

# THE MEDIATING EFFECT OF TRUST IN AUTHORITY ON THE RELATIONSHIP BETWEEN TAX SYSTEM REFORM, TAX KNOWLEDGE, AND E-COMMERCE BUSINESS VOLUNTARY TAX COMPLIANCE.

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**Abstract:** *This study aims to examine the mediating effect of trust in authority on the relationship between tax system reform, tax knowledge, and voluntary tax compliance among e-Commerce business taxpayers in Malaysia. This study posited tax system reform, tax knowledge, and trust in authority, as determinants of e-Commerce voluntary tax compliance. The study also proposed the mediating influent of trust in authority on the relationships between tax system reform, tax knowledge, and e-commerce-voluntary 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 system reform, tax knowledge, and e-Commerce voluntary compliance. Additionally, tax system reform and tax knowledge have a significant direct relationship with e-commerce voluntary compliance, and have a significant relationship with mediating effect of trust in authority, indicating that there is a partial mediation effect between the relationships. The findings of this study showed how trust in authority can impact voluntary tax compliance among e-Commerce business taxpayers. 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, Voluntary Tax Compliance, Trust in Authority, Tax System Reform, Tax Knowledge.

## 1.0 Introduction

The landscape of commerce is transforming due to the rise of e-commerce. Towards the end of the 20<sup>th</sup> century, an information-based economy began to emerge, with services accounting for over half of economic activity in developed countries. Furthermore, the global business environment has been significantly impacted by the outbreak of the Coronavirus Disease 2019 (COVID-19) pandemic, which started in December 2019. This has led businesses to adopt new operational methods, with a shift from offline to online settings affecting various aspects of business operations. The nature of commerce has been altered by the pandemic on a global scale. 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 become one of Malaysia's most significant and competitive industries since 2018, as supported by statistics from the Malaysia Investment Development Authority (2019) and a survey conducted by the Department of Statistics Malaysia (DoSM). The DoSM survey indicated an annual growth rate of 6% in revenue from e-commerce transactions between 2015 and 2017, resulting in an overall revenue increase of approximately RM50 billion. Moreover, the Malaysian e-commerce market generated sales of US\$3.68 billion (RM15.2 billion) in 2019, with an anticipated annual market growth rate of 11.8% by 2023, according to the online statistic data portal Statista.

Despite this remarkable growth, tax authorities frequently encounter challenges with e-commerce taxpayers failing to declare or disclose their tax liabilities based on their profits. These taxpayers believe that borderless transactions make it difficult for tax authorities to track their online business earnings (Hamid *et al.*, 2019). Furthermore, e-CB taxpayers consider online business activities to be distinct from conventional physical trade and as a result, believe that such income is not subject to taxation (Turban *et al.*, 2018). Additionally, there is no requirement for creating audited accounts, and transactions conducted in the e-CB lack traceable evidence, which increases the likelihood of hidden transactions. The internet leaves no traces that could aid tax authorities in identifying the locations of e-commerce players, thereby creating a loophole in taxation. In an attempt to exploit the inability of relevant authorities to monitor the situation, e-commerce players continue to explore legal jurisdictions, resulting in the loss of millions of dollars in tax revenue (Mohammad, 2019).

Hence, this study aims to investigate the determinants of voluntary tax compliance in the e-CB sector and explore the mediating effect of trust in authority on the relationship between tax system reform, tax knowledge, and e-CB voluntary tax compliance in Malaysia. The remainder of this paper is structured as follows. The next section provides a review of the relevant literature, followed by an explanation of the research methodology in section 3. Subsequently, empirical results and discussions are presented, leading to the conclusion of the paper in the final section.

## **2.0 Literature Review and Theoretical Framework**

### **2.1 Theoretical Foundation**

The Fiscal Psychological Model combines Economic Deterrence Model and the Social-Psychological Model to understand and predict human behavior concerning taxes. These models explore taxpayers' attitudes and beliefs to shed light on their compliance with tax obligations. Numerous studies have been conducted over the past decade to improve and expand the variables and methods used in these models.

In the earliest studies on tax compliance, Schmolders (1959) examined taxpayer perception of the tax concept. The underlying assumption was that taxpayers prioritize their self-interest rather than contributing to the public good. It was found that when taxpayers hold positive attitudes toward tax obligations and support the government, they are more likely to comply and pay their taxes. Schmolders (1959) concluded that attitudes are influenced by cultural variations and the tax systems in place. However, McKerchar (2008) on the other hand, argued this was a limited understanding of the basics of attitude.

In the late 1960s, Strümpel (1969) developed one of the initial fiscal psychology models of tax compliance. The model emphasized that the severity of tax assessment by authorities can impact the level of compliance. It included two key factors which were "rigidity of assessment" and "willingness to cooperate". The rigidity of the assessment encompassed

aspects such as tax fines, the audit process, and bureaucratic hurdles encountered when dealing with tax authorities. On the other hand, willingness to cooperate referred to individuals' behaviors and perspectives regarding the tax system.

Throughout the 1970s, several other fiscal psychology models were developed to explore behavioral factors associated with tax compliance. Spicer (1974) investigated the concept of equity exchange, where the public receives benefits from the government in exchange for paying taxes. Vogel (1974) and Song and Yarborough (1978) also researched the moral principles that influence taxpayers' compliance. Both equity and morals were found to have significant associations with compliance behavior. In the early 1980s, Ajzen and Fishbein (1980) proposed an important alternative version of fiscal psychology model development known as the Theory of Reasoned Action (TRA). According to TRA Model, taxpayers' behavior is directly influenced by their intentions, which are determined by their behavior and their perception of subjective norms or their beliefs about whether their reference group approves of their actions (Bobek, Roberts, & Sweeney, 2007). The reference group can include friends, colleagues, and family members.

In line with the TRA framework, Lewis (1982) conducted a study in the early 1980s to understand tax compliance behavior. The study identified three significant factors that affect compliance intentions which are age, moral outlook, and perception of others' involvement in evasion. Similarly, Groenland and Veldhoven (1983) proposed a psychological framework for tax compliance, which examined the relationship between people's attitudes toward the tax system and their behavior. Their research revealed a correlation between tax education and tax compliance behavior. The study emphasized the need for a comprehensive research design based on the psychological framework.

