

Determinants of Compliance Behavior of GST Taxpayers: a Conceptual Model via Review

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Abstract

To make any taxation law successful, the rate of compliance should be as high as possible. The government of India recently implemented the Goods and Services Tax in India in July 2017. Since GST is a new taxation law in India, it has become critical to investigate the level of compliance among GST taxpayers by reviewing the available literature on determinants of compliance behavior around the globe. Therefore, the present study analyzed the variables affecting the compliance behavior of GST taxpayers and synthesizes those into the Indian Goods and Services Tax system to shape a conceptual model and use it as a tool for increasing the GST revenue by taxation authorities in India. The result revealed that GST taxpayers' compliance behavior is affected by a variety of socio-psychological and institutional factors, in addition to economic factors, and their behavior is moderated by the quality of GST services perceived by them. The government should try to increase the taxpayer's satisfaction and their knowledge regarding various aspects of GST with economic and other socio-psychological factors to improve the GST collection in the country.

Keywords: *Economic factors; Goods and Services Tax; GST Compliance behavior; GST revenue; Indian Economy.*

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1. Introduction

Tax revenue is a major source of funding for government spending on public goods and services around the world. The revenue from taxation builds the government's capability to meet basic needs, provide security to its citizens, and foster economic growth, but the ability of the government to generate revenue from taxation is limited and depends on a lot of factors. The filing of GST returns is based on the concept of the Self-Assessment System (SAS), which is widely adopted across the world. One of the biggest concerns that have arisen with SAS is non-compliance with GST laws by taxpayers, as the duties for calculating and disclosing tax payment liabilities are passed away from taxation authorities to taxpayers under this system (Saad, 2014). Therefore, the desire of taxpayers to comply with specific tax laws is one of the vital factors for generating higher tax revenues through voluntary taxation for the government. The non-compliance behavior of taxpayers is a universal phenomenon that presents a challenge for both developed and developing nations around the globe, as the higher the non-compliance among taxpayers, the higher the burden on compliant taxpayers to finance government expenditures, or necessitates shrinking vital expenditures on development programs, or a combination of both. GST non-compliance is a worrying phenomenon, especially in the era of economic crisis where need increases, but the tax base shows declining trends. Despite its social and economic importance and the recent expansion of research on determinants of compliance behavior, we still have limited knowledge of this informal phenomenon (Alm, 2012). However, the epic manifestation of personal and corporate tax evasion has encouraged researchers to work on the drivers of tax compliance in most countries. Tax non-compliance is indeed an unavoidable fact and one of the most important and highly debatable topics in accounting, economics, and law literature (Kirchler *et al.*, 2008).

1.1 The Concept of GST Compliance

Across all tax compliance studies, no standard all-inclusive definition of tax compliance has been adopted. However, tax compliance in its simplest form is usually referred to as the extent to which the taxpayers abide by the rules and regulations of the tax law of their respective countries (James &

Alley, 2002). The GST regime obliges the registered business entities to file certain periodic returns (e.g. GSTR-1, GSTR-2, GSTR-2A, GSTR-3B, etc.) for outward and inward supplies of goods and services, as well as details of input tax credits, claimed in India. The failures of business entities to submit these GST returns within the stipulated period, voluntarily and non-voluntarily, over-claiming of the input tax credit, declaration of fewer taxes, non-issuing of tax invoices, and failure to comply with the rules of audit laws can be viewed as GST non-compliance. Ling *et al.* (2016) defined GST compliance as the willingness of the GST payers to abide by the rules and regulations regarding GST matters in their respective countries. GST compliance is defined as the submission of requisite GST returns on time and reporting of correct tax liability following the regulations, tax laws, and court decisions in effect in their respective countries at the time of filing of GST return (Palil & Mustapha, 2011).

1.2 GST Compliance a firing issue around the Globe

GST is a trust-based taxation system in which taxpayers are expected to self-assess their tax liability, pay their due taxes, and file GST returns on time. The filling of GST return under the self-assessment system is based on the principle that citizens of the country will cooperate with their government by filling their GST returns honestly and accurately. The goal of governments around the globe for the transition to the self-assessment system (SAS) was to increase voluntary tax compliance among taxpayers, reduce the burden of assessing the tax returns on tax authorities, and improve the efficiency of the tax collection system. However, this transition has raised an issue of non-compliance among taxpayers around the globe as taxpayers have to self-assessed their tax liabilities under this system (Saad, 2014). Tax non-compliance is a major issue for governments around the globe due to the unwavering search of the government for revenue to meet the needs of the public, wealth redistribution, and economic development (Andreoni *et al.* 1998, Ibrahim *et al.*, 2015, and Yew *et al.*, 2015. The non-compliance behavior of taxpayers reduces both the availability of public services and revenue and also results in biasness among honest taxpayers (Alm, 2012), resulting in distortion of income distribution as firms

and individuals may have different opportunities for evasion of taxes (Hindriks *et al.*, 1999). Attoh and Awal (2013) have also pointed out that the competence of a country to develop and provide security and well-being to its citizens is determined to a large extent by its ability to generate sufficient revenue through taxes. As the revenue from taxation facilitates the government's redistribution of wealth and distribution of goods and services among its citizens in an impartial way, pertinent approaches for tax collection and compliance should be explored (Youde & Lim, 2019).

1.3 GST and Compliance Behavior in India

The Government of India has adopted the Goods and Services Tax (GST) in India from July 2017 to intensify the efficiency and transparency in the tax collection system, as well as to serve as a significant source of revenue to finance the socio-economic development of the country. GST is a destination-based taxation system in which tax is levied on value addition at each stage of the manufacturing and distribution process. By removing the cascading effect of taxation in India, GST attempts to unify all indirect taxes under one umbrella and contributes to the creation of "One Nation, One Market, and One Taxation". The introduction of GST has resulted in the elimination of 13 cesses and subsumption of 17 central and state taxes, i.e., Octroi duty, Service Tax, Turnover tax, Stamp duty, and State level Sales Tax, etc. in India. Vasanthagopal (2011) found that the adoption of GST in India would eliminate all the complexities in the current taxation system and would be a great leap in the Indian taxation system. However, the implementation of GST has affected the compliance behavior of taxpayers in India. According to the Fifteenth Finance Commission (FFC), India's overall tax to GDP ratio is around 17.2%, which, according to its computations, should be around 22.6%¹. There is a discrepancy of about 5.4%, out of which the GST compliance gaps account for approximately 2.4% of the GDP. With the adoption of the Goods and Services Tax (GST), SBEs (Small Business Enterprises) are required to update their accounting systems and business processes, as well as be prepared to set up the correct accounting and record-keeping systems, train their employees and have the appropriate software to facilitate successful documentation and recording keeping for GST compliance (Chen & Taib, 2017, and Ramli *et al.*, 2015). SBEs were required

to train their personnel to deal with the complexity of this newly adopted taxation system at the initial stage, which increased the compliance cost of their taxes. In India, Small Business Enterprises (SBEs) supply approximately 111 million jobs with a contribution of 30% in Gross Value Added (GVA) in all India's gross domestic product at current prices during the year 2019-20². Despite its importance, researches have revealed that GST non-compliance is still prevalent among SBEs in India. Under the SAS system of GST, it is presumed that taxpayers have the necessary taxation knowledge to calculate their tax liability, as a lack of knowledge will lead to incorrect calculation of tax. But in some cases, SBEs were found to be involved in tax non-compliance behavior unintentionally due to their lack of knowledge regarding the taxation system (McKerchar, 1995). Therefore, the present study will try to focus on exploring and determining the factors affecting the compliance behavior of GST taxpayers by reviewing the available literature in this context to improve the tax base of the country and provide future guidance and research gaps for further study.

