

## **Critical Factors of Tax Compliance Behaviour and Intention among Small and Medium Enterprises in Libya**

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### **ABSTRACT**

Tax compliance can be described as the level to which taxpayers obey or fail to obey the rules of taxation of their country. This is an admitted fact that the aim of an effective administration of tax is to enhance the voluntary compliance of tax with the use of all possible approaches that may include penalties as well. The primary purpose of this study is to assess the tax compliance behaviour among small and medium enterprises in Libya. The secondary problem is concerned with how intention to tax compliance mediates and affects the relationship between determinants of tax compliance and tax compliance behaviour. This study provides a cornerstone for those who are looking for the reasons for tax compliance to be low. Therefore, this study examines the determinants of tax compliance and tax compliance behaviour and how intention to compliance mediates this relationship. To achieve the goals of this study, a questionnaire survey was administered. Multiple regressions were used to test the formulated hypotheses. The results of this study show how the behaviour of tax compliance can be influenced by intentional behaviour and poor awareness, unfair taxes, low morale, strict authorities, tax rate and tax penalties. In addition, the mediating effect of intention to compliance on determinants and behaviour of tax compliance indicates partial mediation. In relation to the practical and theoretical contributions, so far, to the best of the researcher's knowledge, no scientific research has been done on this. This research would assist politicians, tax officials and the government of Libya in researching this phenomenon.

**Keywords:** tax compliance, tax compliance behaviour, determinants of tax, tax knowledge, tax penalty.

### **1.0 INTRODUCTION**

Tax compliance can be defined as the extent to which taxpayers adhere to or violate their country's tax laws. It is a well-known fact that the goal of effective tax administration is to increase voluntary compliance with tax through the use of all available tools, which may include penalties (Sakarnor, Marziana and Norkhazimah, 2012). Taxpayers' compliance responsibilities include the obligation to report, calculate, and pay their taxes in accordance with applicable tax laws. These can result in benefits such as increased convenience for taxpayers, cost savings for the revenue authority, and improved data quality on tax returns as a result of the elimination of data entry errors associated with manual filing (Gwaro, Maina, &Kwasira, 2016). Kirchler, Muehlbacher, Kastlunger, and Wahl (2010) argue that the most neutral term for taxpayers' willingness to pay their taxes is compliance.

Tax compliance, in a broader sense, refers to taxpayers' ability and willingness to comply with tax laws, which are determined by ethical considerations, the legal environment, and other contextual factors at a given time and place. Similarly, several tax authorities define tax compliance as taxpayers' ability and willingness to adhere to tax laws, declare the correct income each year, and pay the correct amount of taxes on time (Jayawardane & Low, 2016). Increased tax compliance on the part of individual taxpayers would contribute to deficit reduction without raising taxes (Kiow, Salleh, & Kassim, 2017). According to Kiow et al. (2017), both under- and over-reporting of income and expense items reduces tax liability.

In general, there is an increasing recognition that SMEs can play a critical role in addressing some of the region's challenges by contributing to economic growth and bridging some of the regional economic development imbalances that have developed between developed and developing countries (Ayozie and Latinwo, 2010; Emine, 2012; Muritala, et al., 2012; Kiraka, et al., 2013).

However, it is widely accepted that SMEs face significant growth constraints and have less access to formal sources of external finance, which may explain why SMEs contribute so little to the country's economic growth (Pandula, 2011; Anis and Mohamed, 2012; Terungwa, 2012; Kira, 2013). As a result, SMEs are critical to the Libyan economy, as the country's economy suffers from a lack of economic diversification in its activities (Eltaweel, 2011; Abdwahab and Abdesamed, 2012; Zarook et al., 2013 a, b). In 2008, the government took the proactive step of establishing national programmes for SMEs in order to foster a vibrant SME sector. However, despite the fact that 96 percent of businesses in Libya are SMEs, their contribution to the country's GDP is only 4%. (Atniesha, 2009; Abdesamed and Abdwahab, 2012; Essmui et al., 2013). This is supported by the UN's 2008 report. It stated that "the contribution of SMEs to Gross Domestic Product (GDP) in the majority of African countries is estimated to be less than 10%." (UN, 2008). The primary reasons for this disadvantage are: (1) the Libyan economy is heavily dependent on oil exports for state revenue; more than 96% of exports are from the oil sector (Eltaweel, 2012; UN, 2008); and (2) the financial difficulties encountered by these enterprises in successfully obtaining bank loans (Zarook et al., 2013a,b).

Direct taxes, such as income tax, are a significant source of revenue for modern governments. Libya's direct taxes suffer from a low collection rate. Since 2010, the actual tax collection has been 803 million LD, down from an estimated 6.3 billion LD in 2010. Libya's government stated that taxes must be collected more efficiently in order to boost national income and cover government expenses. Libyan legislation and regulations have not been updated in years and may be too rigid to assist businesses, particularly SMEs, in complying. However, the situation in Libya, in addition to the government's lack of control, could be another source of contention (Haendel, 2019). In Libya, dealing with "difficult to tax" sectors such as small businesses, including small farmers, professionals, and in some cases state-owned enterprises, is challenging (Libyan Organisation for Politics and Strategies, 2016). Libya's tax reality is the weakest in the region in terms of sector development and inability to accurately control fund leakage and profit financiers, in addition to the state of partial chaos experienced by that sector during the previous regime's decades, which resulted in the sector's expansion and spread. The phenomenon of tax evasion, particularly in cities along the Libyan coast, where informal professions, particularly those involving rents and duplication of residential and commercial property, are practised. It is worth noting that the absence of accounting

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books in the private sector contributes to the spread of tax evasion, as it is difficult to quantify the results of projects (Libyan Organisation for Politics and Strategies, 2016; Ruhoma, 2015).