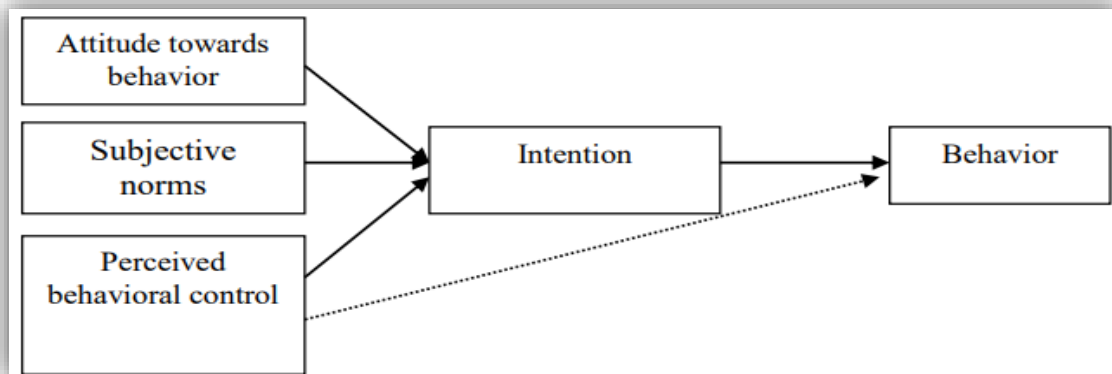
During 1990s and early 2000s, other elements were examined in the development of fiscal psychology, which was also lacking from the Economic Deterrence Model. Certainly, the exchange-equity variable was used in Alm & Jackson's (1992) study, in which taxpayers estimate the gains they receive from the government in exchange for taxes paid. Alm and Jackson (1992) found a significant result that despite the lack of public goods, compliance decreased when uncertainty was introduced. Overall, these developments in the fiscal psychology model explained the importance of taxpayers' intentions, subjective norms, attitudes toward the tax system, and other factors such as age, moral outlook, and perception of others' involvement in tax evasion. These studies highlight the need for a comprehensive understanding of human behavior and psychological frameworks in the field of tax compliance.

In this way, The Theory of Planned Behavior (TPB) is an extension of the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1973; Ajzen & Fishbein, 1980), which was inspired by the preceding model's limitations in dealing with behaviors over which persons have only limited voluntary control. Developed by Ajzen (1991), TPB focuses on the person's intention to engage in a specific behavior, which reflects their commitment to change. According to TPB, behavior is determined by the individual's intention, their perceived control over the behavior, and their awareness of behavior control.

The TPB has been widely applied across various fields of research which it is useful in describing the intention to participate in specific actions (Ajzen and Driver, 1992; Krueger, Reilly, and Carsrud, 2000), such as education (Hunsinger and Smith, 2008; Ariff *et al.*, 2010), marketing (Chiou, 1998), organizational behavior (Wiethoff, 2004; Lanigan & Bentley, 2006)

and taxation (Al-Zaqeba and Al-Rashdan, 2020; Taing and Chang, 2021), health, recreation options, psychology, sociology, and information technology (Ajzen & Driver, 1992; Cooke & French, 2008).

A modification of the TRA, the TPB claims that one's behavior is controlled by one's intention, which is influenced by attitude (attitude toward a behavior) and subjective norms (Ajzen & Fishbein, 1980). Ajzen (1985) developed a new construct in the TPB called perceived behavioral control, which is the ease or difficulty of performing something. The model of TPB is shown in Figure 1.



Source: Ajzen (1991)

Figure1 :Theory of Planned Behavior (TPB)

Attitude toward behavior refers to an individual's positive or negative judgment of specific objects, people, organizations, events, behaviors, or intentions. Beliefs about the consequences of a behavior influence one's attitude toward it (behavioral beliefs). Individuals with a positive attitude engaged in behavior that produces positive consequences, while those who engage in behavior that produces negative outcomes have a negative attitude, and vice versa (Ajzen & Fishbein, 2005).

Subjective norms are a person's perceptions of the actions of others, and they are influenced not only by a referent but also by the intention to comply. A person will experience social pressure to act if they believe the referent has permitted them to do so, and vice versa (Ajzen, & Fishbein, 2005). Individuals' perceptions of behavioral control are referred to as perceived behavioral control. This variable is influenced by the individual's or others' experiences. The individual will do an action if he has considered it positive, there is social pressure to do it, and he has the assurance or a chance to do it (Ajzen & Fishbein, 2005).

The intention to act is a self-component that refers to an individual's ability to act. Behavior is affected by several factors, including the resources available and chances to be conducted (Ajzen & Fishbein, 2005). The attitude toward behavior, subjective norms, and perceived behavioral control contributed to the intention, and behavior is the actual action that is based on the intention.

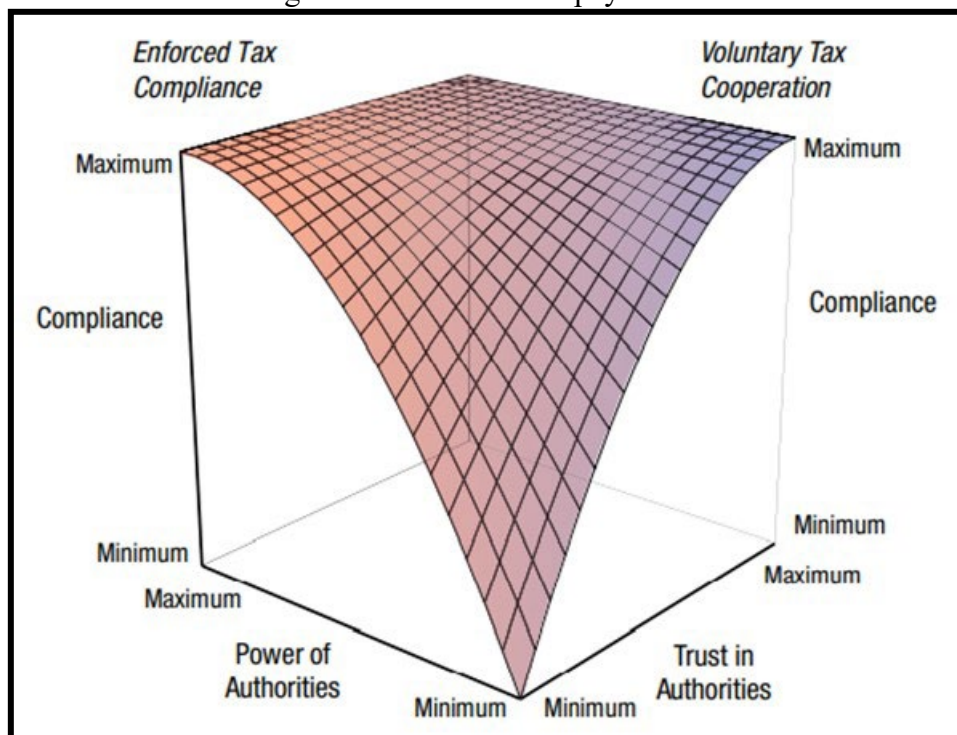
Numerous studies using the TPB to investigate tax compliance have been conducted around the world, including United States (Bobek, Hagemen, and Kelliher, 2013), Canada (Trivedi, Shehata, and Mestelman, 2005), Turkey (Benk, Çakmak, & Budak, 2011), Australia

