

DOI: https://doi.org/10.38035/ijam.v4i1 https://creativecommons.org/licenses/by/4.0/

# Analysis of the Influence of Tax Knowledge, e-Filing Tax System, Tax Authority Services, and Tax Law Enforcement on Tax Awareness through Taxpayer Compliance

# Sri Rusiyati<sup>1</sup>, Tri Widyastuti<sup>2</sup>, Apollo Daito<sup>3</sup>

<sup>1</sup>Universitas Pancasila, Jakarta, Indonesia, <u>sri.siq@nusamandiri.ac.id</u> <sup>2</sup>Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia, <u>triewidhiastuti@yahoo.com</u> <sup>3</sup>Universitas Mercubuana, Jakarta, Indonesia, <u>apollo@mercubuana.ac.id</u>

Corresponding Author: sri.siq@nusamandiri.ac.id1

Abstract: The purpose of this study is to determine the extent of the influence of tax knowledge, the e-filing tax system, tax authority services, and tax law enforcement on tax awareness and taxpayer compliance, both directly and indirectly. The population in this study was 252,953 SMEs in East Jakarta. Based on this number, the sample for this study consists of 124 taxpayers from small and medium enterprises (SMEs) in East Jakarta. The population in this study is taxpayers from small and medium enterprises (SMEs) in East Jakarta. Sampling was conducted using purposive sampling. The purposive sampling used in this study is judgment sampling, which is the selection of samples based on the fact that the samples or respondents are considered the primary source of information capable of providing the necessary information. The researcher will distribute questionnaires to the accounting and taxation divisions working in the companies. For reasons of data adequacy in the Structural Equation Model (SEM) analysis, at least 200 samples are required. The unit of analysis in this study is the individual or employee who handles SME taxes. This study uses primary data sources from individual respondents. The results of this study are as follows: 1) Tax Knowledge has a positive and significant effect on Brand Awareness among SMEs in East Jakarta; 2) E-Filing Tax System has a positive and significant effect on Brand Awareness among SMEs in East Jakarta; 3) Tax Authority Services have a positive and significant effect on Brand Awareness among SMEs in East Jakarta; 4) Tax Law Enforcement has a positive and significant effect on Brand Awareness among SMEs in East Jakarta; 5) Tax Knowledge has a positive and significant effect on Tax Compliance among SMEs in East Jakarta; 6) E-Filing Tax System has a positive and significant effect on Tax Compliance among SMEs in East Jakarta; 7) Tax Authority Services have a positive and significant effect on Tax Compliance among SMEs in East Jakarta; 8) Tax Law Enforcement has a positive and significant effect on Tax Compliance among SMEs in East Jakarta; 9) Brand Awareness has a positive and significant effect on Tax Compliance among SMEs in East Jakarta; 10) Tax knowledge has a positive and significant effect on Taxpayer Compliance mediated by Tax Awareness among SMEs in East Jakarta; 11) The E-Filing Tax System does not have a positive and significant effect on Taxpayer Compliance mediated by Tax Awareness among SMEs in East Jakarta; 12) Tax Authority Service positively and significantly influences Tax Compliance mediated by

Tax Awareness among SMEs in East Jakarta; and 13) Tax Law Enforcement does not positively and significantly influence Tax Compliance mediated by Tax Awareness among SMEs in East Jakarta.

**Keywords:** Tax Awareness, Tax Compliance, Tax Knowledge, E-Filing Tax System, Tax Authority Services, Tax Law Enforcement

#### **INTRODUCTION**

Developing countries face considerable challenges in increasing tax revenues to finance development needs (Besley & Persson, 2014). Developing countries are now focusing on taxation as a source of revenue for development, (Marandu et al., 2015). Basically, every government relies on revenue from sources such as taxes and non-taxes to finance development and provide services to its citizens (Alm & Torgler, 2011). Similarly, the Indonesian government has launched a development program funded by one of the state's sources of revenue, namely taxes. Therefore, the optimization of tax revenue, which is the largest source of revenue, must continue to be pursued optimally from year to year, one of which is used to finance development programs in Indonesia.

According to the General Provisions and Procedures of Taxation Law (KUP) No. 16 of 2007, taxes are mandatory contributions to the state by individuals or entities that are compulsory in nature, without direct compensation, and used for state purposes for the prosperity of the people.