According to Hassan, Nawawi, Salin, and Azlin (2016), individual taxpayers require a breadth of tax knowledge in order to fulfil their tax obligations responsibly, precisely, and on time. According to Kiow et al. (2017), both under- and over-reporting of income and expense items reduces tax liability. Previous research in this area has noted the importance of studying the determinants of tax compliance due to the existence of a tax gap. Underreporting income and/or overreporting deductions was unsurprising given that Libya's personal income tax is progressive, ranging from 0% to 25%. (Tradingeconomics, 2019). Tax evasion and avoidance are impediments to different countries' socioeconomic development, particularly developing countries. Across the globe, the SME sector makes a sizable contribution to job creation and inclusive growth. SME's account for up to 50% of GDP and an even greater share of total employment in developed countries (Ayyagari et al., 2003). This is not the case in Libya, where small and medium-sized enterprises are estimated to contribute 5% to GDP.

The attitude of the taxpayers on tax compliance is affected by several factors, leading to an effect on the behaviour of the taxpayers. The factors affecting compliance or non-compliance of taxation rules and regulations vary from country to country and individual to individual as well (Kirchler, 2007). These factors include, but are not limited to, perception of the taxpayers about the Revenue Authority and tax system (Atawodi, and Ojeka, 2012); attitudes of peers and subjective norms, understanding of taxpayers regarding taxation laws and system of taxation (Keen, M., 2014); reward system for motivation (Feld, Frey and Targler, 2006); penalties as punishment for non-compliance (Martínez-Vázquez, and Moreno Dodson, 2012); compliance cost (Laffer, A. B, 2014); efforts to enforce tax laws, audit, detection possibility, cultural differences and perceived behavioural control (Benk, Budak, and Cakmak, 2012); and morality and ethical values of the tax collectors and taxpayers, tax system equity and some demographic determinants, such as age, sex, income and level of education (Murphy, 2004).

The problem is to be resolved by this study is whether by identifying factors that impact on tax compliance intention, and the development of tax compliance behavior based on the factors that identified.

## 2.0 Literature Review

### *The Reasoned-Action Theory*

The Theory of Reasoned Action (TRA), developed by Fischbein and Aizen, can be used to explain innovation adoption and dissemination patterns. It is based on the theory of attitude, learning theories, expectancy-value theories, and consistency theories (Fischbein and Ajzen, 1975). TRA is a predictive model that describes the influence of an individual's pre-existing attitudes, subjective norms, and behavioural intentions on his or her behaviour. In simpler terms, it enables us to comprehend another person's behaviour through the lens of their attitudes and subjective norms. The model demonstrates that behaviour (in this case, innovation adoption) is rooted in intentions (to adopt), which are formed by attitudes toward the behaviour (both toward adoption and toward the innovation itself) and subjective norms (Behkami and Daim, 2016; Fishbein and Ajzen, 1975).

### *Compliance with Tax Laws*

Tax compliance, according to Devos (2009), is defined as the timely filing of all required tax returns and the accurate reporting of tax liability in accordance with the tax code, regulations, and court decisions in effect at the time the return is filed. According to a review of the literature, Allingham and Sandmo (1972) developed the first theoretical model of tax noncompliance.

This is referred to as an economic deterrence model (Andreoni, Erard, & Feinstein, 1998). The model presupposes rational behaviour on the part of taxpayers and suggests that tax rate, probability of detection, and penalty rate all play a role in determining tax compliance. Similarly, tax compliance can be defined as a taxpayer's degree of adherence to tax rules and regulations. According to James and Alley (2002), the meaning of the tax compliance concept can be interpreted in a variety of ways. According to them, tax compliance is defined as "...individuals and other taxable entities' willingness to act in accordance with both the spirit and letter of tax law and administration without resorting to enforcement activity." To address the problem of tax evasion, it is necessary to understand the factors that influence an individual's decision to comply with tax law provisions. Early researchers examined tax compliance from an economic perspective, identifying tax rate, penalty, and detection probability as factors influencing taxpayers' behaviour (Allingham & Sandmo, 1972).

Additionally, Allingham and Sandmo (1972) asserted that taxpayers' noncompliance behaviour is contingent upon their perceptions of the likelihood of being discovered during an audit and the severity of the legal penalties imposed. The structural factors that are beyond the taxpayers' control are typically determined exogenously. For example, tax administration, tax complexity, tax rate structures, and auditability are all factors to consider (Alm, Jackson & Michal, 1992).

## **The Factors That Influence Tax Compliance**

### **Tax Knowledge**

According to Hassan, Nawawi, Salin, and Azlin (2016), individual taxpayers require a breadth of tax knowledge in order to fulfil their tax obligations responsibly, precisely, and on time. They may expose themselves to certain risks of being penalised by the tax authority if they lack tax knowledge. Economic Deterrence Theory suggests enhancing tax compliance through increased education/knowledge. Prior research has produced inconsistent findings. According to Hassan et al. (2016), there are numerous instances of unintentional non-compliance in Malaysia as a result of taxpayers' limited tax knowledge and unfamiliarity with the new tax system. Ali, Fjeldstad, and Sjursen (2014) discover a significant correlation between tax knowledge and awareness and tax compliance attitude. Kasipillai and Abdul Jabbar (2003), as well as Kirchler et al. (2010), demonstrate that tax knowledge results in increased compliance rates.