(Langham, Paulsen, and Härtel, 2012), and Ghana (Razak, 2013). In Malaysia, this theory was used in the studies conducted by Loo *et al.*, (2010); Bidin, Othman, and Salleh (2015); Saleh Al-Maghrebi *et al.*, (2016); Mohamad and Mohd Ali, (2017)

Apart from the Socio-Psychological Theory, the Slippery Slope framework would also be utilized in this study to examine the relationship between tax system reform, tax knowledge, and trust in authority with e-CB voluntary 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.

Figure 2 illustrates the proposed power, and trust with enforced and voluntary compliance relationships. The SSF Theory also stated that policies that aim to increase voluntary tax compliance are determined by the people's trust in authorities. Audits and tax fines are examples of policies that increase the perception of the authority's power in enforcing tax compliance. Based on this theory, people's trust in tax authorities should be prioritized to improve voluntary tax compliance (Yasa & Martadinata, 2019). Under the condition of low power and low trust, it is expected that people attempt to maximize their outcomes by evading taxes so that overall compliance is at a minimum level. Hence, to accomplish a higher level of compliance, the authorities must either reinforce power or gain trust. The mutual relation of power and trust is referred to as the "slippery slope." A decline in one factor will lead to a decline in the other, resulting in a significant decrease in tax compliance.

Furthermore, power of authority and trust in authority are indicators of the interactive environment that occurs between taxpayers and authorities. A synergistic environment is defined by strong mutual trust between taxpayers and authorities. Taxpayers can comply, and the tax administration delivers good service to the taxpayers as a customer.



Source: Kirchler, Hoelzl and Wahl (2008)

Figure 2: Slippery Slope Framework (SSF)

## 2.2 Voluntary Tax Compliance

Voluntary tax compliance refers to taxpayers willingly fulfilling their obligations without being forced or coerced by the tax authorities. In other words, voluntary compliance means that taxpayers are willing to fulfill their tax obligation promptly and completely, without any legal action or enforcement measures being taken against them. As mentioned by Chong and Arunachalam (2018), taxpayers who willingly disclose their income, accurately calculate their tax liability, and file their tax returns on time are classified as voluntary tax compliance.

Voluntary compliance aligns with the concept of responsive regulation, where taxpayers take legislative responsibility for their own behavior (Valerie, Murphy & Reinhart, 2007). It corresponds to the “trust paradigm” in tax administration, as mentioned by Alm and Torgler (2011), which emphasizes the importance of establishing trust between taxpayers and tax authorities. Contrarily with the traditional “enforcement paradigm” that views taxpayers as potential criminals, the trust paradigm recognizes the need for mutual benefit and cooperation between taxpayers and tax authorities. Voluntary compliance is driven by a sense of trust, with taxpayers demonstrating greater honesty and compliance as trust in authority arises.

Additionally, voluntary compliance is influenced by the perception of fairness in the tax system. When taxpayers believe they are treated fairly and the tax system is just, their inclination toward voluntary compliance is strengthened (Alm, Kirchler, Muehlbacher, Gangl, *et al.*, 2012). This cooperative behavior stems from a foundation of trust and fairness, where taxpayers willingly fulfill their obligations based on a positive relationship with tax authorities.

In summary, voluntary tax compliance entails taxpayers willingly and honestly fulfilling their tax obligations, free from enforcement measures. It is driven by trust, perceptions of fairness, and a cooperative relationship between taxpayers and tax authorities.

## 2.3 Tax System Reform and e-Commerce Business Voluntary Tax Compliance

Previous studies have made limited attempts to explore the relationship between tax system reform and tax compliance. However, Heinemann and Kocher (2013) conducted a study using the Economic Model to investigate the impact of tax system changes or reforms on tax compliance. Their findings revealed two important effects not accounted for in the traditional model. Firstly, after the implementation of tax reform, those who were negatively affected by the reforms tended to engage in more tax evasion. Secondly, a shift from a proportionate to a progressive tax system decreased compliance compared to a reverse transformation.

In a more recent study by Kim and Kim (2018), the impact of tax administration reform on tax performance and compliance in Tanzania and Uganda was examined. The results indicated that Tanzania outperformed Uganda in terms of both tax performance and tax compliance. Despite both countries implementing tax administration reform, the effectiveness of the reforms varied significantly. Tanzania’s tax administration successfully altered strategic

and normative factors that enhanced tax compliance, while Uganda encountered challenges with its tax reforms. This study highlights the interconnectedness and significant correlation between tax reform, tax performance, and tax compliance.

This current research aims to investigate the effect of tax system reform on tax compliance as one of the variables. Theoretically, reforming the tax system and ensuring compliance are interrelated, with tax reform influencing compliance through changes in the tax system, tax rates, or intensives, as suggested by the Economic Deterrence Model. However, only a few previous studies have specifically examined this relationship. In this study, tax reform is measured by two dimensions which were the simplification of tax complexity (Tran-Nam, 2016; Slemrod, 2002) and the implementation of a new system or compliance procedures (Isa, 2014), as well as the improvement of tax service quality (Kwarto & Yunaenah, 2019).