2. Objectives and Methodology

The broad objective of the study is to examine the impact of GST tax reforms on the compliance behavior of GST taxpayers in the Indian economy, which is classified into the following sub-objectives:

- To provide a thorough examination of previous research on tax compliance behavior and gain a better understanding of the phenomenon;
- To study the various determinants determining the compliance behavior of GST Taxpayers;
- To formalize a conceptual model with the factors affecting the compliance level of GST taxpayers; and
- To provide avenues for future research work by finding literature gaps with some policy implications.

Research Methodology:

GST non-compliance among taxpayers is a worrying phenomenon, especially in the era of economic crisis where the need increases, but the tax base shows declining trends. It is a dynamic and multifaceted phenomenon that is affected by numerous factors.

Therefore, the present study explores the variables affecting the compliance behavior of GST taxpayers from the available literature and synthesizes those into the Indian Goods and Services taxation system to shape an ideal conceptual model in India. The study has adopted the search parameter by including the keywords i.e. Goods and Service Tax, tax compliance, determinants of compliance behavior, and self-assessment system, etc. by accessing the research articles from various electronic databases i.e. Emerald Insight, Taylor & Francis, Springer, Sage, and Google scholar, etc. The study has collected a total number of 179 research articles. Afterward, the study has adopted the selection criteria for short-listing the research articles for framing the conceptual model. First of all, the study has excluded 33 research articles that are published in other regional languages except English. Afterward, the research articles (42) have been excluded from the database whose only abstract is published or which are not directly accessible through open access. Out of these selected articles, the study has lastly selected 69 national and international research articles of high quality which directly or indirectly contribute significantly to the objective of the study. Finally, the study has critically reviewed these selected research articles and synthesizes those into the Indian GST system to shape an ideal conceptual model that can be used as a tool for increasing the GST revenue by the taxation authorities in India.

3. Review of Literature

Many researchers have made significant contributions to the literature on factors affecting the compliance behavior of taxpayers around the globe. But typically, most studies of this caliber have focused on income tax, leaving indirect tax compliance and non-compliance virtually unexplored. However, this is quite a surprising fact when seeing the critical importance of indirect taxation in the tax administration system and public budgets of the Indian economy. Therefore, it becomes necessary to study the factors affecting the compliance behavior of taxpayers. Thus, this paper explores the literature in the context of determinants of taxpayers' compliance behavior to gain an insight into how these factors, such as Economic factors, Socio-psychological factors, and Institutional factors with GST service quality as a moderator affect the compliance behavior of GST taxpayers in India.

3.1 Economic factors and GST Compliance

Tax compliance gained the attention of researchers around the year the 1970s when the decision to comply with the tax laws was viewed as a purely economic decision at risk. Allingham and Sandmo (1972) and Srinivasan (1973) also found in their study that the decision to comply or not to comply with tax laws is determined by calculating the cost-benefit ratio by the tax assessee. The taxes evaded by the taxpayer are viewed as income by the assessee, and the probability to get caught and potential punishment was considered as the typical cost. They found that people will be prohibited from evading taxes only when they comprehend that the rate of detection and penalties are much greater than the sum of money that they could save by evading taxes. This section includes the literature on how economic factors affect the compliance behavior of GST taxpayers:

3.1.1 Compliance Cost

The taxation system of a country transfers resources from the private sector to the public sector to meet the needs of government spending and distribute wealth for vertical and horizontal equity in the country. The private sector bears not only the loss of resources equal to the amount of taxes paid plus any associated distortionary cost resulting from changes in decision making and behavior as a result of this resource transfer, but also the losses incurred in the process of levying, collecting, and depositing taxes to the government (Pope, 2002). The burden of these hidden costs on the private sector is known as the "Compliance Cost of Taxation". Sapiei *et al.* (2014) defined compliance as the cost incurred by taxpayers for abiding by a country's relevant tax laws to fulfill their obligations. They found that the compliance cost of taxation consists of three types of cost: Internal costs (cost of time spent by the employees of the company on tax administration work); External costs (charges paid by the company to outside tax professionals); and incidental costs (costs excluding internal and external costs incurred to address tax matters, i.e. cost of software, computers, etc.). The taxpayers are now required to match invoices between their inputs and outputs to be eligible for a full claim of input tax credit under the GST law, which further raises the compliance costs even higher for small firms³. Nzioki and Peter (2014) found in

their study that the compliance cost of taxation is significantly and negatively related to the compliance behavior of tax assesses. Rashid *et al.* (2018) have also observed that the higher psychological and fiscal compliance cost of GST results in building an extra burden on SMEs and will result in reducing their GST compliance behavior. Palil *et al.* (2013) observed that the adoption of GST in Malaysia would result in an increase of RM6 336 per annum on average in external compliance costs for tax computation and tax planning on MSMEs. They also observed that most of the respondents in the survey dissipate that the implementation of GST will also increase their internal cost of GST compliance after some time. Ramli *et al.* (2015) have also found in their research that the implementation of GST would increase external compliance costs for SMEs for tax computation, tax planning, and tax appeal in Malaysia. Mahangila (2017) has also observed that the compliance cost of taxation has a substantial negative impact on the taxpayer's compliance behavior.

3.1.2 GST Rate

GST rate is one of the major factors influencing the compliance behavior of GST taxpayers in India. According to the Finance Ministry of the Indian Government, the high rate of taxes in the pre-GST era has acted as a disincentive to paying taxes in India, but the lower tax rates under the GST regime have helped taxpayers to increase their compliance behavior⁴. The previous researches on tax research compliance behavior have provided mixed and unclear results. Previously, Allingham and Sandmo (1972) used statistical modeling to identify a relationship between actual income, penalties, tax rates, investigations, and tax evasion. Regardless of tax rates, they found that taxpayers may select to declare a lesser income or report less. According to them, in determining tax evasion, tax rates appeared to be irrelevant. Alm *et al.* (1995) have found that that higher taxes lead to somewhat greater tax compliance. Similarly, Yitzhakit (1974) has found that an increase in the tax rate increases the tax compliance behavior of taxpayers. However, most of the empirical studies conducted in this domain have found that an increase in the tax rate negatively affects the taxpayer's compliance behavior. Park and Hyun (2003) have found that the tax rate affects the compliance behavior of taxpayers negatively,