Tax knowledge is critical for a taxpayer to be able to comply with tax laws and regulations in the Self-Assessment System; thus, the taxpayer's level of education is a significant factor (Eriksen and Fallan, 1996). Loo and Ho (2005) conducted a study in Malaysia on 250 salaried individuals enrolled in the Self-Assessment System to assess their tax knowledge in terms of chargeable income, exemptions, reliefs, rebates, and tax credits. The study concluded that, despite their tertiary education, respondents' tax knowledge in relation to personal taxation was deemed to be relatively

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limited, rendering them incompetent and unprepared to comply appropriately under the self-assessment regime. According to Eriksen and Fallan (1996), a successful strategy for preventing tax evasion is to increase tax knowledge among a larger segment of society in order to improve tax ethics and people's perceptions of the tax system's fairness.

Mohd (2010) concluded in a study conducted in Malaysia on tax knowledge and tax compliance determinants under the Self-Assessment System that tax knowledge is critical in the Self-Assessment System and has a significant positive effect on tax compliance. This means that in Malaysia's Self-Assessment System, expanding one's tax knowledge would almost certainly help increase tax compliance.

### **Tax Fairness**

Fairness is a judgement formed as a result of actual or imagined comparisons between oneself and others (Alexander, Balavac, Mukherjee, & Massey, 2018). Additionally, fairness is a perception (Tam, 2014). Fairness perceptions have significant ethical implications in a wide variety of social and economic contexts: when individuals perceive fairness, they feel satisfied and are generally supportive of a situation, whereas when individuals perceive injustice, they feel angry and are frequently retaliatory (Yip & Schweitzer, 2016).

One of the primary principles guiding the design of the tax system is equity or fairness (Smith, 1776). The fairness of the tax system can be perceived in two dimensions: horizontal equity (where people in similar income or wealth brackets should pay the same amount of taxes) and vertical equity (where people in similar income or wealth brackets should pay the same amount of taxes) (where the taxes paid increase with the amount of the tax base). The conceptual framework for considering fairness suggests classifying fairness into three distinct categories. Distributive justice (refers to the exchange of resources, both benefits and costs), procedural justice (refers to the distribution process), and retributive justice (refers to the perceived appropriateness of sanctions in the case of norm-breaking) (Kirchler et al., 2008).

Wilson and Sheffrin (2005) divided the sample of moral and immoral taxpayers using data from the US IRS's compliance measurement programme. Moral taxpayers were defined as those who did not tolerate tax evasion on small amounts, whereas immoral taxpayers were defined as those who did not tolerate tax evasion on small amounts, but had more favourable attitudes toward tax evasion on larger amounts. Immoral taxpayers were discovered to be less trustworthy than moral taxpayers. When taxpayers perceived the tax system as "very fair," they were 5% more likely to be honest than when they perceived it as "fair." Additionally, immoral individuals were more likely to cheat if their income was higher or they were self-employed. Mohd (2010) discovered that this factor had no effect on compliance behaviour in a study on tax knowledge and compliance determinants in Malaysia's Self-Assessment System. Marti et al. (2010) discovered this factor influencing non-compliance in their study of taxpayers' attitudes and tax compliance behaviour in Kenya.

### **Tax Morale**

As demonstrated in work by the "Cologne school of tax psychology" (Schmölders, 1960; Strümpel, 1969), the concept of "tax morale" as an explanatory factor in tax compliance behaviour dates all the way back to the 1960s. These researchers emphasised the importance of viewing economic phenomena through a lens broader than the traditional neoclassical lens and incorporating insights from social psychology. They saw tax morale as a critical explanation for tax compliance behaviour in particular. This early work anticipated the growing importance of "behavioural economics" as a tool for understanding individual and group behaviour, which is reflected in a variety of related approaches with their origins in tax psychology (Kirchler et al., 2010). Tax morale is most clearly associated with "intrinsic motivation" in the context of tax compliance (Pukeliene&Kaemekaityte, 2016).

Attitude refers to an individual's positive or negative assessment of objects (Nicoletta, 2011). Taxpayers who have a favourable attitude toward tax evasion are less complaint, whereas those who have a negative attitude toward tax evasion are more compliant. Taxpayers who have a favourable attitude toward the tax authorities or who trust the tax authorities will be more compliant as a result. As Kirchler et al. (2008) put it, "tax attitudes in general are also contingent on how money is perceived to be used and thus are linked to tax knowledge." As previously stated, research on the influence of non-economic factors on tax compliance is scarce, which makes data for cross-country comparisons difficult to come by. Despite this theoretical prediction, Mohd (2010) discovered in a Malaysian study that taxpayers with a positive attitude toward taxes (but a negative attitude toward tax evasion) file more complaints (positive correlation).

### **Taxation Authorities**

Tax compliance is a significant issue for many tax authorities, and persuading taxpayers to comply with tax requirements is not an easy task, even when 'tax laws are not always precise' (Oladipupo&Obazee, 2016). According to Murphy and Tyler (2008), if the tax authority treats taxpayers nicely and fairly, they will cooperate and be more receptive to the tax authority's decisions.

### **Rate of Taxation**

Remali et al. (2018) asserted that while 'lowering tax rates is not the only policy that has the potential to deter tax evasion,' the tax rate is also a significant factor in determining tax compliance behaviour, even if the precise impact is still unknown and debatable (Kirchler et al., 2010). Rates of taxation have a mixed effect on tax compliance. Allingham and Sandmo (1972) concluded that regardless of tax rates, taxpayers may choose to report all income or a portion of it. Tax rates did not appear to play a role in determining tax evasion.

According to Kirchler (2007), economic models of rational compliance decisions are unable to predict the effect of the marginal tax rate on compliance or to hypothesise that higher tax rates result in increased compliance; rather, the majority of empirical research indicates that higher tax rates result in decreased compliance. Pommerehne and WeckHannemann (1996) show that evasion increases as the marginal tax rate increases. Baldry (1987) describes an experimental investigation into the relationship between income, tax rates, and tax evasion, with the specific objective of testing the conventional expected utility maximisation analysis of evasion behaviour. He discovered that

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while tax rates are insignificant, income is positively related to tax rates. Tanzi (1980) used aggregate data to investigate the relationship between tax rates and tax evasion in the United States of America. Using an econometric model, he discovered that tax rates were positively correlated with tax evasion.