Several studies have consistently explored the impact of tax service quality on tax compliance and have found a positive relationship. For instance, Alabede, Ariffin, and Idris (2011) extended Fischer's tax compliance model by incorporating tax service quality, public governance quality, ethnic diversity, and the moderating effect of taxpayers' financial status and risk preference. Similarly, Augustine, Folajimi, and Ayodele (2020) examined the influence of quality tax services on voluntary tax compliance among individual taxpayers in Southwest Nigeria. Their findings demonstrated that a quality tax system positively influenced voluntary tax compliance, with trust in tax authority services and tax service quality playing significant roles in compliance behavior.

Recent research conducted in Indonesia by Masari and Suartana (2019) and Chrissanjaya (2018) has shown that the quality of tax authority service has a significant impact on tax compliance. Chrissanjaya (2018) aimed to explore the relationship between tax authority service quality, tax morale, and tax compliance through regression analysis and the study found that tax compliance is highly influenced by tax morale and the quality of tax services. These findings were further supported by Masari and Suartana (2019) who discovered a positive impact of service quality on compliance among local taxpayers. However, a study by Madjid (2015) found no significant impact of tax service quality on tax compliance.

Based on the existing research, there is still limited study in Malaysia regarding the correlation between tax reform, specifically in terms of quality of service and tax compliance. There is a study by Zainal, Abu Bakar, and Saad (2016) discusses a factor of service quality but in the scope of zakat compliance. The study examined three factors which were reputation, satisfaction with zakat distribution, and service quality on zakat compliance. Similar to related previous studies, the study also found that compliance is influenced by reputation, zakat distribution satisfaction, and service quality.

This current study however intense to measure tax reform in the context of tax simplicity in tax administration which includes tax service quality. Tax service quality is measured according to three dimensions which are responsiveness, reliability, and assurance instead of five dimensions as suggested by Parasuraman *et al.*, (1985). This is in line with Baker and Taylor (1998) who described the correlation between service quality as different from one industry to another industry of services. Some factors should be added or eliminated based on the generic dimension and appropriateness of service sectors, namely tax service.

Numerous studies have attempted to explain that encouragement given by tax authorities of implementing the tax amnesty as one of the tax system reform approaches has

influenced tax compliance behavior among taxpayers. Ibrahim, Myrna, Irawati, and Kristiadi (2017) studied the implementation of tax amnesty in nine Asian countries namely Bangladesh, India, Indonesia, Kazakhstan, Malaysia, Pakistan, Philippines, Sri Lanka, and Thailand. The study revealed that amnesty give an effective effect on tax compliance but the implementation should not be too frequent and long-term duration as it can ruin the credibility of the government and would give a negative impact on genuine taxpayers. A study by Nurkhin, Noranty, Muhsin, and Sumiadji, (2018) has proven and supported the previous study that tax amnesty has a positive and significant influence on tax compliance. The implementation of tax amnesty will allow the taxpayer to be more compliant as they would not be punished if they neglect their obligation intentionally or unintentionally.

Supported by the Slippery Slope Framework, a study by Inasius, Darijanto, Gani, and Soepriyanto (2020) confirmed the influence of trust and power on voluntary or enforced compliance after implementing tax amnesty among developing countries, especially in Asia. The findings indicated that the tax authority should have a better understanding of how to encourage tax evaders to participate in tax amnesty in order to increase compliance and tax collection. More recent studies were conducted to confirm the significant relationship between tax amnesty and tax compliance. A study by Shahryar (2021) compared the tax amnesties adopted by three countries which are Pakistan, India, and Indonesia. While tax amnesty influences tax compliance, there is a blueprint proposed for implementing an optimal tax amnesty design that should follow strict post-amnesty enforcement measures. Some necessary features to make sure a successful design for an amnesty program are lower tax rates, the threat of strict post-amnesty enforcement, a reasonable implementation period, and confidentiality and immunity assurance.

In Malaysia, Abu Hassan *et al.*, (2021) conducted a study to examine tax compliance strategies, including the deterrence approach involving tax audits and penalties and the accommodative approach involving tax reform to foster taxpayer compliance. The findings revealed that individual taxpayers perceive the compliance strategies provided by the Inland Revenue Board of Malaysia (IRBM), such as the Special Voluntary Disclosure Program (SVDP), positively, and that perception has a direct positive relationship with tax compliance.

Meanwhile, the contra results were found by other researchers. Gerger (2012) suggested that tax amnesty has a negative effect on taxpayers' compliance due to a perception of unfairness among compliant taxpayers, arguing that non-compliant taxpayers should have penalties instead of receiving forgiveness. A study by Bird (2004) revealed that repeated amnesty will generally hint that the government is unable or incompetent to enforce taxes effectively. It will cause a loss of credibility among tax authorities.

Based on the literature review, this study identifies a gap in understanding the direct impact of tax system reform on tax compliance. Considering tax system reforms as a crucial element of trust in authority within the Slippery Slope Framework, it is evident that tax system reform significantly influences voluntary tax compliance. However, limited attention has been given the exploring the relationship between tax system reform and voluntary compliance in previous studies. Therefore, based on the existing literature, the study proposes the following hypothesis:

H1: There is a positive relationship between the tax system reform and e-CB voluntary tax compliance.



## 2.4 Tax Knowledge and e-Commerce Business Voluntary Tax Compliance

Tax knowledge has been shown to have an impact on tax compliance. Lewis (1982) established a connection between a limited understanding of taxes and negative attitudes toward taxation. Consistent with earlier studies, Eriksen and Fallen (1996) discovered that taxpayers' educational level plays a crucial role in their comprehension of taxation, particularly tax laws, and regulations. Furthermore, having greater tax knowledge may lead to improve tax attitudes, resulting in increased compliance and reduced non-compliance. Inasius (2019) conducted a recent study that supports this evidence, indicating that enhanced tax knowledge corresponds to higher tax compliance. This finding aligns with the research conducted by Malik and Younus (2019), which studied tax compliance behavior among SMEs in Pakistan. Similarly, multiple studies conducted in Malaysia, including Loo *et al.*, (2010); Saleh Al-Maghrebi *et al.*, (2016); Manual and Xin (2016); Hamid *et al.*, (2019), and Sritharan *et al.*, (2020), suggested that tax knowledge has a positive influence on tax compliance behavior.