Tax avoidance causes economic costs, slows economic growth, and reduces the government's ability to provide sufficient goods and services to the public, (Randlane, 2016). Tax avoidance is one of the main problems faced by developing countries (Alshira'h et al., 2020). Among other things, the challenges faced by tax collectors include a culture of tax evasion and avoidance, social disapproval among taxpayers of tax violations, and delays in tax reporting (Frederick Mpambara, Benjamin Byiringiro, 2013). Therefore, policymakers need to identify the causes of taxpayer compliance to implement reforms and minimize the negative effects of tax avoidance worldwide (Alkhatib et al., 2019). This involves attention to the difficulties of taxpayer compliance globally by public policymakers over the past few decades, with attention given to the difficulties of taxpayer compliance globally by public policymakers and researchers over the past few decades (Sebhat & Assfaw, 2019).

Most governments strive to combat and reduce tax avoidance. A dilemma arises regarding whether policies should encourage ethical behavior by informal institutions or strengthen the auditing standards of formal institutions. Evidence from around the world on the effects of these two factors on overall tax avoidance suggests that while strong audit standards can reduce tax avoidance, ethical behavior by companies has a statistically stronger effect in achieving the goal (Benkraiem et al., 2021).

The issue of taxpayer compliance has long been discussed by economists, who have proposed models to clarify the reasons behind tax non-compliance (Ya'u et al., 2020). Taxpayer compliance depends on several factors, including economic, political, social, and psychological factors (Ya'u et al., 2020). Some demographic variables, such as income and education, appear to have a greater impact on tax evasion. Income has been found to be a highly significant predictor of tax evasion (Khalil & Sidani, 2020). Other relevant studies contribute to the literature by proposing theoretical models that distinguish the determinants of taxpayer compliance behavior, including social factors (Randlane, 2012), economic factors such as fines, inspection rates, and tax rates, among others ((Atawodi & Ojeka, 2012), (Solichah et al., 2019), (Hamilah & Aliza, 2021), (Kurniawan & Daito, 2021), (Rahmayanti et al., 2020), (Waluyo, 2016)). In addition to the economic approach, most studies have overlooked realistic

and humanistic aspects. All behavioral treatments generally share a key characteristic, which states that the values, attitudes, perceptions, and morals of economic actors are the key determinants of significance, and that avoidance is not merely a function of tax rates, opportunities, and other factors, but also depends on individual tendencies to avoid or comply. According to researchers, this can be explained by non-economic factors ((Le et al., 2021), (Vincent, 2021), (Fagbemi, T. O. & Abogun, 2013) (Putra et al., 2019), (Putra et al., 2019), (Kamleitner et al., 2012),(Nkwe, 2013)). In the face of numerous studies expanding the Theory of Planned Behavior (TPB), this research is one of the pioneers in expanding the theory by integrating knowledge of taxation, e-filing tax systems, tax authority services, and their influence on awareness to engage in tax compliance among SMEs.

Social factors are significant determinants of tax compliance, as demonstrated by (Randlane, 2012), and must be considered when identifying determinants of tax non-compliance (Chebusit et al., 2014), especially since only a few authors have addressed this issue from this perspective.

In addition, only a few studies have examined this issue from a socio-psychological perspective, with no research conducted to analyze the Theory of Planned Behavior (TPB) in relation to tax compliance among SMEs, particularly in DKI Jakarta.

According to a report by the Ministry of Finance (Kemenkeu), Indonesia's tax ratio from 2017 to 2022 is still around 9% of GDP, as shown in Figure 1 below:

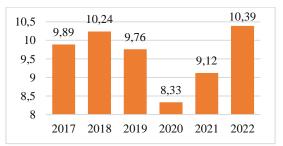


Figure 1. Tax Ratio to GDP in Indonesia from 2017 to 2022 Source: Ministry of Finance Report, 2023

Figure 1 above shows that in 2017, Indonesia's tax ratio was at 9.89% of GDP, then increased to 10.24% in 2018, then in 2019 it dropped to 9.76% and in 2020 it fell sharply to 8.33%, due to the impact of the Covid-19 pandemic. In 2021, there was an increase compared to 2020, reaching 9.12%, though still below the pre-pandemic level. In 2022, the ratio increased to 10.39%, surpassing the pre-pandemic level.