### **Tax Penalty**

A penalty is money paid to a government authority as restitution for committing a crime or other offence (Nzioki, 2014). Increased tax deterrence sanctions related to the likelihood of detection and the severity of penalties resulted in decreased noncompliance among taxpayers (Assfaw&Sebhat, 2019). Penalties had a significant impact on tax compliance; the greater the penalty and thus the possibility of an audit, the greater the disincentive for potential tax evasion (Gadi, 2015). The level of the penalty rate has a statistically significant effect on the level of tax compliance (Bidin, Sinnasamy, & Othman, 2018).

Because penalties are frequently assumed to be effective tools for discouraging undesirable behaviour, economic scholars have concentrated on penalty schemes and their effectiveness (Landsberger and Meilijson, 1982). Friedland, Maital, and Rutenberg (1978) conducted a groundbreaking experiment in which 15 participants were instructed to earn as much money as possible in a game rather than a real-world tax situation. Tax rates were either 25% or 50%, audit probabilities were either 6.67% with sanctions fifteen times the amount evaded, or 33.3 percent with sanctions three times the amount evaded. In each round of the experiment, participants were assigned a fictitious monthly income that approximated the average monthly income in the months preceding tax filing. The experiment's findings indicate that, first, a higher tax rate results in less declared income and, second, that a higher penalty appears to be slightly more effective at preventing evasion than a higher audit rate.

Park and Hyun (2003) discovered similar results in a South Korean experiment: compliance increased (positive correlation) with audit rate and fines. Mohd (2010) discovered in another study that the penalty is highly inversely related to compliance in Malaysia. Marti et al. (2010) concluded in a study conducted in Kenya that depending on how a penalty is applied, it can both facilitate and impede compliance.

### **Tax Compliance Intention**

The intention to act in a certain way is the main predictor of the actual behavior: there is no behavior without intention. It is based on the assumption that any behavior has outcomes and the individual has intentions to reach those outcomes by exercising the behavior. This intention is named behavioral intention (Fishbein and Ajzen, 1975). The behavioral intention is a sum of two components: the attitudes and subjective norms, which influence onto the intention not on an equal level. For some individuals their attitudes are more decisive, for others- the subjective norms. Some studies found the relation between the previous experience with the certain behavior and its results on one hand and the weight of attitudes on the other.

Attitude toward a behavior is either a positive or negative attitude toward a behavior, in our case adoption of an innovation. Attitude can be, however, also toward the innovation itself. Attitudes are quantifiable and measurable: there were several studies conducted in various fields of application,

where the individual's attitudes, desires and beliefs toward a behaviour and its results were measured (Ajzen and Fishbein, 1973).

A strong correlation of attitude toward a behavior to behavioral intention as well as a strong correlation of subjective norms to behavioral intention has been confirmed in many studies (Sheppard et al., 1988). However, the lack of correlation between the behavioral intention and the behavior itself was also shown in other research studies (Norberg et al., 2007). There are many other gaps and limitations within the TRA. The model ignores however the social distance between the individual and other people. A closer social distance between the respondent and others could have a different effect onto the behavioral intentions in comparison to the weak social distances. Moreover, the model assumes that the surrounding is homogeneous. In fact, the surrounding can be very complex and the individual can receive even conflicting opinion and attitudes from others.

### **Tax knowledge, intention to tax compliance, and tax compliance behavior**

Previous studies have acknowledged the effects of tax knowledge on tax compliance behavior. Most studies such as (Aondo & Sile, 2018; Bidin et al., 2018) found tax knowledge have a significant impact on tax compliance. Therefore, tax knowledge plays a vital role in influencing tax compliance (Hamid et al., 2019). Based on the above findings the following hypotheses were developed;

- Tax knowledge has significant effect on intention to tax compliance
- Tax knowledge has significant effect on tax compliance behavior

### **Tax fairness, intention to tax compliance, and tax compliance behavior**

Upstream research shows that tax fairness has a significant and significant impact on taxpayer compliance (Azmi, Zainuddin, Mustapha, & Nawi, 2016; Faizal & Palil, 2015; Jimenez & Iyer, 2016; Muslichah & Graha, 2018; Zeng, 2014). Based on the explanation, the following hypotheses can be formulated;

- Tax fairness has a significant effect on intention to tax compliance
- Tax fairness has a significant effect on tax compliance behavior

### **Tax morale, intention to tax compliance, and tax compliance behavior**

Tax morale is the attitudes of a group of population on a particular subject, in this case tax compliance (Richardson, 2016). Tax morale is the motivation of a tax payer to comply. Studies have shown that tax morale is significantly related to tax compliance (Hamid et al., 2019; Pukeliene & Kažemekaityte, 2016). Based on the explanation, the following hypotheses can be formulated;

- Tax morale has a significant effect on intention to tax compliance
- Tax morale has a significant effect on tax compliance behavior

### **Tax authority, intention to tax compliance, and tax compliance behavior**

Previous research emphasizes that tax authority has an significant and positive relationships with tax compliance behavior role in creating taxpayer compliance (GIRMA, 2017; Hassan et al., 2016; Pukeliene & Kažemekaityte, 2016). Based on the explanation, the following hypotheses can be formulated;

- Tax authority has a significant effect on intention to tax compliance



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- Tax authority has a significant effect on tax compliance behavior