Previous literature also indicates that taxpayers' awareness of their tax obligations significantly influences tax compliance. Specifically, having a basic understanding of tax responsibilities and functions has been found to increase compliance, as demonstrated by studies by Devos (2008) and Loo *et al.*, (2010). However, research conducted by Csontos, Kornai, and Toth, (1998), has also shown that taxpayers are not aware of the various types of taxes they are subject to and have limited knowledge of how tax revenue is utilized to fund public services. However, research conducted by Csontos, Kornai, and Toth, (1998), has also shown that taxpayers are not aware of the various types of taxes they are subject to and have limited knowledge of how tax revenue is used to fund public services. This lack of awareness can lead to a misunderstanding of the significance of tax collection for a nation. Similarly, a study by Cullis and Jones (2009) in the UK found that although many respondents possessed good tax knowledge, they preferred a fixed tax rate at current levels to improve public services.

Among ASEAN countries, several studies conducted in Indonesia, such as those by Savitri and Musfialdy (2016); Hastuti (2014); Yayuk *et al.*, (2017), and Asrinanda (2018) have demonstrated a significant and positive impact on tax compliance. Yayuk *et al.*, (2017) conducted a study emphasizing the government's need for long-term socialization on the importance of tax payment. The study also examined taxpayer awareness to analyze its potential influence on compliance, mediating through knowledge and understanding of tax regulations. The findings revealed that knowledge, understanding of tax regulation, and taxpayer awareness collectively contribute to compliance. This finding was further supported by recent research conducted by Asrinanda (2018) which investigated the influence of tax knowledge, self-assessment system, and tax awareness on taxpayer compliance. The study found that tax knowledge and tax awareness significantly affect taxpayer compliance.

In line with this context, several studies were conducted in Malaysia such as Saleh Al-Maghrebi *et al.*,(2016), and Chong and Arunachalam (2018). Saleh Al-Maghrebi *et al.*, (2016) focused on the impact of income declaration transparency and tax awareness on tax compliance among individual Malaysian taxpayers. The study revealed that tax awareness had a significant and positive influence on tax compliance, consistent with previous research conducted by Palil *et al.*, (2013). Consequently, this current study aims to contribute to the existing literature on tax awareness as a measurement of tax knowledge that determines tax compliance.

Numerous studies including Lewis (1982); Eriksen and Fallan (1996); Kasipillai (1997); Hasseldine *et al.*, (2007); Jabbar and Pope (2009); Loo *et al.*, (2010); Inasius (2019); Malik and Younus (2019); Hamid *et al.*, (2019) and Sritharan *et al.*, (2020) provided evidence supporting the positive correlation between tax knowledge and tax compliance. These findings align with the Socio-Psychological Theory. Therefore, based on previous literature review, this study hypothesizes the following:

H2: There is a positive relationship between tax knowledge and e-CB voluntary tax compliance.

## 2.5 Mediation of Trust in Authority

Trust in authority is a unique relationship based on positive attributes (Chong and Arunachalam, 2018) and shared ideas that establish a common expectation of honest behavior (Bjørnskov, 2007). In the context of tax compliance, trust in authority refers to individuals' confidence and belief in the fair and effective administration of the tax system by the government or tax agencies.

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. On the other hand, a lack of trust in the tax authorities can lead to tax avoidance and non-compliance. Kirchler *et al.*, (2008) emphasized the importance of mutual trust between the government and taxpayers, creating a synergistic tax environment. In a cooperative environment, the government treats taxpayers respectfully, confident that they will pay their taxes honestly and on time. In return, taxpayers fulfill their tax obligations because they trust that the government will provide quality services.

Based on Robbins (2016), trust has several dimensions which are integrity, competency, consistency, loyalty, and openness. Integrity refers to the government's trustworthiness, and individuals are more willing to pay taxes if they perceive the government as trustworthy. Competency, as the second dimension, relates to the leader's interpersonal skills, technical expertise, and knowledge. A trustworthy leader is seen as someone who follows through on their promises. Competency significantly impacts the perception of trust, as taxpayers believe the government will manage their tax revenue properly, and not misuse it, leading to higher compliance (Ya'u & Saad, 2018).

Consistency is the third dimension of trust, which involves predictability, reliability, and good judgment in the government's actions. When the government consistently delivers on its promises and enforces policies that align with the public's needs, citizens gain confidence and cooperate transparently with the tax authority. The fourth dimension is loyalty, which refers to citizens' commitment to the government. When the government provides goods and services that benefit citizens, loyalty and compliance increase.

The fifth component of trust is openness, which relates to the government's ability to communicate the reality of the situation. Openness and transparency build trust as citizens

understand and perceive the government’s intentions. This fosters compliance with tax laws and gradually improves voluntary compliance. These dimensions are relevant in the study as trust in authority will be used as a mediating variable.

Several studies have examined the relationship between trust and tax compliance and consistently found a positive correlation. Murphy (2009), Torgler (2013), Wahl *et al.*, (2010), Bornman (2015), and Jimenez & Iyer (2016) found a positive association between tax compliance and trust in authority based on national and international surveys. Van Dijke and Verboon (2010) demonstrated the moderating role of trust in authorities in the positive impact of procedural fairness on tax compliance. Gobena and Van Dijke (2016) investigated the mediating roles of the legislative and coercive power of the tax authority in the relationship between procedural justice, trust in 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. Recent study conducted by Ya’u and Saad (2018) and Albab and Suwardi (2021) confirmed the positive effect of trust as a mediating variable in the relationship with tax compliance. Based on these previous studies and the Slippery Slope Framework, the following hypotheses are proposed:

H3 : Trust in authorities have a significant positive relationship with e-CB voluntary tax compliance.

H4 : Trust in authority positively mediates the relationship between tax system reform and e-CB voluntary tax compliance.

H5 : Trust in authority positively mediates the relationship between tax knowledge and e-CB voluntary tax compliance.