as the higher tax rate increases the pressure on taxpayers to under-report their tax liabilities. Ling *et al.* (2016) have discovered a statistically significant and moderately negative relationship between price stability, GST adoption, and compliance. They found that the willingness of consumers to accept and comply with the newly adopted GST law goes on diminishing if it causes a price rise in the country. The increase in the GST rate forces consumers to buy the products without GST invoicing to reduce the cost of the product, which in turn impacts the compliance behavior of the firms and the individual GST taxpayers. Mas'ud *et al.* (2014) have also found that the tax rate negatively affects the tax compliance behavior of taxpayers. Gordon (1989) also demonstrates that if people differ in their honesty, increasing the tax rate will reduce the compliance behavior even of the most honest taxpayers. Kirchler *et al.* (2008) found that the impact of the tax rate on compliance behavior depends on the trust between the government and the taxpayers. When the level of trust is low between them, a high tax rate may be regarded as unfair treatment of the taxpayers; when trust is high, the same level of tax rate may be interpreted as a community contribution. In short, the result demonstrates that tax rates have a mixed impact on tax compliance, i.e., lowering the tax rates does not always promote compliance (Kirchler *et al.*, 2008) and increasing tax rates does not always decrease compliance behavior (Allingham & Sandmo, 1972).

3.1.3 GST Audit

A GST audit is a process of examination of returns, records, and details maintained by the assessee to assess, verify and ensure the accuracy of turnover reported, taxes paid, refund and Input Tax Credit (ITC) claimed and weigh up other such compliance as required under the GST laws. According to the economic model of tax compliance behavior of taxpayers, the taxpayers try to magnify the outcome of compliance decisions by evaluating the benefit of successful evasion with the probability of being caught and punished. The decision of the taxpayers to be compliant depends on the audit probabilities and fines (Kircher *et al.*, 2008). Palil and Mustapha (2011) found in their study that the rate and the thoroughness of audit positively affect the tax compliance behavior of taxpayers. Allingham and

Sandmo (1972) also concluded in their study that an increase in the detection rate would always result in the declaration of a larger income. Snow and Warren (2005) observed that any rise in the uncertainty of being audited; increases tax compliance among acuity-averse taxpayers. However, increasing the uncertainty or ambiguity of being audited cannot be used as an effective tool for tax compliance as tax authorities never categorize or screen taxpayers based on their preference for ambiguity. Park and Hyun (2003) also found that the penalty and audit rate are important deterrents to tax compliance behavior. However, some studies have found a weak effect of tax audits on tax compliance. Modugu and Anyabuba (2014) found in their study by analyzing the extensive literature on tax audits and compliance behavior that tax audits are yet to make any substantial impact on the compliance behavior of taxpayers. Similarly, Beron *et al.* (1988) also found in their study that the audit probability positively stimulates the tax compliance behavior of taxpayers, although the effect was not found to be large and significant for all groups under the study.

3.1.4 Penalties, Enforcement and Compliance behavior

The tax penalty is a punitive measure that is imposed by the tax law for the execution of an act that is litigated, or for failing to take necessary action such as failing to file timely returns or file incorrect or undervalued returns (Oladipupo & Obazee, 2016). Park and Hyun (2003) found in their study that the penalty rate is an important deterrent to the tax compliance behavior of taxpayers in comparison to tax audits. Blackwell (2007) also observed strong evidence that an increase in the rate of penalties increases the compliance behavior of taxpayers. Kamil (2015) found that the tax compliance behavior of individuals can be improved with the effective application of tax penalties. However, some studies found an insignificant impact of penalties on tax compliance behavior. Oladipupo and Obazee (2016) found that penalties have a positive but insignificant impact on the tax compliance behavior of taxpayers. Mohdali *et al.* (2014) also found that the threat of punishment negatively affects the compliance behavior of taxpayers. They found that taxpayers start to avoid taxes when they are threatened with punishment. Swistak (2015) has also found that tax

penalties are helpful in increasing tax compliance, but only up to a specified level. The imposing of tax penalties can give reliable results only when it is applied as a complement to other drivers of tax compliance. A system that is too punitive is a hurdle to business formalization and a deterrent to tax compliance. In a country, tax penalties should be designed to motivate taxpayers, not to repress them or raise additional revenue for the government, as voluntary tax compliance has a stronger impact on tax compliance in comparison to tax compliance by enforcement. Therefore, a system of too many penalties and tax enforcement should be avoided and its use should be preferred with a combination of other deterrents to tax compliance.

3.2 Socio-Psychological factors

The economic deterrent model of tax compliance behavior assumes that the decision of a rational taxpayer to be compliant with the tax laws merely depends on the economic calculation of the cost and benefit arising from the evasion of taxes. According to this approach, it is sufficient to investigate all taxpayers more frequently and to impose more stringent penalties to limit tax evasion practices. However, this approach seems to be very reassuring in its simplest form, as no tax administration system has enough resources to frequently scrutinize all the taxpayers, and it may also be possible that rational taxpayers include it in their calculations and still continue to evade taxes. This notion assumes that the taxpayers are fully individualistic and immoral and their willingness to conform to the tax laws is not affected by any social norms or by any social interaction. The pure economic cost-benefit explanation of tax compliance behavior has been criticized for excluding social and psychological determinants over time by a lot of researchers. With the passage of time and the expansion of research into this phenomenon, it has been shown that tax compliance cannot be entirely explained by the risk of deterrence and economic factors (Lefebvre, 2014). Some critics take a controversial position and claim that non-economic factors, i.e. social, psychological, and political factors, have better explanatory power for determinants of tax compliance behavior. Therefore, the tax compliance behavior of a taxpayer does not merely depend on economic factors, but it also depends on other social and psychological

factors. This section includes the literature on socio-psychological factors affecting the compliance behavior of GST taxpayers.

3.2.1 Peer Groups

Peer groups are highly influential in shaping an individual's values, preferences as well as behaviors. The peer or referent group is normally defined as associates of the taxpayer, i.e., their relatives, friends, colleagues, and co-workers. It is convincible by the available literature that the tax morale of a human being depends on the compliance behavior of others in society. Kirchler *et al.* (2008) found in their study that if taxpayers find that non-compliance practices are pervasive and widely accepted in their social reference groups, they are also motivated to indulge in such tax evasion practices. Lefebvre *et al.* (2014) also found an asymmetric outcome of social information on the tax compliance behavior of taxpayers in their study. They found that when taxpayers obtain information regarding the prevalence of low tax evasion practices among their peer group members, tax compliance is not found to be increasing among them, which indicates that a good example of compliance does not have any disciplinary impact on the compliance behavior of taxpayers. On the other hand, when taxpayers receive information about the highest level of tax evasion practices among their peers, their tax compliance behavior is found to be diminishing. Palil (2010) has also found that the tax compliance behavior of an individual is strongly affected by the behavior and attitude of the reference group members, i.e., their colleagues, friends, spouses, and family members who surround the taxpayers. Wallschutzky (1984) has also found in their study that the more non-compliant taxpayers known to the respondent, the greater the probability of evading the taxes by the respondent. Alkhatib *et al.* (2019) found a negative but significant impact of peer influence on the tax compliance behavior of Palestinian SMEs. Alm (1991) also found that tax compliance is highly affected by the taxpayer's commitment to the social norms of compliance, that citizens who believe that others cheat are more likely to deceive themselves, and that personal perceptions about how they are treated relative to others influence compliance. Levi (1988) defines taxpayers as strategic players who will corporate only if they expect others to do

the same. They found that the compliance of each taxpayer is contingent on the compliance of other taxpayers in society. Wartick and Rupert (2010) also studied the influence of peers on tax reporting decisions by examining whether observing a peer's likelihood of reporting income would influence a taxpayer's reporting decision. They found that peer reporting does not have any direct influence on tax compliance behavior, but it has a significant effect on the likelihood measure. They found that a participant who had viewed the decision of a non-compliant peer was less likely to report their income accurately compared to those who had viewed the decision of a compliant peer.