## Tax rate, intention to tax compliance, and tax compliance behavior

The importance of tax rate in relation to taxpayers' compliance behavior is getting more attention from researchers. For instance, Remali et al. (2018) found that the tax rate demonstrated the significant relationship towards tax compliance among the SME. Previous researches claimed that the tax rate has a significant influence on tax compliance (Aondo&Sile, 2018; Remali et al., 2018). Based on the explanation, the following hypotheses can be formulated;

- Tax rate has a significant effect on intention to tax compliance
- Tax rate has a significant effect on tax compliance behavior

## Tax penalties, intention to tax compliance, and tax compliance behavior

Previous studies showed that the tax penalties do have a significant effect on tax compliance behavior (Gemmell&Ratto, 2017, 2018; Nuridayu&Rosiati, 2017; Oladipupo&Obazee,2016). Based on the explanation, the following hypotheses can be formulated;

- Tax penalties has a significant effect on intention to tax compliance
- Tax penalties has a significant effect on tax compliance behavior

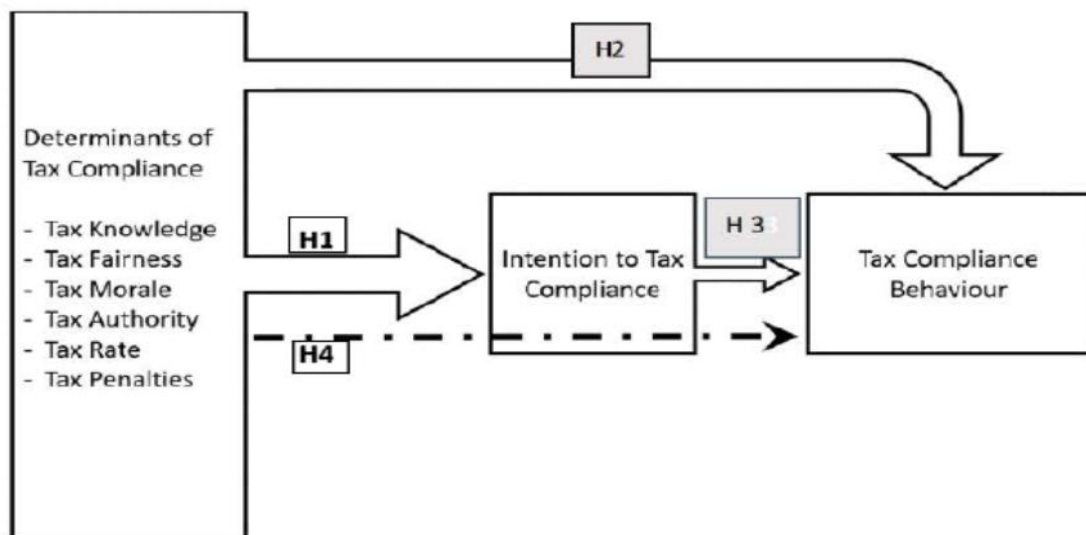


Figure 1 Conceptual Framework of the Study

## 3.0 Methods

This is a quantitative study, and the results will be revealed through the use of numerical data representation. The study included all SMEs in Libya that had active records in the commercial and trading ministry's system in 2018/2019. Additionally, the accountants, CEOs, and business owners were all eligible to respond to the proposed survey. The sample size for this study was determined

using the G\*power calculator. For this study, non-probability sampling was chosen and convenience sampling techniques were used. For this study, we collected data from 383 businesses with the intention of surveying only one employee per business. The data was gathered in western Libya, as it is the most populous and stable region at the moment.

A standard rating questionnaire was distributed to the sampling population's employees. A review of pertinent literature served as the basis for questions that provided insight into the study's objectives. A pilot test was conducted on the questionnaires to identify potential measurement issues, to clarify unclearly phrased subjects, and, most importantly, to monitor nonverbal actions. The primary data collection method was a survey questionnaire, which was used to verify the reliability of all the items following a pilot analysis. The questionnaires were then modified as necessary prior to conducting the research. To determine the face's and content's authenticity. To determine the internal consistency of each construct, a reliability study was conducted to ensure that each test product had a high degree of generalizability. The study instrument included four components: a permission letter, a section for biographical information, a questionnaire on the determinants of tax compliance, and a questionnaire on tax compliance. Additionally, participation was declared to be voluntary, and respondents were free to withdraw from the study at any time. Weiss, Darwiss, England, and Lofquist (1967) revised the Innovative Questionnaire in its entirety (alpha coefficient 0.92). The questionnaire contained fifty items, each of which was scored on a five-point Likert scale. The questionnaire used a 1–5 rating scale, with 1 indicating strong disagreement and 5 indicating strong agreement.

Each participant's questionnaire contained pertinent information and concerns. Closed questions using Likert-type scales were used to estimate the demographic homogeneity of the participants. A multiple-choice questionnaire was included in the survey packets to elicit demographic information. SPSS version 21.0 was used to analyse the raw data from the surveys. Means, frequencies, defaults, and ranges were used to analyse demographic data (primary and predictor). Inferential statistics such as the T-Test and ANOVA have been used to determine the effect of biographical variables on leadership styles and innovation. Correlation analysis was used to determine the relationship between tax compliance determinants and tax compliance behaviour. The MLR of dependent and independent variables was calculated using this software. Using this study, data from this programme were evaluated at a p-value of .05.

#### **4.0 Results and Discussion**

Staff responded to 424 of the 500 questionnaires distributed, resulting in an 84 percent response rate. There were 33 instances of missing data that were omitted, as Babbie (2005) recommended. The majority of respondents (37.4 percent) were between the ages of 41 and 50, followed by those between the ages of 51 and 60 (30.5 percent) and those between the ages of 31 and 40 (30.5 percent) (29.2). Around 1.5 percent of the workforce was under the age of 31, while 1.3 percent was over the age of 60. Male participants made up a greater proportion of overall samples (90.7 percent) than female participants (9.3 percent). 61.7 percent (241) of respondents had intermediate education, while approximately 5.8 percent (23) attended secondary school. 31.9 percent (125) of respondents were undergraduates, 0.6 percent (2) held postgraduate degrees, and 20.3 percent (79) had more than

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30 years of work experience.