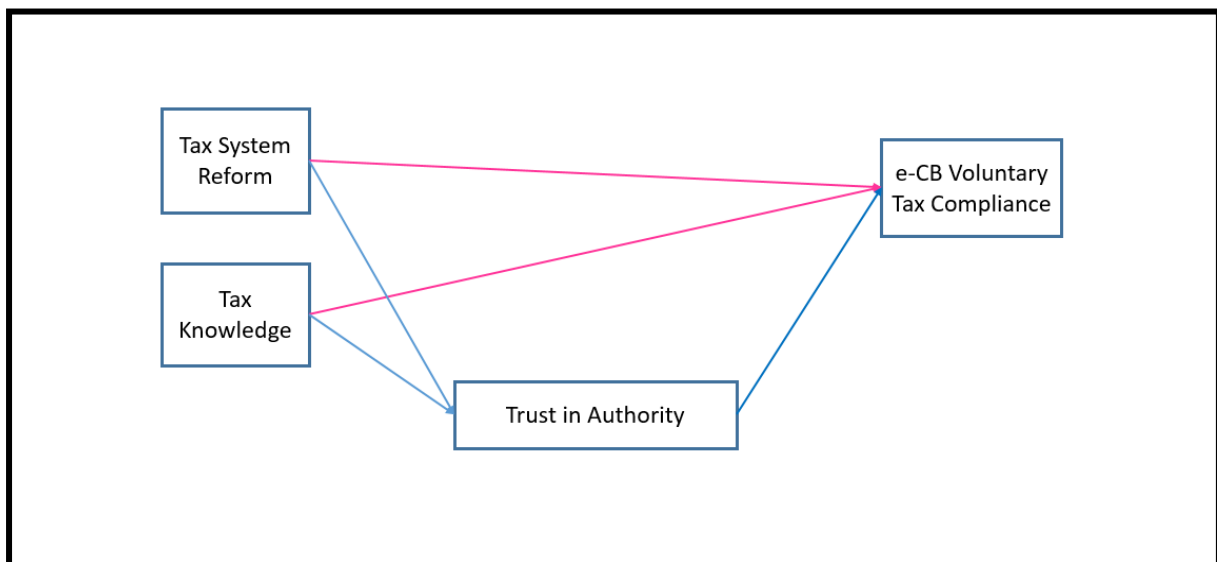


Figure 3: Theoretical Framework

### 3.0 Methodology

### **3.1 Participant and procedure**

This study examined the mediating role of trust in authority in the relationship between tax system reform, tax knowledge, and e-CB voluntary tax compliance. The researcher conducted a survey both in hardcopy and online formats, targeting 750 registered e-commerce taxpayers under the Inland Revenue Board of Malaysia (IRBM). The questionnaires were distributed across IRBM branches in four states representing the significant distribution of e-commerce businesses, namely the Wilayah Persekutuan, Selangor, Penang, and Johor. However, the final number of respondents reached 339 resulting in an effective response rate of 45.2%.

Demographic analysis of the respondents revealed that the majority were below the age of 56 (91.4%), while the remaining 8.6% were 56 years and older. The gender distribution was approximately balanced, with 55.8% male and 44.2% female respondents with the majority being married status (59.9%). Regarding ethnicity, the largest proportion was Chinese (45.1%), followed by Malay (38.6%), and Indian (14.7%). All Malay respondents were Muslim (38.9%), while Chinese and Indian respondents predominantly identified as Buddhist (14.5%), Hindus (20.1%), and Christians (26.5%, respectively). In terms of educational background, a significant portion of respondents had a higher education level, with 52.8% at an undergraduate or postgraduate level, 26% at a diploma level, and 21.2% at the SPM (Sijil Pelajaran Malaysia) or equivalent level. The respondents' designations were primarily business owners (49.6%), followed by accountants or finance officers (22.4%) and managers (14.2%). The study also categorized e-CB taxpayers based on their type of business, including retail and wholesale trading, manufacturing, management, and consulting services, food and beverage business, and others. The highest percentage of respondents were involved in retail and wholesale trading (29.2%), followed by management and consulting services (24.5%), and food and beverage businesses (23.6%).

Regarding the years of operation or the age of business, the majority of businesses had been established between two to five years of operation (41.3%), with approximately 44.2% established for six years or more. Only 14.5% were established within less than two years. In terms of income level, 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%).

### **3.2 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 voluntary tax compliance while section C measures the independent variables and mediating variables which are tax system reform, tax knowledge, and trust in authority.

According to Tran-Nam (2016), tax system reform can be understood as part of a simplification of the tax system in administration and compliance where tax administration reform is a tool to achieve a public interest objective by implementing efforts such as improving tax service quality, making tax authority more efficient, and implementing effective tax policy in order to achieve compliance. The current priority for tax reform is to modernize tax

administration to achieve a high degree of voluntary compliance, high trust in tax administration, and high apparatus productivity. Thus, this study adopted five items from Kartikaputri (2013), Loo (2006), Niemiowski, and Wearing (2006) with some modifications to meet the context. While the tax knowledge can be characterized as information, facts, and expertise earned from experience and education. In the current study, the operational definition of tax knowledge is an e-commerce taxpayer's ability to understand the tax laws and rules that enable them to meet their tax statutory obligations. The tax obligation includes filing their tax returns on time, accurately reporting their tax matters, and accurately computing their tax liabilities. In line with this definition, this study adapted six items from Palil (2010), Loo (2006), and Saad (2010) with some refinement to confirm with the latest Form B 2020.

For the independent and mediator variable, trust in authority is measured by five items adapted from Kartikaputri (2013), Ali (2011), and 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).

Voluntary tax compliance, which is a dependent variable in this study, was evaluated using five questions adopted from Kirchler and Wahl (2010). Voluntary compliance operationally defines taxpayers as willingly complying with their tax obligations without being forced or coerced by the tax authorities. In other words, voluntary compliance means that taxpayers are willing to fulfill their tax obligation promptly and completely, without any legal action or enforcement measures being taken against them. All the questionnaire items were scored using a five-point Likert scale with the responses ranging from 1 (strongly disagree) to 5 (strongly agree).