3.2.2 Tax Fairness and Equity

Tax fairness consists of two dimensions: one entails equity of exchange: the benefit received by the taxpayer for the taxes paid; and the second dimension involves the equity of burden on the taxpayers in comparison to other individuals. In other words, equity may be defined as treating equal people in similar circumstances in an equal manner. Wallschutzky (1984) also found that the exchange relationship was the most important hypothesis in explaining the reason for the non-compliance behavior of taxpayers. The study showed that taxpayers realize that the burden of taxes falls disproportionately on salary and low-income earners, as high-income earners evade taxes with the help of tax specialists. The unfairness of the tax system may be reflected in the perception of taxpayers that they are overpaying taxes in respect to the value of services rendered by the government in exchange for taxes paid or in respect to what other taxpayers pay (Chau & Leung, 2009). Alkhabit *et al.* (2019) have also found a positive relationship between the compliance behavior of taxpayers and tax fairness. The result showed that taxpayers perceive the tax system as fair and, therefore, they are motivated to pay taxes honestly and accurately. Mukhlis *et al.* (2015) also found that tax fairness has a positive impact on the tax knowledge of taxpayers regarding the taxation system, and their compliance level improves with an increase in perceived fairness in the taxation system. However, Gilligan and Richardson (2005) discovered that there is no universal cross-cultural relationship between various aspects of tax fairness and taxpayers' compliance behavior.

3.2.3 Tax Morale

Tax morale can be defined as the intrinsic motivation to pay taxes that stems from a moral obligation or belief that paying taxes contributes to society. It is based on the tax attitude of citizens and their perception of being citizens of their internal acceptance of their tax duty and their acceptance of state sovereignty. The attitude of taxpayers towards paying taxes is determined by their individual perceptions and self-motivation, which can be expressed by the term "tax morale" (Jayawardane, 2015). Since the work of Sandmo and Allingham (1972), a lot of research has been conducted on the determinants of tax compliance behavior, and tax morale has gained major attention among researchers studying this phenomenon. The main reason for the failure of the economic model is the neglect of the tax morale of the taxpayers as a determinant of tax compliance behavior in their model (Kirchler *et al.*, 2010). The tax morale provides insight into why people pay taxes despite low penalties and fines around the globe. Tax morality is influenced by a variety of factors that interact to determine whether people are willing or unwilling to contribute to their country's tax revenue. Alasfour *et al.* (2016) have also found in their study that the improvement in tax morale of taxpayers along with improvements in other factors (i.e. reduction in the tax rate, decreasing level of corruption, improving the perception of fairness and equity, etc.) positively increase the compliance behavior of taxpayers.

3.2.4 GST Tax Knowledge

Tax knowledge is described as a taxpayer's ability to understand tax laws and accurately calculate their tax liability. Previous have shown that tax knowledge plays a vital role in affecting the taxpayer's compliance behavior. Saad (2014) found in their study that taxpayers have inadequate knowledge of the technical aspects of the taxation system and therefore, they perceive the taxation system as complex. They found that tax knowledge and tax complexity contribute significantly to determining the compliance behavior of taxpayers in the voluntary compliance system of taxation. Similarly, a lack of tax knowledge may lead to non-compliance behavior by taxpayers, either intentionally or unintentionally. Mckerchar, (1995) found in their study that small business taxpayers are not even aware of the shortfall

in their knowledge, resulting in their unintentional non-compliance behavior. Many studies have found that taxpayers with more fiscal awareness had higher tax ethics scores than those with less fiscal understanding. In their studies, Oladipupo and Obazee (2016), Kirchler *et al.* (2010), Chau and Ling (2009) have found that an increase in the level of tax knowledge further leads to an increase in the tax compliance behavior of a taxpayer. The knowledge regarding taxation policies can also help taxpayers to understand the perceived power of the taxation authorities. However, a study conducted by Harris and Donald (1989) found that tax knowledge has a direct effect on an individual's perception of fairness but does not have any direct effect on the compliance behavior of taxpayers. Similarly, a study conducted by Loo *et al.* 2010b, has shown that an increase in tax knowledge of taxpayers helps them to access information and discovers new ways of tax evasion and tax avoidance. Similarly, Fauziati *et al.* (2016) have found in their research that tax knowledge has no direct impact on taxpayers' compliance behavior. Thus, the researches on tax knowledge as a factor influencing tax compliance has yielded inconclusive and varied results.

3.3 Institutional Factors

Institutional factors are the traditional standards established by the government and taxation authorities of a country to motivate the taxpayers to pay taxes honestly and also to ensure prompt payment of tax liability to ensure the compliant behavior of the taxpayers. Along with economic and socio-psychological factors, institutional factors play an important role in determining the tax compliance behavior of taxpayers. In a country, the taxpayers will be willing to pay taxes honestly and accurately only if the edifice of the institutional framework is well-founded. Due to the weak network of taxation institutions, the mobilization of tax levels is very low and unsatisfactory in developing countries. Therefore, this section involves the institutional factors derived from the available literature, which are as below:

3.3.1 Probability of Detection

The probability of detection plays an important role in determining the tax compliance behavior of an individual. The probability of detection refers

to the likelihood that the tax authorities will catch an individual's tax non-compliance practices. It is a situation of uncertainty faced by taxpayers when deciding whether to be involved in non-compliant tax practices or not. Sanusi *et al.* (2017) have also found that the probability of being audited positively influences GST compliance behavior among businesses in Malaysia. Allingham and Sandmo (1972) also found in their study that an increase in the detection rate would always result in the declaration of larger income by the taxpayers. They found that the taxpayer evaluates the outcome of non-compliant practices by comparing the taxes to be saved by evasion of taxes with the penalties to be imposed in case of detection of evasion. The taxes evaded by the taxpayer are viewed as income by the assessee and the probability of getting caught and potential punishment are viewed as the typical cost. They found that people will be prohibited from evading taxes only when they comprehend that the rate of detection and penalties are much greater than the sum of money that they could save by evading taxes. Alm (1991) observed that an increase in the probability of detection would increase the tax compliance behavior of taxpayers. The result of his study showed that people pay taxes due to their fear of detection and penalties. Snow and Warren (2005) have also found that the increase in the uncertainty of being audited increases tax compliance among ambiguity-averse taxpayers.