**Table 1 Pearson Correlation between study variables**

Variables	Tax knowledge	Tax fairness	Tax morale	Tax authority	Tax rate	Tax penalties	Intention To tax compliance	Tax compliance behavior
Tax knowledge	1	.028	.041	.000	.092	.031	.076	.196**
Tax fairness		1	.172**	.112	.063	.016	.137*	.175**
Tax morale			1	.018	.128*	.098	.013	.197**
Tax authority				1	.022	.032	.066	.161*
Tax rate					1	.000	-.041	-.186***
Tax penalties						1	.113	.157*
Intention to tax compliance							1	.223**
Tax compliance behavior								1

Tax compliance behaviour was found to have a positive correlation with the variables of tax knowledge ( $r = .196$ ,  $p = 0.01$ ); tax fairness ( $r = .175$ ,  $p = 0.05$ ); tax morale ( $r = .197$ ,  $p = 0.01$ ); tax penalties ( $r = .157$ ,  $p = 0.01$ ); intention to tax compliance ( $r = .223$ ,  $p = 0.01$ ); tax authority ( $r = .161$ ,  $p = 0.05$ ) and negative with tax rate ( $r = -.186$ ,  $p = 0.01$ ).

To explain the importance of the regression coefficient, Beta analysis was used. Regression analysis is used to compare the relative influence of independent variables that are calculated by separate units of measurement, whereas the coefficients of regression are translated to a coefficient of Beta. A higher Beta coefficient translates to a greater influence of the variable on the dependent variable. These Beta coefficients will then be compared to each other.

The coefficient of regression indicates which of the variables predict the dependent variable in the model and to what degree the relationship is. For each vector converted to the same size, uniform coefficients apply to values in order to equate them and calculate the largest beta value

(overlooking the negative signs). The highest Beta coefficient, however, was 0.263 for the tax knowledge, suggesting that this variable added greatly to the clarification of the dependent variable. In fact, the tax knowledge was important at less than .001 (sig. = .000), suggesting its distinct contribution to the prediction of the dependent variable (tax compliance behaviour). The Beta value for overall intention to tax compliance was 0.235 (sig. = .000), suggesting that there was a great input from intention to compliance. According to stronger unique contributions, other factors is organised as follows: tax authority.217, Beta (sig. = .000); tax rate -.256, Beta (sig. = .001) and tax fairness .147, Beta (sig. = .009). In the other hand, the tax morale was .103, Beta (sig. = .099) and the tax penalties was .077, Beta (sig. = .140).

A summary of the findings for regression is provided in Table below. The modified decision coefficient (R<sup>2</sup>) showed that differences in the independent variables were explained by 0.228 percent of the variance in the dependent variable. This explains that the difference in the tax compliance behaviour was statistically clarified or compensated for by the equation of regression. R<sup>2</sup>, with F = 9.683 and p < 0.000, was statistically important. The general expression in the regression equation form is then stated as follows:

$$\text{Tax compliance behaviour} = 3.446 + 0.263 \text{ tax knowledge} + 0.147 \text{ tax fairness} + 0.103 \text{ tax morale} + 0.217 \text{ tax authority} - 0.256 \text{ tax rate} + 0.235 \text{ intention to tax compliance} + 0.077 \text{ tax penalties.}$$

As shown by the positive R-value of .504 in Table below, the predictor variables were shown to be positively correlated to the output of the workers (the dependent variable). A measured R-square value of .254 shows that the factors were responsible for more than 25.4 percent of the variation in the output with a typical 1.042 estimation error. For the following factors, the low proportion of variation described may be related. Second, since this current research focuses on indirect factors, opposed to direct factors, the values of R2 are typically much smaller.

**Table 2 Summary of Regression Analysis**

Model	R	R Square	Adjusted R. Square	Error of Estimate
1	.504	.254	.228	1.04261

**ANOVA<sup>b</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	84.203	08	10.525	9.683	.000 <sup>a</sup>
	Residual	246.759	227	1.087		
	Total	330.962	235			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.446	.536		6.434	.000
	Tax knowledge	.263	.065	.235	4.069	.000

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Tax fairness	.147	.056	.157	2.640	.009
Tax morale	.103	.062	.099	1.658	.099
Tax authority	.217	.061	.205	3.536	.000
Tax rate	-.256	.075	.201	3.422	.001
Tax penalties	.077	.052	.088	1.482	.140
Intention to tax compliance	.235	.076	.220	3.751	.000

The ANOVA indicates that at a 95 percent confidence level with an F- value of 9,683 (p<0.01), the regression model of the effect of predictor variables on the output is significant. Three factors were shown to be statistically important for the tax compliance behaviour (at p<0.001). These variables are tax knowledge, tax authority and intention to tax compliance; at p=.001, one variable was found to be important – tax rate at p<0.05.

