effects of Deterrence Factors on Income Tax Evasion among Palestinian SMEs. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 8(4), 144–152. <https://doi.org/10.6007/ijarafms/v8-i4/5471>
- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of Public Economics*, 1(3_4), 323_338.
- 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](https://doi.org/10.1016/0047-2727(92)90040-M)
- Badra, M. S. (2012). The Effect of Tax Audit on Tax Compliance in Nigeria (A Study of Bauchi State Board of Internal Revenue). *Research Journal of Finance and Accounting*, 3(4), 74–81.
- Bărbuță-Mișu, N. (2011). A Review of Factors for Tax Compliance. *Economics and Applied Informatics*, 17(1), 69–76.
- Becker, G. S. (1968). Crime and Punishment:An Economic Approach. *Journal of Political Economy*, 76, 169–217.
- Beron, K., Helen, V.T., Witte, A. D. (1988). *We find cospliance to be higher , if anything , in areas with less educated and older University of Texas.*
- Bjørnskov, C. (2007). Determinants of generalized trust: A cross-country comparison. *Public Choice*, 130(1–2), 1–21. <https://doi.org/10.1007/s11127-006-9069-1>
- 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. <https://doi.org/10.4102/jef.v8i3.121>
- Braithwaite, V. (2009). *Defiance in Taxation and Governance*. Edward Elgar Publishing.
- Braithwaite, Valerie, Murphy, K., & Reinhart, M. (2007). Taxation threat, motivational postures, and responsive regulation. *Law and Policy*, 29(1), 137–158. <https://doi.org/10.1111/j.1467-9930.2007.00250.x>
- Chau, G., & Leung, P. (2009). A critical review of Fischer tax compliance model : A research synthesis. *Journal of Accounting and Taxation*, 1(2), 034–040.
- Chin, W. W. (1998). *Commentary: Issues and opinion on structural equation modeling*. JSTOR.
- Chong, K. R., & Arunachalam, M. (2018). Determinants of enforced tax compliance: Empirical evidence from malaysia. *Advances in Taxation*, 25, 147–172. <https://doi.org/10.1108/S1058-749720180000025007>
- Devos, K. (2014). *Tax Compliance Theory and Literature*. Springer, Dordrecht.
- Dubin, A. J. (2004). Criminal Investigation Enforcement Activities and Taxpayer Noncompliance. *Mimeo Direktorat Jenderal Pajak. 2000, Jakarta Post, Vol. July.*
- Faridy, N., Copp, R., Freudenberg, B., & Sarker, T. (2018). Complexity, Compliance Costs and

- Non Compliance with VAT by Small and Medium Enterprises in Bangladesh: Is There a Relationship? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2479146>
- Fischer, C., Wartick, M., & Mark, M. (1992). Detection probability and taxpayer compliance: A review of the literature. *Journal of Accounting Literature*, 11(1), 1_46.
- Fischer, C. M. (1993). *Perceived-detection probability and taxpayer compliance: A conceptual and empirical examination*. Pennsylvania State University.
- Gupta, M., & Nagadevara, V. (2007). Audit Selection Strategy for Improving Tax Compliance: Application of Data Mining Techniques. *Foundations of Risk-Based Audits. Proceedings of the Eleventh International Conference on e-Governance*, 378–387.
- Hair, J. F., Celsi, M., Money, A., Samouel, P., & Page, M. (2015). The essentials of business research methods: Third Edition. *The Essentials of Business Research Methods: Third Edition*, 1–494. <https://doi.org/10.4324/9781315716862>
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hamid, N. A., Ibrahim, N. A., Ariffin, N., Taharin, R., & Jelani, F. A. (2019). Factors Affecting Tax Compliance among Malaysian SMEs in E-Commerce Business. *International Journal of Asian Social Science*, 9(1), 74–85. <https://doi.org/10.18488/journal.1.2019.91.74.85>
- Hauptman, L., Horvat, M., & Korez-Vide, R. (2014). Improving tax administration's services as a factor of tax compliance: The case of tax audit. *Lex Localis*, 12(3), 481–501. [https://doi.org/10.4335/12.3.481-501\(2014\)](https://doi.org/10.4335/12.3.481-501(2014))
- Hite, P. A. (1988). The effect of peer reporting behavior on taxpayer compliance. *Journal of the American Taxation Association*, 9(2), 47–64., 9(2), 47–64.
- Jimenez, P., & Iyer, G. S. (2016). Tax compliance in a social setting: The influence of social norms, trust in government, and perceived fairness on taxpayer compliance. *Advances in Accounting*, 34, 17–26. <https://doi.org/10.1016/j.adiac.2016.07.001>
- 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>
- Loo, E. C. (2006). *The Influence of the Introduction of Self-Assessment on Compliance Behaviour of Individual Taxpayers in Malaysia*.