## **4.0 Data Analysis**

### **4.1 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 four items (VC1, VC3, TK6, and TIA2) having values below 0.7 but meet the requirement of exceeding more than 0.5. Seven items have been deleted, having a value less than 0.5 (TS1, TS4, TK1, TK4, TK5, TIA1, and TIA3). The AVE of the entire

construct is accepted having to range from 0.528 to 0.621. The CR also met the threshold value ranging from 0.788 to 0.844.

	TIA	TK	TS	VC
TIA	0.7877			
TK	0.5234	0.7449		
TS	0.3798	0.498	0.7508	
VC	0.4014	0.4644	0.5053	0.7265

Convergent Validity				
Construct	Item	Loadings	CR	AVE
Voluntary Compliance (VC)	VC1	0.590	0.844	0.528
	VC2	0.871		
	VC3	0.543		
	VC4	0.710		
	VC5	0.860		
Tax System Reform (TS)	TS2	0.735	0.795	0.564
	TS3	0.763		
	TS5	0.755		
Tax Knowledge (TK)	TK2	0.747	0.788	0.555
	TK3	0.822		
	TK6	0.657		
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 0.7265 and 0.7877 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)

TIA= Trust in Authority, TK= Tax Knowledge, TS = Tax System Reform, VC= Voluntary Compliance

## 4.2 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 ( $\beta$ ), 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 system reform factor and e-CB-voluntary tax compliance. H1 is supported based on the result that shows the coefficient value is 0.218 and significant ( $p < 0.05$ ). In addition, Hypothesis 2(H2) predicted that there would be a positive relationship between the tax knowledge factor and e-CB-voluntary tax compliance. H2 is supported because the path coefficient from tax knowledge to e-CB voluntary tax compliance (coefficient = 0.199) is significant ( $p < 0.05$ ). Besides, Hypothesis 3(H3) predicted that there would be a positive relationship between the trust in authority factor and e-CB voluntary tax compliance. The path coefficient from trust in authority to e-CB voluntary tax compliance is 0.109 which is significant ( $p < 0.05$ ), therefore H3 is also supported.

Table 3 : Result of Hypothesis (Without Mediator)

Hypothesis	Relationship	Beta	T-Values	P values	Supported	R <sup>2</sup>
H1	TS → VC	0.218	3.670	0.000	Yes	0.412
H2	TK → VC	0.199	3.325	0.000	Yes	
H3	TIA → VC	0.110	2.067	0.039	Yes	

Table 4 summarized the assessment of the relationship between tax system reform, tax knowledge, and e-CB voluntary 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 system reform and tax knowledge as independent variables and voluntary compliance as dependent variables.

Table 4: Result of Hypothesis (With Mediator)

Hypothesis	Mediator	Trust In Authority			
		Relation	Indirect Effect (a x b)	Direct Effect c'	Interpretation
H4	Tax System reform → Trust in Authority → Voluntary Compliance	0.010 Significant	0.230 Significant	Partial Mediation	Complimentary
H5	Tax Knowledge → Trust in Authority → Voluntary Compliance	0.033 Significant	0.193 Significant	Partial Mediation	Complimentary

a = Independent Variable x Mediator (TIA), b= Mediator (TIA) x Dependent Variable (Voluntary Compliance)

c' = Direct Path Coefficient ( $\beta$ ), with a mediator

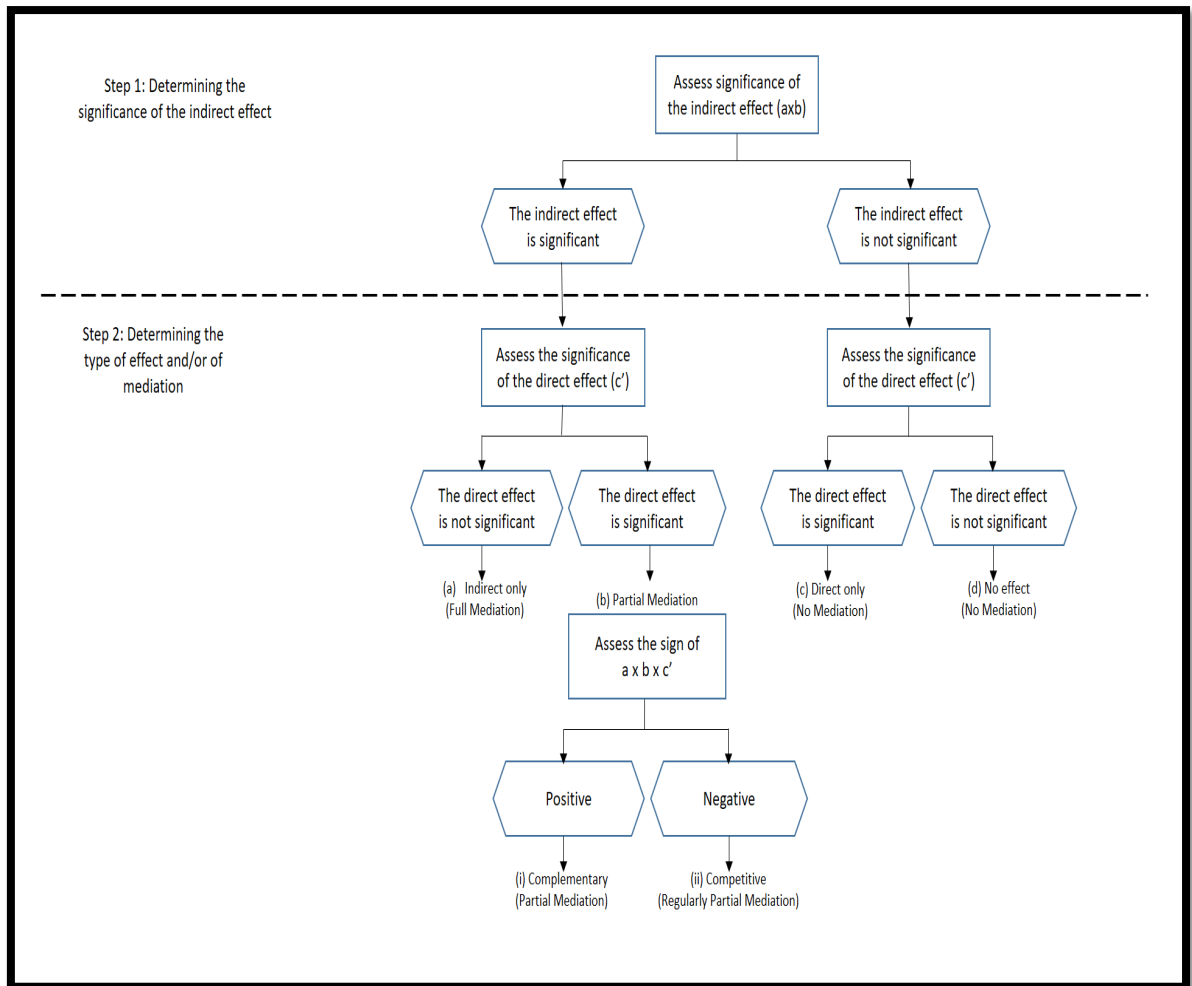
This study applies the bootstrapping analysis and adopts the mediator analysis procedure based on Zhao, Lynch, and Chen (2010) for mediating analysis. Table 5 summarized the type of mediation and non-mediation based on Zhao *et al.*, (2010).