**Table 3 Mediation Analysis**

	TK	TF	TM	TA	TR	TP
<b>Direct Effects</b>						
INT	.188	-.053	.207	.072	.383	.218
CB	-.153	.083	.054	.026	.110	.126
<b>Indirect Effects</b>						
INT	.000	.000	.000	.000	.000	.000
CB	.081	-.023	.254	.031	.164	.233
Sig Value	.004	.184	.011	.125	.004	.013
<b>Total Effects</b>						
INT	.188	-.053	.207	.072	.383	.218
CB	-.073	.060	.143	.057	.274	.031

The study examined the most frequently encountered negative acts in tax compliance. According to the study's findings, respondents from small and medium-sized businesses encountered a variety of negative tax compliance incidents. The regression analysis found a positive and statistically significant relationship between tax knowledge and tax compliance behaviour (t=4.830, p=0.000). According to the R-squared determination coefficient, 9.2 percent of variation in tax compliance behaviour tends to account for the effect of tax knowledge. Individual taxpayers, according to

Hassan, Nawawi, Salin, and Azlin (2016), require a variety of tax knowledge in order to fulfil their tax obligations responsibly, correctly, and on time. Without tax awareness, the taxpayer may take an interest in actions that are punishable. According to Ali, Fjeldstad, and Sjursen (2014), tax education and understanding are strongly associated with an attitude toward tax compliance. Kasipillai and Abdul Jabbar (2003), as well as Kirchler et al. (2010), report that tax awareness results in increased compliance rates.

Tax literacy is critical in the Self-Assessment System for a taxpayer to be able to comply with tax laws and regulations, and thus the taxpayer's educational attainment is critical (Eriksen and Fallan, 1996). Loo and Ho (2005) conducted a study in Malaysia on 250 workers in the Self-Assessment System, calculating tax awareness in terms of taxable income, exemptions, reliefs, discounts, and incentives. While the respondents held tertiary degrees, the study concluded that their tax knowledge was deemed to be relatively limited when it came to personal taxes, rendering them incapable and unable to practise adequate self-assessment enforcement.

While it was expected that intention to comply would act as a mediator between tax knowledge and tax compliance behaviour, the data in this study revealed that intention to comply only partially mediated their relationship. The study discovered a positive and significant correlation between tax fairness and tax compliance behaviour ( $t= 3.068$ ,  $p=0.002$ ). Tax fairness consequences account for 3.7 percent of the variation in tax compliance behaviour. Taxpayers who perceived the tax system as "very fair" were 5% more likely to be fair than those who perceived it as "fair." (2005) (Wilson & Sheffrin). Marti et al. (2010) discovered that this aspect affects non-compliance in their research in Kenya on taxpayers' mindsets and tax compliance behaviour. The mediation analysis conducted in this study discovered that Intention to comply only partially mediated the relationship between tax fairness and tax compliance behaviour.

According to the findings of this study, low tax morale contributes to poor tax compliance behaviour. The interaction's frequency is calculated using the p-value of 0.007 and the r value of 0.177. The coefficient of determination calculated for  $R^2$  is 0.032. This suggests that tax morale accounts for 3.2 percent of the variation in tax compliance behaviour. Additionally, this study established that intention to tax compliance does not act as a mediator between tax morale and tax compliance behaviour. Mohd (2010) discovered that taxpayers with a positive attitude toward taxes are more compliant (a negative attitude toward tax evasion) in a Malaysian study (positive correlation). As a result, taxpayers who have a favourable attitude toward the tax authorities or regard them as trustworthy would be more compliant.

Additionally, this study discovered that for every unit increase in tax authority, a -0.196 increment in tax compliance behaviour is predicted. The t-values ( $t = -3.043$ ,  $p0.05$ ) indicate that tax authorities have an effect on tax compliance behaviour. According to Murphy and Tyler (2008), if the tax authority treats taxpayers fairly and equally, they will cooperate and are more likely to comply with the tax authority's decisions. Intention to comply with tax laws mediates only a portion of the relationship between the tax authority and tax compliance behaviour.

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According to the regression analysis, each tax rate unit reduction results in a 0.163 increase in tax compliance behaviour. The t-values analysis ( $t = -2.512$ ,  $p < 0.05$ ) reveals that increasing the tax rate results in an increase in tax compliance behaviour.

Allingham and Sandmo defined tax rate, penalty, and likelihood of identification as variables influencing taxpayer behaviour in a survey (Allingham & Sandmo, 1972). According to Kirchler, higher tax rates contribute to decreased compliance (2007). Tax compliance intention plays a role in mediating the relationship between tax rate and tax compliance behaviour, but only partially.

The findings of this study indicate that each unit change in the independent variable, tax penalties, results in an expected change of 0.186 in the dependent variable, tax compliance behaviour. The symbol is in the affirmative. Tax penalties result in a change in tax compliance behaviour, as revealed by an analysis of the t-values ( $t = 2.881$ ,  $p < 0.05$ ). The tax rate, the penalty, and the likelihood of identification were identified as factors influencing taxpayer behaviour (Allingham & Sandmo, 1972). Allingham and Sandmo (1972) believed that taxpayers' noncompliance behaviour is determined by their confidence in the risk of being discovered during an audit and the severity of the resulting legal penalties. The amount of the penalty rate has a statistically significant effect on tax enforcement standards (Bidin, Sinnasamy, & Othman, 2018). The mediation analysis established that tax compliance intention mediates the relationship between tax penalties and tax compliance behaviour in part.

According to the findings above, the determinants of tax compliance in the context of Libyan small and medium-sized enterprises should be redesigned to create an environment that is more conducive to enhancing tax compliance. In summary, the findings of this study demonstrated the effects of tax compliance determinants on tax compliance behaviour in Libyan small and medium-sized enterprises. This study suggests that policymakers rethink such practises in order to reduce the likelihood of poor tax compliance behaviour.

As a result, one can conclude that respondents from Libya's small and medium-sized enterprises exhibited poor tax compliance behaviour. Notably, these businesses should consider the correlation between tax compliance intentions and tax compliance behaviour. This study discovered a significant correlation between tax compliance determinants and intention to comply, as well as a significant correlation between tax compliance intention and behaviour. Thus, this study demonstrates that tax compliance determinants affect respondents' intention to comply with the law, which may have an effect on their tax compliance behaviour.