The business phenomenon and empirical facts on the ground regarding taxation in Indonesia show that if taxes are not managed properly, it will result in a decrease in tax revenue, which is crucial for a country, as taxes are the primary source of state revenue. Additionally, current phenomena indicate that tax compliance rates remain relatively low in Indonesia. In 2016, out of 131 million workers, only 38 million were registered taxpayers (29%), and of that number, approximately 18 million were required to submit tax returns (SPT), (Darussalam et al., 2019).

According to the Performance Report of the Directorate General of Taxes, there has been an increase in taxpayer compliance from year to year, although it has fluctuated and remains low. The development of compliance from 2017 to 2022 in terms of the number of Annual Tax Returns (SPT) can be seen in the following figure:



**Figure 2. Realization of Tax Return Submission Ratio** Source: Performance Report of the Directorate General of Taxes

The compliance rate for the submission of Annual Tax Notification Letters (SPT) in 2017 reached 72.58% and decreased to 71.1% in 2018. rebounded in 2019 to 73.06%, increased to 77.03% in 2020, and saw a significant rise to 84.07% in 2021. However, in 2022, the realization rate dropped to 83.2%. This figure actually decreased from the 2021 realization rate of 84.07%. However, this achievement has exceeded the set target of 80%. The 2022 tax return target was 19 million taxpayers, consisting of 1.65 million corporate taxpayers and 17.35 million individual taxpayers. If the compliance rate is 83.2%, then only 15.8 million tax returns were reported for 2022.

The above phenomenon illustrates that the achievements and performance of the tax authorities in the form of tax revenue, despite experiencing fluctuations in increases and decreases every year, present challenges and consequences for individual and corporate taxpayers. Understanding of taxation and the implementation of the tax system are expected and required to change significantly, driven by the need to recognize and understand various factors related to the applicable tax system. This, in turn, influences taxpayers' actions in complying with the accuracy of tax reporting and the correctness of tax payments under the self-assessment system, which is a tax collection system that grants taxpayers the authority to determine the amount of tax owed, (Mardiasmo, 2018), So, taxpayers have to calculate and decide how much tax they owe each year based on the tax rules. This also shows that tax revenue is super important for Indonesia, so we need to keep working on getting the best tax revenue possible each year. One way to do this is by making taxpayers more compliant so that development programs can be funded properly. The pressure on taxpayers to change will become even stronger in the future because the tax authorities are also required to achieve the tax ratio target of the Gross Domestic Product (GDP).

Indonesia's contribution to income from Micro, Small and Medium Enterprises (MSMEs) occupies a major position in the transformational activities of most of the world's developed and developing economies. This is not unrelated to the fact that MSME owners are undoubtedly important catalysts in tax revenue collection for government growth and economic development. Small and Medium Enterprises (SMEs) are the lifeblood of income generation in most economies worldwide, particularly in developed and developing countries.

Data from the Ministry of Cooperatives and SMEs indicates that the number of MSMEs in Indonesia currently stands at 64.19 million, contributing significantly to the Gross Domestic Product (GDP) at 61.97% of the total national GDP or equivalent to Rp. 8,573.89 trillion and absorb a large workforce, accounting for 97% of the labor force in the business sector during the 2020 period. SMEs are spread across rural and urban areas and are labor-intensive, with the potential to provide significant job growth opportunities and increase income.

In developed countries, tax issues extend to SME owners due to tax decisions made, such as in Ghana, where the informal sector and SMEs contribute over 80% of total employment (Ghana Living Standard Survey, 2010). This means that any policy aimed at maximizing tax collection must target SME owners. Additionally, developing an appropriate tax system that effectively integrates SME owners into the tax net as much as possible remains challenging. Tax knowledge and understanding, the quality of tax services, and tax awareness still need to be improved to ensure tax compliance. Tax awareness, tax knowledge and understanding, and the quality of tax services collectively influence individual tax compliance.

A number of factors have been debated as contributing to the difficulty of taxing SMEs, including but not limited to: low standards of record keeping, the predominance of cash transactions, lack of voluntary compliance and lack of permanent place of operation, (Asante & Baba, 2011). Thus, the question of factors that determine taxpayers' compliance with tax laws has attracted the attention of governments and academics in both developed and developing countries.