3.3.2 Complexity of taxation system

GST complexity can manifest itself in a variety of forms, including difficulties in tax computations, complexity in filling out GST returns, compliance complexity, and complexity in confirming with the relevant GST laws. According to a World Bank report, GST is one of the world's most complex taxation systems, with the world's second-highest tax rate among 115 countries with a similar indirect taxation system⁵. The GST structure in India has five tax slabs of 0%, 5%, 12%, 18%, and 28% which makes it a complex taxation system for the taxpayers. Furthermore, certain sales are exempted, and exports are zero-rated, allowing exporters to claim a refund for taxes paid on input. The gold is taxed separately at 3%, with precious stones at 0.5% and excluding some products from the preview of the GST regime, i.e., petroleum, real estate stamp duties, and electricity duties, which are taxed

at state-specific rates. Saad (2014) has also found in their study that the complexity of the taxation system negatively affects the compliance behavior of taxpayers. The structure of the taxation system reduces the willingness of the taxpayers to comply if they perceive the taxation system as too bureaucratic or if the taxation system involves several taxes and a higher tax burden on the taxpayers (Batrancea *et al.*, 2013). Krause (2000) demonstrates in their study that the requirement for onerous documentation, ignorance, and uncertainty prevent some taxpayers from taking advantage of rebates and deductions for which they are eligible. On the other hand, these ambiguous provisions provide opportunities to avoid taxes for other taxpayers. Kirchler *et al.* (2006) have also found in their study that taxpayers see the complexity and ambiguity of the taxation system as a major reason for their failure to file returns and avoid taxes. They found that the existence of a taxation system that ordinary taxpayers cannot understand due to its ambiguity and complexity allows taxpayers who can afford it to take advantage of the expertise of experts to avoid taxes, reducing the chances of achieving voluntary compliance among taxpayers. However, Nasution *et al.* (2020) conducted a study by collecting the data from 900 registered individual income taxpayers from 5 major cities in South Sumatra. They found that tax complexity has no direct impact on the compliance behavior of taxpayers or their trust in tax authorities.

3.3.3 Public governance quality

Public governance quality is one of the major determinants of the compliance behavior of GST taxpayers. Governance quality is an aspect of a general issue for the citizens of a country because it is based on the benefits that they accrue from the governance. The World Bank (2006) defines public governance quality as the process through which the leadership of a country is selected, evaluated, and replaced, as well as how the government efficiently and effectively governs the country's resources in a perceivably fair and equitable manner for the benefit of all its citizens. Levi (1988) studied the relationship between governance and taxpayers. He asserted that the tax compliance of the taxpayer is affected by the vertical contract. According to the concept of the vertical contract, the decision of taxpayers to comply or not with the tax law depends on whether

the benefits provided by the government in the form of political goods are sufficient in comparison to the taxes they pay to the government. Levi (1988) as cited in Lassen (2003) further found that if the taxpayers believe that the rate of transformation from tax to political goods is low, then the taxpayers will believe that the government has breached their contractual obligation and, as a result, their compliance level will be diminished. Lassen (2003) discovered in their study that the political goods mix (benefits provided by the government to its citizens) are important determinants of taxpayers' tax compliance behavior. If the political goods mix delivered by the government mismatches the citizen's expectations, taxpayers may perceive it as a breach of vertical contract by the government, resulting in their lower compliance behavior. Alasfour *et al.* (2016) also found that efficient government tax revenue expenditure has a positive impact on the compliance behavior of taxpayers. They found that the spending of the government's tax revenue wisely and efficiently on worthy projects and on such avenues from which taxpayers receive benefits increases the tax morale and compliance behavior of the taxpayers. Similarly, Alm *et al.* 1993 provide more insight on governance quality and taxpayer's compliance behavior. They found that when taxpayers are pleased with the quantity and quality of political goods funded by the taxes paid by them, their tax compliance levels may rise. Alabede *et al.* (2011) have also found a strong positive relationship between public governance quality and the tax compliance behavior of taxpayers.

4. GST Service Quality as a moderator of determinants of GST compliance behavior

The empirical studies discussed above have provided inconsistent relationships between the dependent variable (GST compliance behavior) and the independent variables (GST determinants). Therefore, the relationship between the dependent and independent variables may be moderated by some variables when the relationship between the dependent and independent variables is weak and inconsistent (Abadede *et al.*, 2011). The available literature has suggested tax service quality as a major determinant of tax compliance behavior of taxpayers. Therefore, the moderating role of tax

service quality in determining the relationship between dependent and independent variables is equally important. Tax service quality is usually defined as the difference between what taxpayers expect from taxation authorities and their perceptions of the services that have been provided by the taxation authorities to them. Susuawu *et al.* (2020) defined tax service quality concerning the service quality model developed by Parasuraman *et al.* 1988, with five major indicators of service quality: reliability, tangibility, assurance, responsiveness, and empathy. They defined reliability as the ability of taxation authorities to provide excellent service to taxpayers consistently and accurately. Tangibility is defined as the physical image of the services provided by tax authorities to taxpayers. Assurance involves the taxpayer's trust and confidence in the taxation authorities to deal honestly with them. When tax authorities prioritize taxpayers' needs and empathize with them, the quality of empathy is activated. The speed with which tax authorities respond to taxpayers' inquiries and needs is referred to as responsiveness. Tax service quality is a critical issue for tax offices just like any other public sector organization as taxation authorities provide numerous types of services to taxpayers. Jackson and Milliron (1986) highlighted the importance of service quality in taxation around five decades ago, in the context of tax compliance behavior of taxpayers. They discovered that how the taxpayers are treated during the period of providing tax services has a significant impact on their compliance behavior. Alabede *et al.* (2011) have also studied the impact of tax service quality on the compliance behavior of taxpayers in Nigeria with the financial condition and risk preference as a moderating variable. They found that the perceived service quality is positively and significantly correlated with the compliance behavior of the taxpayers. Hidayat *et al.* (2014) have also found responsiveness as one of the major indicators of tax service quality. Al-Ttaffi and Abdul-Jabbar (2016) also analyzed the impact of tax service quality on the tax compliance behavior of taxpayers in Yemeni. They found that the perceived tax service quality has a positive impact on the compliance behavior of taxpayers.

5. Conceptual Framework of the Study

Tax non-compliance is a dynamic and multifaceted aspect. The result from the finding of the study will help to develop a conceptual model on determinants of GST compliance behavior of taxpayers in India as shown in figure 1. This conceptual model will help the policymakers and the taxation authorities in formulating suitable policies for improving the collection of GST revenue by improving the compliance level of GST taxpayers in India. In addition, this model will enable to improve the voluntary tax compliance among GST taxpayers by incorporating economic factors (Compliance cost, GST audits, GST rate, penalties, and enforcement, etc.); socio & psychological factors (peer groups, tax fairness, and equity, GST knowledge, and tax morale, etc.) and Institutional factors (probability of detection, the complexity of taxation system, and public governance quality, etc) with GST service quality as a moderating variable. This will also enable us to synthesize the available literature on tax compliance to help the researchers to identify the future research gap and consider promising future directions for further study. The validity of the model can be validated through empirical testing.