### **5.0 IMPLICATIONS TO AUTHORITIES AND POLICY MAKERS**

Present literature emphasizes tax compliance as a relevant subject for research. The results of the present research contribute to the literature by defining the determining factors of tax compliance and tax compliance behaviour. As a mediator in the relationship between determinants of tax compliance and tax compliance behaviour, this analysis used the intention of tax compliance. Researchers have also been informed of the missing mediating links between determinants of tax compliance and tax compliance behaviour. In several studies, for instance, a strong correlation of attitude towards action

with behavioural intention and a strong correlation of intention with behavioural action has been verified (Sheppard et al., 1988). While the understanding of these connections has been advanced through empirical findings, less is known about the mediating role of tax compliance intent in the relationship between tax compliance determinants and tax compliance behaviour. Given the relevance of this question, there is a need for further evidence to explore the impact of tax compliance intent as a mediator in the relationship between tax compliance determinants and tax compliance behaviour.

This current research is one of the pioneering studies to investigate the conduct of tax compliance in the background of Libya. Due to the lack of economic diversification of Libya, SMEs are very important to the Libyan economy (Eltaweel, 2011; Abdwahaband Abdesamed, 2012; Zarook et al., 2013 a, b). The study will create proposals to assist policymakers in Libya's government to provide taxpayers, especially small and medium sized companies, with a better taxation system. The outcomes of this research have since rendered important impacts to tax authorities and policy makers. They have first-hand experience of the impact of unsuitable behavioural factors on tax compliance. This study suggests the development of a better taxation mechanism and accepts that, owing to lack of awareness, taxpayers are unable to comply adequately with taxes. As Eriksen and Fallan (1996) concluded, an effective way of avoiding tax evasion is to provide broader portions of society with more tax awareness in order to enhance tax ethics and people's perception of the tax system's fairness.

Individuals are happy and prefer to support a situation when people consider fairness, while when people perceive unfairness, they feel frustration and tend to be retaliatory (Yip & Schweitzer, 2016). The researcher recommends that until taxpayers suffer poor morale, there is a need to eradicate tax unfairness. Such actions will prove detrimental to a taxpayer's confidence unless and until tax unfairness is acknowledged and handled. Therefore, in order to boost tax confidence, tax officials can learn to understand fairness and equality.

The identification and understanding of the impact of tax rate and tax penalties may also improve the ability of tax officials or policy makers to determine the needs of taxpayers and to determine an acceptable tax rate and penalty. Remali et al. (2018) concluded that 'reducing tax rates is not the only strategy that has the power to reduce tax avoidance,' but the tax rate is still an important element in assessing the conduct of tax enforcement. In a research in Kenya, Marti et al. (2010) reported that penalty would promote enforcement and non-compliance, based on how it is implemented. Increases in tax avoidance penalties related to the risk of identification and the seriousness of penalties resulting in lower tax payer non-compliance (Assfaw&Sebhat, 2019). These results advocate for qualitative surveys among taxpayers and tax authorities which will add to the current body of information.

## **6.0 STUDY LIMITATIONS**

This study has its own limits, not unlike other reports, which are described as follows; First, at a specific point in time, data for this analysis was obtained. It is necessary to emphasize that questionnaire surveys meant to provide close-ended questions do not allow qualitative discussion.



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Though qualitative analysis is exploratory, this study is only limited to quantitative approach. Secondly, respondents with the aim of non-compliance with tax and non-compliant actions are always hesitant to disclose their experiences and some of the respondents have different ideas on the same subject. Therefore, when answering their survey, some of the participants in this research may not have been fully transparent.

### **7.0 RECOMMENDATIONS FOR FUTURE WORK**

The usage of a qualitative approach may be considered in a potential analysis devoted to tax enforcement. In order to have a wide view of the effect of tax enforcement determinants, studies could use a wider representative sample. Respondents may have something to add outside of the survey questions. Any of them may like to include their stories regarding tax rates and tax authorities' errant actions to be heard so that they can be addressed. A qualitative research or mixed approach can also serve to broaden the assessments of certain participants' perceptions and feelings.

The actions of tax authorities can even be studied in potential research. Officials can have a tremendous ability to mistreat themselves by misusing their authority because of their influential status and convenient access to resources and power. Future research could also explore how politicians might obtain additional details in order to detect the interaction between tax authorities and taxpayers and to recognise forms of in-place mistreatment in order to maintain a high degree of taxpayer morale. More specifically, businesses in developed countries could use the survey from this study to assess and compare the overall tax enforcement activity in their community with this study in the context of Libyan economy. Another significant avenue for future studies is to examine the intention to tax compliance that needs to be identified in order to promote a conducive physical atmosphere

and avoid non-compliance actions, to foster a positive attitude towards taxes, and to identify the steps needed to cope with tax evasion intentions.

### **8.0 CONCLUSION**

This study showed how the behaviour of tax compliance can be influenced by intentional behaviour and poor awareness, unfair taxes, low morale, strict authorities, tax rate and tax penalties. According to this study, in order to preserve the good intent of citizens and the dignity of the taxation system, sufficient consideration needs to be paid to developing a positive climate. The study's results are relevant and hence help the literature and add to it. The findings can also add to the knowledge given by policy-makers and tax authorities on how they might handle tax behaviour in the hope of improving the Libyan economy, especially for small and medium-sized enterprises in the background of Libya. In order to build a system design and encourage behaviour that prevents tax evasion, ongoing study dedicated to tax enforcement is needed. As these advantages are of high concern to the economy, government should work on providing the public with greater understanding of the taxation mechanism. In addition, the authorities can make attempts to raise taxpayers' confidence in order to stimulate their enthusiasm and eradicate negative attitude in small and large businesses, if they are willing to sustain this important source of financial revenues.

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