Other important factors that can influence taxpayer compliance are tax knowledge, efiling tax systems, tax authority services, and so on. Specific tax knowledge is necessary to enable small business owners to comply, as well as to increase their willingness to pay, (Kamleitner et al., 2012). Tax knowledge and tax complexity are seen as factors contributing to taxpayer noncompliance behavior, (Saad, 2014). One fundamental way to raise public awareness is to ensure that taxpayers have knowledge about taxation. Empirical evidence shows three main aspects that distinguish small business owners' perceptions of taxation: small business owners tend to see more opportunities for noncompliance, are more likely to lack knowledge about taxation, and are more likely to face decisions that make taxation a loss according to (Kamleitner et al., 2012). Lack of tax knowledge, simplicity of the tax system, awareness of penalties, audits, and perceptions of tax rates are key factors influencing taxpayers voluntary compliance with the tax system, (Orkaido Deyganto, 2018). Tax knowledge, SME motivation, and technology are important factors that influence and have a positive impact on indirect tax compliance among SMEs, (Sanusi et al., 2021).

In an effort to continuously improve taxpayer compliance, the modernization of the tax system continues to be developed. In 2005, the government also accommodated a number of private companies that provide services and technology for online tax reporting. These official partners of the DGT are called Application Service Providers (ASP). Initially, the DJP separated the e-Filing channels for individual taxpayers and corporate taxpayers. For individual taxpayers, the channel provided was a government-owned application, while corporate taxpayers could use ASPs for their tax reporting.

The use of the e-filing system is not only for convenience but also supports the economy and business. One indicator is the use of technology to streamline bureaucracy and improve time and cost efficiency. The Ministry of Finance then issued Minister of Finance Regulation No. 9 of 2018 (PMK-9/PMK.03.2018) on the obligation to use e-Filing. This regulation, effective as of April 1, 2018, mandates the use of e-Filing for reporting PPh 21/26 and VAT.

The number of micro and small industries in Jakarta (units) from 2015 to 2020 can be seen in Figure 3 below:

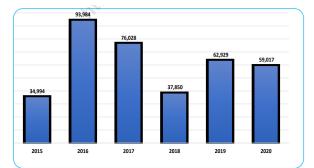


Figure 3. Number of Micro and Small Industries in Jakarta (Units), 2015-2020 Source: Jakarta Central Statistics Agency (<u>https://jakarta.bps.go.id</u>, 2020)

Figure 3 above shows that the number of micro and small industrial enterprises (IMK) in DKI Jakarta is 59,017 enterprises. This number has decreased by 6.22 percent compared to the number of IMK in 2019, which was 62,929 enterprises. The development of the number of MSMEs during the period from 2015 to 2020 shows that the highest number of MSMEs was recorded in 2016 at 94,549 businesses/companies and the lowest in 2015 at 34,994 businesses/companies.

Number of Micro and Small Industries by Category/Scale of Business and District/City in Jakarta in 2020:

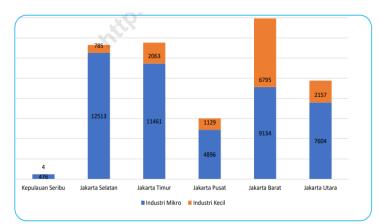


Figure 4. Number of IMK by Business Category/Scale and District/City in DKI Jakarta Source: Jakarta Central Statistics Agency, (<u>https://jakarta.bps.go.id</u>, 2020)

The figure above shows that the majority of micro industries in DKI Jakarta are spread across South Jakarta, with 12,513 businesses/companies or 27.15%, followed by East Jakarta with 11,461 businesses/companies or 24.87%, and Central Jakarta with 4,896 businesses/companies or 10.62%. Meanwhile, the region with the smallest number of micro industries is the Thousand Islands, with 4 businesses/companies or 0.03%. Small industries in Jakarta are predominantly concentrated in West Jakarta with 6,795 businesses/companies, accounting for over 50%, followed by North Jakarta and East Jakarta with 2,157 businesses/companies (16.68%) and 2,063 businesses/companies (15.95%), respectively. Meanwhile, the number of micro and small businesses in Jakarta according to Annual Income (in millions of Rupiah) in 2020 is shown in the following figure:

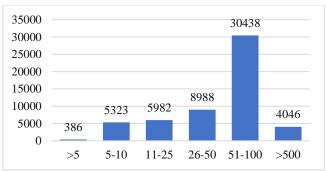


Figure 5. Number of Micro and Small Businesses in DKI Jakarta by Annual Income Source: Jakarta Central Statistics Agency (<u>https://jakarta.bps.go.id</u>, 2022)

The annual income of businesses in the figure above shows that the majority of IMK in DKI Jakarta earn between 5 and 10 million rupiah per year, totaling 5,323 businesses/companies. Revenue of 11-25 million rupiah per year is reported by 5,982 businesses/companies, of 26-50 million rupiah revenue per year by 8,988 million businesses/companies, revenue of 51-100 rupiah per year by 30,438 businesses/companies, million rupiah and revenue exceeding 500 4.046 bv businesses/companies.

Meanwhile, the number of Small and Medium Enterprises (SMEs) in Jakarta can be presented in the following chart:

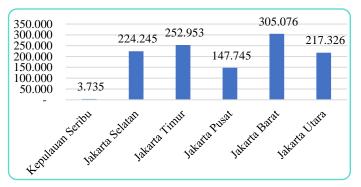
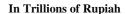
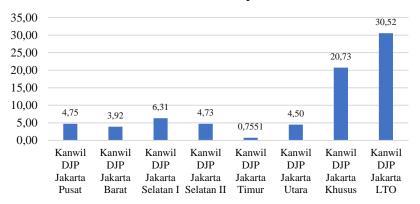


Figure 6. Number of UMK in DKI Jakarta Province by Regency/City, 2022 Source: Jakarta Central Statistics Agency, (https://jakarta.bps.go.id, 2022)

The number of UMK in DKI Jakarta in the figure above is highest in West Jakarta with 305,076, while the lowest is in Kepulauan Seribu with 3,735.

Next, tax performance in the 8 working areas of the DKI Jakarta Regional Tax Office can be presented to determine the areas with the highest or lowest tax revenue. This reflects the compliance of SME taxpayers in DKI Jakarta.





# Figure 7. Realization of tax revenue in eight Regional Offices (Kanwil) of the Directorate General of Taxes (DJP) in DKI Jakarta

Source: Head of Regional Office of the Directorate General of Taxes for Large Taxpayers, 2022

Based on the data above, it can be seen that the East Jakarta Regional Tax Office has the lowest tax revenue realization value of 755.1 billion compared to the seven Regional Tax Offices in DKI Jakarta. This indicates that tax compliance among small and medium enterprises in East Jakarta is still low. This is the basis for selecting East Jakarta as the research location and makes it interesting to conduct research on taxpayer compliance and the factors that influence it, resulting in low tax revenue for the East Jakarta Regional Tax Office.

In general, research on taxpayer compliance is grouped into three perspectives: the taxpayer perspective, the tax office perspective, and the tax regulator perspective (Ministry of Finance - Directorate General of Taxes).

Research examining the taxpayer perspective, tax knowledge, trust, tax awareness, tax understanding, tax rate perception, and taxpayer satisfaction with tax compliance has shown that tax knowledge has a positive influence on taxpayer compliance, ((Sanusi et al., 2021), (Andreas & Savitri, 2015), (Saad, 2014), (Meiryani et al., 2021), (Herawati et al., 2018), (Purba, 2020), (Wibawa et al., 2021), (Mulyani et al., 2019), (Nurlis & Ariani, 2020), (Asrinanda, 2018), (Mujiyati & Khalimaturrosyida, 2022), (Inasius, 2019), (Septyana & Suprasto, 2019), (Mukhlis et al., 2015), (Seralurin et al., 2021), (Orkaido Deyganto, 2018), (Mukhlis et al., 2015), (Ardy et al., 2018)) Conversely, several studies have stated that tax knowledge or understanding does not affect taxpayer compliance by, ((H. K. S. Negara & Purnamasari, 2018), (Jarwa et al., 2021), (Negara, Hari Kusuma Satria and Purnamasari, 2019), (H. K. S. Negara & Purnamasari, 2018).