- Loo, E. C., Evans, C., & McKerchar, M. (2010). Challenges in understanding compliance behaviour of taxpayers in Malaysia. *Asian Journal of Business and Accounting*, 3(2), 145–161. <https://doi.org/10.2139/ssrn.2128378>
- Mohammad, A. J. (2019). *The Impact of E-Commerce for Taxation*. 02(09), 74–91.
- Mohd Rizal Palil. (2011). Factors affecting tax compliance behaviour in self assessment system. *African Journal of Business Management*, 5(33), 12864–12872. <https://doi.org/10.5897/ajbm11.1742>
- Murphy, K. (2009). Procedural justice and affect intensity: Understanding reactions to regulatory authorities. *Social Justice Research*, 22(1), 1–30. <https://doi.org/10.1007/s11211-008-0086-8>
- Nuridayu, Y., Rosiati, R., & Abu Hassan, N. S. (2017). Tax Penalties and Tax Compliance of Small Medium Enterprises (SMEs) in Malaysia. *International Journal of Business, Economics and Law*, 12(1), 81–91. <http://ijbel.com/wp-content/uploads/2017/07/ACC-342.pdf>
- Olaoye, C. O., & Ekundayo, A. T. (2019). Effects of Tax Audit on Tax Compliance and Remittance of Tax Revenue in Ekiti State. *Open Journal of Accounting*, 08(01), 1–17.

- <https://doi.org/10.4236/ojacct.2019.81001>
- Palil, M. R. (2010). Tax Knowledge and Tax Compliance Determinants in Self Assessment System in Malaysia. In *Journal of International Development* (Vol. 4, Issue 3). The University of Birmingham.
- Palil, M. R., Hamid, M. A., & Hanafiah, M. H. (2013). Taxpayers compliance behaviour: Economic factors approach. *Jurnal Pengurusan*, 38, 75–85. <https://doi.org/10.17576/pengurusan-2013-38-07>
- Palil, M. R., & Rusyidi, M. A. (2013). The Perception of Tax Payers on Tax Knowledge and Tax Education with Level of Tax Compliance: A Study the Influences of Religiosity. *ASEAN Journal of Economics, Management and Accounting*, 1(1), 118–129.
- Palil, R. M., Amin, H., & Turmin, S. Z. (2020). *Challenges In Implementing Taxes On E-Commerce Transaction In Malaysia*. 22(2), 179–200.
- Robbins, B. G. (2016). From the general to the specific: How social trust motivates relational trust. *Social Science Research*, 55, 16–30. <https://doi.org/10.1016/j.ssresearch.2015.09.004>
- Shanmugam, S. (2003). Managing self assessment - an appraisal. *Tax Nasional-Self Assessment: The Way Forward, 1st Quarte*.
- Srinivasan. (1973). Tax Evasion: A Model. *Journal of Public Economic*, 2, 339–346.
- Torgler, B. (2013). Tax Compliance and Tax Morale. *Tax Compliance and Tax Morale*. <https://doi.org/10.4337/9781847207203>
- Turban, E., Outland, J., King, D., Lee, J. K., Liang, T.-P., & Turban, D. C. (2018). *Electronic Commerce 2018*. <https://doi.org/10.1007/978-3-319-58715-8>
- Wahl, I., Kastlunger, B., & Kirchler, E. (2010). Trust in authorities and power to enforce tax compliance: An empirical analysis of the “slippery slope framework.” *Law and Policy*, 32(4), 383–406. <https://doi.org/10.1111/j.1467-9930.2010.00327.x>
- Weigel, R. H., Hessing, D. J., & Elffers, H. (1987). Tax evasion research: A critical appraisal and theoretical model. *Journal of Economic Psychology*, 8(2), 215–235. [https://doi.org/10.1016/0167-4870\(87\)90021-3](https://doi.org/10.1016/0167-4870(87)90021-3)
- Witte, A. D., & Woodbury, D. F. (1985). The effect of tax laws and tax administration on tax compliance: The case of the US individual income tax. *National Tax Journal*, 1–13.
- Ya’u, A., & Saad, N. (2018). Trust as Moderating Variable in the Relationship between Fairness Perceptions and Voluntary Tax Compliance in Nigeria : A Theoretical Framework. *Journal of Advanced Research in Business and Management Studies*, 10(1), 28–39.
- Youde, S., & Lim, S. (2019). The Determinants of Medium Taxpayers’ Compliance Perspectives: Empirical Evidence from Siem Reap Province, Cambodia. *International Journal of Public Administration*, 42(14), 1222–1233. <https://doi.org/10.1080/01900692.2019.1591447>
- Zandi, G., & Elwahi, A. S. M. (2016). Tax Compliance Audit: The Perspectives of Tax Auditors in Malaysia. *Asian Development Policy Review*, 4(4), 143–149. <https://doi.org/10.18488/journal.107/2016.4.4/107.4.143.149>
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206. <https://doi.org/10.1086/651257>