{Figure 1: is about here}

6. Discussion and Conclusion

The revenue from taxation is an important source of financing for government spending on public goods and services around the globe. But the ability of the government to generate revenue from taxation is limited and affected by a lot of factors. GST non-compliance is one of the major and complex factors affecting the GST revenue collection of the government. According to the FFC of India, the country is losing nearly 5 trillion in revenue a year due to the non-compliance behavior of taxpayers in the indirect taxation

system, indicating that taxpayers are not paying their fair share of taxes, which is around 40% of the GST revenue collection target of the government for the year 2019-20 and equivalent to 2.4% of the GDP of the country⁶. By reviewing the available literature, it was found that GST non-compliance is a dynamic and multifaceted phenomenon that is affected by numerous factors, including but not limited to

coercion activities adopted by the government. Firstly, the findings of the study confirm that the compliance behavior of GST taxpayers is influenced by a variety of socio-psychological and institutional factors, in addition to economic factors, as explained by Allingham and Sandmo in 1972. The results showed that the country's GST collection can be improved only up to a certain limit by using coercion factors such as penalties, fines, GST audit, and enforcement, as overreliance on coercion factors can increase GST revenue only in the short run, but not in the long run, because a system with too many penalties and enforcement creates many barriers to business formalization. Therefore, coercion factors should be used to motivate taxpayers to pay taxes rather than repress them. Secondly, the study revealed that taxpayers are social beings and their decision to comply with the tax law is directly influenced by the decisions of others in society. The study found that the compliance behavior of GST taxpayers is positively affected and moderated by the GST service quality perceived by them in comparison to their tax payments. In reality, there is a need for a multi-pronged policy approach that emphasizes enforcement, but one that also enhances cooperative social norms. Further, the study showed that the GST compliance decision is positively and directly influenced by the taxpayers' knowledge of GST law, the complexity of the current taxation system, the GST rate, and corruption in the government. The government should try to increase the taxpayer's knowledge regarding various aspects of GST, i.e. filling out GST returns, claiming the input tax credit, and the benefits of paying taxes on time by arranging various seminars and programs to create awareness and increase compliance behavior of GST taxpayers. In addition, the government should try to rationalize the complexity of the taxation system, simplify the procedure of filing GST returns, use enforcement and penalties as an effective tool, and risk-based GST audit to reduce the non-compliance behavior of the taxpayers.

7. Research Gaps and Future direction

In spite of the studies discussed above, the research on GST compliance is still in its infancy. Generally, the majority of the studies in this domain have covered direct taxation and ignored indirect tax compliance behavior, despite the huge contribution of indirect

taxation to government revenue around the globe. The revenue of the Government of India from taxation stood at 10% of GDP, of which nearly 4.4% came from indirect taxes. The government of India loses nearly 5 trillion rupees in revenue from indirect taxes each year due to GST non-compliance among GST taxpayers. Despite the vulnerable contribution of GST (an indirect tax) to the Indian economy, very few and limited studies have covered the problem of GST compliance behavior in India.

Based on available literature on tax compliance, it was found that most of the studies conducted by researchers on tax compliance are conducted in developed economies, i.e. the USA, Canada, Australia, etc. In this caliber, only a few limited studies have been conducted in developing economies. The previous studies have attempted to explain the determinants of tax compliance behavior, however, it remains unclear how these studies contribute to developing economies, as local authorities in developing countries have less power and public trust due to social, political, and economic stability in comparison to developed economies. Because of the shortcomings in the institutional framework as well as the lack of expertise and resources to monitor tax complexities, developing countries are found to be more prone to tax non-compliance issues. Therefore, there is a vast scarcity of literature on GST compliance behavior in developing countries like India.

On reviewing the available literature on tax compliance, it was found that most of the factors taken under previous studies provide contradictory results. Most tax compliance studies have incorporated some determinants of tax compliance behavior, but there are very few studies that have taken all variables in combined form. There is a need to study the interrelationship between various determinants of GST compliance behavior as it directly influences the compliance behavior of GST taxpayers. There is very limited literature available in GST compliance determinants that have worked out or developed a conceptual model taking into account all the determinants of GST compliance behavior. There is a need to conduct an empirical study to validate the validity of the model. There is also a need to conduct a study by taking into consideration corporate sectors, as the majority of the studies focus on individual and MSMEs compliance behavior.

8. Theoretical and Managerial Implications of the Study

The paper proposes a model for understanding the GST compliance behavior of GST taxpayers in India. The GST taxpayers especially individuals and MSMEs face a lot of constraints under the GST regime as they are not backed up by the financial and human resources owned by big corporations. It has been noted that no empirical study has been conducted to examine the determinants of GST compliance behavior of taxpayers in India as it is a newly adopted phenomenon in India. The model is an extension of the Fischer model (which is based on social and psychological theories) and the deterrence theory by incorporating economic, socio-psychological, and institutional factors with GST service quality as a moderating variable in the model. Theoretically, the extension of the model from the available literature on direct taxation and GST will enrich the literature on GST compliance with a better understanding of the compliance behavior of GST taxpayers. Furthermore, the proposal is a single comprehensive model that incorporates economic, socio-psychological, and institutional factors with tax service quality as a moderating variable for studying the compliance behavior of GST and income tax taxpayers. The proposed model will serve as a guide for the government in formulating socioeconomic and political policies for the development of the country and will increase the GST revenue of the country. This study is invaluable for a variety of stakeholders, including taxation authorities, policymakers, taxpayers, and the government, as a starting point for decision-making to enhance tax reforms in aspects of instituting better revenue performance, as well as to add to the existing body of knowledge on determinants of GST compliance behavior of taxpayers. By establishing the theoretical relationship between the factors affecting the GST compliance behavior of taxpayers, the present study builds up a road map for validating the validity of the model and conducting an empirical study.

Endnotes:

1. <https://www.livemint.com/news/india/govt-could-be-losing-5-tn-in-gst-revenue-over-defaults-evasion-11579544020437.html> retrieved on 15 August 2021.

2. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1744032> retrieved on 15 Sept. 2021.
 3. <https://www.livemint.com/Politics/99hZqzvxfdwZKgkbWOrO/GST-one-of-the-most-complex-and-second-highest-tax-rate-in.html> retrieved on 15 September 2021.
 4. <https://www.thehindu.com/business/Economy/gst-reduced-tax-rate-increased-compliance-more-than-66-crore-returns-filed-in-4-years-finance-ministry/article35050834.ece> retrieved on 16 September 2021.
 5. Retrieved from <https://www.livemint.com/Politics/99hZqzvxfdwZKgkbWOrO/GST-one-of-the-most-complex-and-second-highest-tax-rate-in.html>.
 6. Retrieved from <https://www.livemint.com/news/india/govt-could-be-losing-5-tn-in-gst-revenue-over-defaults-evasion-11579544020437.html>
- ## References
- Alabede, J. O., & Zainal Affrin, Z. (2011). Public governance quality and tax compliance behavior in Nigeria: The moderating role of financial condition and risk preference. *Issues in Social and Environmental Accounting (ISEA)*, 5(1/2), 3-24.
- Alabede, J. O., & Zainal Affrin, Z. (2011). Tax service quality and compliance behaviour in Nigeria: Do taxpayer's financial condition and risk preference play any moderating role?. *European Journal of Economics, Finance and Administrative Sciences*, (35), 90-108. Retrived on 15 September, 2021 from <http://repo.uum.edu.my/id/eprint/3854>
- Alasfour, F., Samy, M., & Bampton, R. (2016). The determinants of tax morale and tax compliance: Evidence from Jordan. In *Advances in taxation*, 35, 125-171. <https://doi.org/10.1108/S1058-749720160000023005>.
- Alkhatib, A. A., Abdul-Jabbar, H., Abuamria, F., & Rahhal, A. (2019). The effects of social influence factors on income tax evasion among the palestinian SMEs. *International Journal of Advanced Science and Technology*, 28(17), 690-700.
- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of public economics*, 1(3-4), 323-338.
- Alm, J. (1991). A perspective on the experimental analysis of taxpayer reporting. *The Accounting Review*, 66(3), 577-593.
- Alm, J. (2012). Measuring, explaining, and controlling tax evasion: lessons from theory, experiments, and field studies. *International tax and public finance*, 19(1), 54-77.
- Alm, J., Jackson, B. R., & McKee, M. (1993). Fiscal exchange, collective decision institutions, and tax compliance. *Journal of Economic Behavior & Organization*, 22(3), 285-303.
- Alm, J., Sanchez, I., & DE Juan, A. (1995). Economic and Noneconomic Factors in Tax Compliance. *Kyklos*, 48(1), 1-18.
- Al-Ttaffi, L. H. A., & Abdul Jabbar, H. (2016). Service quality and income tax non-compliance among small and medium enterprises in Yemen. *Journal of Advanced Research in Business and Management Studies*, 4(1), 12-21.
- Andreoni, J., Erard, B., & Feinstein, J. (1998). Tax compliance. *Journal of economic literature*, 36(2), 818-860.
- Armah-Attoh, D., & Awal, M. (2013). Tax administration in Ghana: perceived institutional challenges. *Afrobarometer Briefing Paper*, 124(1).
- Batrancea, L. M., Nichita, R. A., & Batrancea, I. (2013). Understanding the determinants of tax compliance behavior as a prerequisite for increasing public levies. *The USV Annals of Economics and Public Administration*, 12(1 (15)), 201-210.
- Beron, K.L., Tauchen, H.V., & Witte, A.D. (1988). A structural equation model for tax compliance and auditing, NBER working paper no 2556, *National Bureau of Economic Research*. Retrieved on 14 May 2021, from <https://www.nber.org/papers/w2556>.
- Blackwell, C. (2007). A meta-analysis of tax compliance experiments. *International Studies Program Working Paper*, 7- 24.
- Chen, L. E., & Taib, M. S. B. M. (2017). Goods and services tax (GST): challenges faced by business operators in Malaysia. In *SHS Web of Conferences*, 36, 1-20. EDP Sciences. <https://doi.org/10.1051/shsconf/20173600027>

- Dreyer Lassen, D. (2003). *Ethnic divisions and the size of the informal sector* (No. 2003-01). EPRU Working Paper Series. DOI: <http://hdl.handle.net/10419/82081>
- Fauziati, P., Minovia, A. F., Muslim, R. Y., & Nasrah, R. (2020). The impact of tax knowledge on tax compliance case study in Kota Padang, Indonesia. *Journal of Advanced Research in Business and Management Studies*, 2(1), 22-30.
- Gerald Chau, P. L. (2009). A critical review of Fischer tax compliance model: A research synthesis. *Journal of Accounting and Taxation*, 1 (2), 034-040.
- Gilligan, G., & Richardson, G. (2005). Perceptions of tax fairness and tax compliance in Australia and Hong Kong a preliminary study. *Journal of financial crime*, 12(4), 331-343.
- Gordon, J. P. (1989). Individual morality and reputation costs as deterrents to tax evasion. *European economic review*, 33(4), 797-805.
- Harris, T. D. (1989). *The effect of type of tax knowledge on individuals' perceptions of fairness and compliance with the federal income tax system: An empirical study*, 9005115, (Doctoral dissertation, University of South Carolina).
- Hidayat, N. R., Suhadak, D., Siti, R. H., & Bambang, W. O. (2014). Measurement model of service quality, regional tax regulations, taxpayer satisfaction level, behavior and compliance using confirmatory factor analysis. *World Applied Sciences Journal*, 29(1), 56-61.
- Hindriks, J., Keen, M., & Muthoo, A. (1999). Corruption, extortion and evasion. *Journal of Public economics*, 74(3), 395-430.
- Ibrahim, M., Musah, A., & Abdul-Hanan, A. (2015). Beyond enforcement: what drives tax morale in Ghana?. *Humanomics*. 31(4), 399-414.
- Ittner, D. (2003). *Ethnic division and the size of the informal sector*. Working paper, Institute of Economics, University of Copenhagen.
- Jackson, B. R., & Milliron, V. C. (1986). Tax compliance research: Findings, problems, and prospects. *Journal of accounting literature*, 5(1), 125-165.
- James, S., & Alley, C. (2002). Tax compliance, self-assessment and tax administration. *Journal of Finance and Management in Public Service*, 2(2), 27-42.
- Jayawardane, D. (2015). Psychological factors affect tax compliance. A review paper. *International Journal of Arts and Commerce*, 4(6), 131-141.
- Kamil, N. I. (2015). The Effect of Taxpayer Awareness, Knowledge, Tax Penalties and Tax Authorities Services on the Tax Compliance: (Survey on the Individual Taxpayer at Jabodetabek & Bandung). *Research Journal of Finance and Accounting*, 6(2), 104-111.
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic psychology*, 29(2), 210-225.
- Kirchler, E., Muehlbacher, S., Kastlunger, B., & Wahl, I. (2010). Why pay taxes? A review of tax compliance decisions. *Developing alternative frameworks for explaining tax compliance*, 59, 1-27.
- Kirchler, E., Niemirowski, A., & Wearing, A. (2006). Shared subjective views, intent to cooperate and tax compliance: Similarities between Australian taxpayers and tax officers. *Journal of economic psychology*, 27(4), 502-517.
- Krause, K. (2000). Tax complexity: Problem or opportunity?. *Public Finance Review*, 28(5), 395-414.
- Lefebvre, M., Pestieau, P., Riedl, A., & Villeval, M. C. (2014). Tax evasion and social information: an experiment in Belgium, France, and the Netherlands. *International Tax and Public Finance*, 22(3), 401-425.
- Levi, M. (1988). *Of Rule and Revenue*. University of California Press. <http://www.jstor.org/stable/10.1525/j.ctt1pngtk>.
- Ling, S. C., Osman, A., Arman Hadi, A. B., Muhammad Safizal, A., & Rana, S. M. (2016). Public acceptance and compliance on goods and services tax (GST) implementation: A case study of Malaysia. *Asian Journal of Social Sciences & Humanities*, 5(1), 1-12.
- Loo, E. C., Evans, C., and McKerchar, M. A. (2010b). Challenges in understanding compliance behaviour of taxpayers in Malaysia. *Asian Journal of Business and Accounting*, 3(2), 145-162.
- Mahangila, D. (2016). Managers or Corporates?: Curbing Non-compliance through Corporate Income Tax Penalty. *Business Management Review*, 19(2), 82-102.