Table 5 : Type of Mediation

<b>Mediation</b>	
<b>Type</b>	<b>Characterize</b>
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 4 shows how the analyses must be performed to determine the type of mediation in a model, according to Zhao, Lynch, and Chen (2010).





Source: Zhao, X., Lynch Jr, J.G and Chen, Q, (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206

Figure 4: Mediator Analysis Procedure

According to the results, the direct effect path coefficient of tax system reform and voluntary compliance was 0.230 with a p-value is 0.00, which is significant. Moreover, the estimated path coefficients from the PLS analysis demonstrated that the indirect effects were statistically significant within all these variables (tax system reform and tax knowledge) on voluntary 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 system reform and voluntary tax compliance. Tax system reform was having significant indirect effect path coefficient (0.010,  $p < 0.05$ ) towards voluntary tax compliance with trust in authority mediation, and its direct effect path coefficient (0.230,  $p = 0.000$ ) was significant. Based on the results obtained from the contemporary approach according to Zhao *et al.*, (2010), the indirect effect and the direct effect were significant, revealing that trust in authority partially mediated the effect of tax system reform on the e-CB voluntary 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 knowledge and voluntary tax compliance. Both the direct effect path

coefficient ( 0.193,  $p < 0.05$ ) and indirect path coefficient ( 0.033,  $p < 0.05$ ) 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 knowledge and voluntary tax compliance. Hence, the H5 result is supported.

## 5.0 Discussion

The current study examined the relationship between tax system reform, tax knowledge, trust in authority, and voluntary tax compliance. The findings revealed that trust in authority significantly mediates the relationship between tax system reform and tax knowledge with e-CB voluntary tax compliance. The study has found that both tax system reform and tax knowledge with mediating of trust in authority have a significant positive effect on e-CB voluntary tax compliance. According to research hypothesis H1, the results demonstrate that tax system reform was significant to Malaysia's e-CB-voluntary tax compliance and the finding was in line with previous studies by Alabede, Ariffin, and Idris (2011), Heinemann and Kocher (2013), and Kim and Kim (2018).

This current study was also designed to determine the impact of tax system reform on voluntary tax compliance among e-CB taxpayers in Malaysia. Tax system reform is one of the important components in tax compliance where it focuses on achieving a high level of compliance, a high level of trust in tax authority, and increasing the efficiency of tax administration. In this current study, tax system reform is focused on simplicity elements including tax service and tax administration, and also tax amnesty. The finding provides evidence that tax system reform plays a substantial role in e-CB voluntary tax compliance. Tax system reform was found to have a significant positive association with e-CB voluntary tax compliance. In line with the prediction of Socio-Psychological Theory and the Slippery Slope Framework approach, the results suggest that good tax system reform tends to have a greater level of tax compliance. The review of the literature indicated that, to date, only a few research on the relationship between tax system reform and tax compliance has been conducted. Furthermore, none of it was conducted on the factor of e-commerce business tax compliance.

The next hypothesis (H2) confirms the significant relationship between tax knowledge and e-CB voluntary tax compliance. The result of this study shows that tax knowledge has a significant positive influence on e-CB voluntary tax compliance. In other words, the higher the tax knowledge of e-commerce business taxpayers, the more tendency towards e-CB voluntary tax compliance. The finding is consistent with socio-psychological approach predictions (Ajzen & Fishbein, 2005) and Slippery Slope Framework (Kirchler *et al.*, 2008). The previous evidence indicated that taxpayers with a higher level of tax knowledge are more likely to comply with paying taxes (Hasseldine *et al.*, 2017; Jabbar & Pope, 2009; Loo *et al.*, 2010; Savitri and Musfialdy, 2016; Yuyuk *et al.*, 2017; and Adhiambo and Theuri, 2019). Therefore, in the e-commerce business context, educating tax knowledge for e-CB owner-managers may significantly and positively influence tax compliance decisions. The owner-managers are considered the main decision maker for e-CB, and their knowledge determines the level of tax compliance.

The result of H3 shows that the relationship between trust in authority and e-CB voluntary tax compliance was positive and significant. This result is consistent with the study by Torgler (2013), Ya'u & Saad (2018), Gobena & Van Dijke (2016), and 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 system reform and tax knowledge with e-CB voluntary tax compliance. In analyzing the mediation effect of the trust in authority factor within tax system reform and tax knowledge with tax voluntary 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 system reform and tax knowledge and it gives impact on voluntary 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 tax system reform and tax knowledge. Although the direct effect between tax system reform and tax knowledge and e-CB voluntary compliance was significant, the element of trust in authority mediating the relationship became significant and that shows the partial mediation effect does exist. Based on the findings, it was determined that the e-CB taxpayers were contented with the tax system reform, tax knowledge, and trust in authority, which had an impact on their level of tax compliance.

## **6.0 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 voluntary tax compliance determinants, providing insight for the tax authorities regarding the effect of socio-psychological elements namely tax system reform and tax knowledge. 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 voluntary tax compliance underpinning two theories namely the Socio-psychological 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 socio-psychological factors and e-CB voluntary 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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