- Mas'ud, A., Aliyu, A. A., Gambo, E. J., Al-Qudah, A. A., & AlSharari, N. (2014). Tax rate and tax compliance in Africa. *European Journal of Accounting Auditing and Finance Research*, 2(3), 22-30.
- McKerchar, M. (1995). Understanding small business taxpayers: Their sources of information and level of knowledge of taxation. *Australian Tax Forum*, 12(1), 25 - 41.
- Modugu, K. P., & Anyaduba, J. O. (2014). Impact of tax audit on tax compliance in Nigeria. *International journal of business and social science*, 5(9), 207-215.
- Mohdali, R., Isa, K., & Yusoff, S. H. (2014). The impact of threat of punishment on tax compliance and non-compliance attitudes in Malaysia. *Procedia-Social and Behavioral Sciences*, 164, 291-297.
- Mukhlis, I., Utomo, S. H., & Soesetio, Y. (2015). The role of taxation education on taxation knowledge and its effect on tax fairness as well as tax compliance on handicraft SMEs sectors in Indonesia. *International Journal of financial research*, 6(4), 161-169.
- Nasution, M. K., Santi, F., Husaini, H., Fadli, F., & Pirzada, K. (2020). Determinants of tax compliance: a study on individual taxpayers in Indonesia. *Entrepreneurship and Sustainability Issues*, 8(2), 1401.
- Nzioki, P., & Peter, O. (2014). Analysis of factors affecting tax compliance in real estate sector: A case of real estate owners in Nakuru Town, Kenya. *Research Journal of Finance and Accounting*, 5(11), 1-12.
- Oladipupo, A. O., & Obazee, U. (2016). Tax knowledge, penalties and tax compliance in small and medium scale enterprises in Nigeria. *IBusiness*, 8(1), 1-9.
- Palil, M. R. (2010). "Tax Knowledge and Tax Compliance Determinants in Self Assessment System in Malaysia". Thesis for PhD, Malaysia: University of Birmingham.
- Palil, M. R., & Mustapha, A. F. (2011). The evolution and concept of tax compliance in Asia and Europe. *Australian Journal of Basic and Applied Sciences*, 5(11), 557-563.
- Palil, M. R., Ramli, R., Mustapha, A. F., & Hassan, N. S. A. (2013). Elements of compliance costs: Lesson from Malaysian companies towards Goods and Services Tax (GST). *Asian Social Science*, 9(11), 135-147.
- Palil, M., & Mustapha, A. (2011). Determinants of tax compliance in Asia: A case of Malaysia. *European Journal of Social Sciences*, 24(1), 7-32.
- Park, C.-G., & Hyun, J. K. (2003). *Examining the determinants of tax compliance by experimental data: a case of Korea*. *Journal of Policy Modeling*, 25(8), 673-684. doi:10.1016/s0161-8938(03)00075-9
- PHAM, T. M. L., LE, T. T., TRUONG, T. H. L., & TRAN, M. D. (2020). Determinants influencing tax compliance: The case of Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7(2), 65-73.
- Pope, J. (2002). Administrative and compliance costs of international taxation. In *The international taxation system* (pp. 273-289). Springer, Boston, MA. https://doi.org/10.1007/978-1-4615-1071-0_14
- Ramli, R., Palil, M. R., Hassan, N. S. A., & Mustapha, A. F. (2015). Compliance costs of Goods and Services Tax (GST) among small and medium enterprises. *Jurnal Pengurusan (UKM Journal of Management)*, 45.
- Rashid, N., Kamal, N. F. S., Hamid, N. A., Ghazali, N., Yusop, R., Zaid, A. S., ... Afthanorhan, A. (2018). The Effect of Government Support Programs and Compliance Costs on Goods and Services Tax Compliance among Malaysian Batik Manufacturers. *International Journal of Academic Research in Business and Social Sciences*, 8(12), 682-695.
- Saad, N. (2014). Tax knowledge, tax complexity and tax compliance: Taxpayers' view. *Procedia-Social and Behavioral Sciences*, 109, 1069-1075. <https://doi.org/10.1016/j.sbspro.2013.12.590>
- Sanusi, S., Omar, N., Sanusi, Z. M., & Noor, R. M. (2017). Moderating Effect of Audit Probability on the Relationship between Tax Knowledge and Goods and Services Tax (GST) Compliance in Malaysia. *Pertanika journal of social sciences & humanities*, 25(S), 231-240.
- Sapiei, N. S., Kasipillai, J., & Eze, U. C. (2014). Determinants of tax compliance behaviour of corporate taxpayers in Malaysia. *eJournal of Tax Research*, 12(2), 383-409.
- Snow, A., & Warren, R. S. (2005). Ambiguity about audit probability, tax compliance, and taxpayer welfare. *Economic Inquiry*, 43(4), 865-871.

- Srinivasan, T. N. (1973). Tax evasion: A model. *Journal of Public Economics*, 2(4), 339–346. doi:10.1016/0047-2727(73)90024-8.
- Susuawu, D., Ofori-Boateng, K., & Amoh, J. K. (2020). Does Service Quality Influence Tax Compliance Behaviour of SMEs? A New Perspective from Ghana. *International Journal of Economics and Financial Issues*, 10(6), 50-56.
- Swistak, A. (2016). Tax penalties in SME tax compliance. *Financial theory and practice*, 40(1), 129-147.
- Vasanthagopal, R. (2011). GST in India: A big leap in the indirect taxation system. *International Journal of Trade, Economics and Finance*, 2(2), 144-146.
- Wallschutzky, I. G. (1984). *Possible causes of tax evasion*. *Journal of Economic Psychology*, 5(4), 371–384. doi:10.1016/0167-4870(84)90034-5.
- Wartick, M. L., & Rupert, T. J. (2010). The effects of observing a peer's likelihood of reporting income on tax reporting decisions. In *Advances in taxation*, 19, 65-94 Emerald Group Publishing Limited. doi:10.1108/s1058-7497(2010)0000019005
- Yew, B., Milanov, V., & McGee, R. W. (2015). An analysis of individual tax morale for Russia: before and after flat tax reform. *International Business Research*, 8(1), 60-80.
- YITZHAKIt, S. (1974). A note on income tax evasion: A theoretical analysis. *Journal of public economics*, 3, 201-202.
- Youde, S., & Lim, S. (2019). Tax Compliance. Global Encyclopedia of Public Administration. *Public Policy, and Governance*, https://doi.org/10.1007/978-3-319-31816-5_3828-1.