Previous studies on tax awareness have shown a positive effect on taxpayer compliance, ((Le et al., 2021), (Putra et al., 2019), (Hartikayanti & Siregar, 2019), (Asrinanda, 2018), (Rahmayanti et al., 2020), (Triandani & Apollo, 2020), (H. K. S. Negara & Purnamasari, 2018), (Sofiana et al., 2020), (Mujiyati & Khalimaturrosyida, 2022), (Le et al., 2021), (Sania & Yudianto, 2018), (Ardy et al., 2018)), Conversely, several studies show that tax awareness does not affect taxpayer compliance, ((Putri et al., 2020), (Nurlela et al., 2021), (Herman & Waluyo, 2020).

The perspective of tax offices and tax awareness campaigns have a positive effect on taxpayer compliance, ((Mas'ud et al., 2014), (Kurniawan & Daito, 2021), (Septyana & Suprasto, 2019), (Sukesi & Yunaidah, 2020), (Seralurin et al., 2021), (Sania & Yudianto, 2018), (Ardy et al., 2018)), Conversely, several studies show that service quality has no effect on taxpayer compliance, ((Andreas & Savitri, 2015), (Putra et al., 2019), (Purba, 2020), (S. Negara & Purnamasari, 2019), (Seralurin et al., 2021), (Artawan et al., 2020)).

Taxpayer awareness plays a mediating role in the relationship between the benefits of NPWP, service quality, and taxpayer compliance, ((Andreas & Savitri, 2015), (Adhiambo & Theuri, 2019), (Nurlis & Ariani, 2020), (Kurniawan & Daito, 2021). Conversely, taxpayer awareness does not play a mediating role in the relationship between fiscal services, tax socialization, tax knowledge, and taxpayer compliance, ((Andreas & Savitri, 2015), (Kurniawan & Daito, 2021), (Sofiana et al., 2020), ).

The perspective of tax regulators and the e-Filing taxation system has a positive effect on taxpayer compliance, ((Atawodi & Ojeka, 2012), (Meiryani et al., 2021), (Sifile et al., 2018), (Purba et al., 2020), (Solichah et al., 2019), (Mustapha et al., 2021), (Natasya et al., 2019), (Prakoso et al., 2020), (Hamilah & Aliza, 2021), (Purba, 2020), (Wibawa et al., 2021), (Puspitasari et al., 2021), (Natasya et al., 2019)) Meanwhile, several studies show that the e-Filing tax system has no effect on taxpayer compliance, (Tracey, 2020).

Tax law enforcement is another factor that can influence taxpayer compliance. Tax law enforcement has a positive effect on taxpayer compliance ((Bibler et al. 2019), (Oladede et al. 2019), (Gakboro et al. 2023), (Nurjanah et al., 2023), while research (Oladede et al. 2019) shows that tax enforcement (tax amnesty) does not affect taxpayer compliance.

Based on the above background and the gaps in previous studies, the researcher intends to examine the determinants of taxpayer compliance with tax awareness as an intervening variable in SMEs in DKI Jakarta, particularly East Jakarta.

Tax awareness in this study is used as an intervening variable. According to (Sugiyono, 2019), an intervening variable is a variable that theoretically influences the relationship between independent and dependent variables to become an indirect relationship that cannot be observed and measured. This variable is an intervening variable located between the independent and dependent variables, so that the independent variable does not directly influence the change or emergence of the dependent variable.

#### **Formulation of Problem**

Based on the research background and problem limitations, the research problem formulation is as follows: 1) Does tax knowledge have a positive influence on tax awareness among SMEs in East Jakarta?; 2) Does the e-filing tax system have a positive influence on tax awareness among SMEs in East Jakarta?; 3) Does tax authority service have a positive influence on tax awareness among SMEs in East Jakarta?; 4) Does tax law enforcement have a positive effect on tax awareness among SMEs in East Jakarta?; 5) Does tax knowledge have a positive effect on tax compliance among SMEs in East Jakarta?; 6) Does the e-filing tax system have a positive effect on tax compliance among SMEs in East Jakarta?; 7) Does tax authority service positively influence tax compliance among SMEs in East Jakarta?; 8) Does tax law enforcement positively influence tax compliance among SMEs in East Jakarta?; 9) Does tax awareness positively influence tax compliance among SMEs in East Jakarta?; 10) Does tax knowledge positively influence tax compliance among SMEs in East Jakarta with tax awareness as an intervening variable?; 11) Does the e-filing tax system positively influence tax compliance among SMEs in East Jakarta with tax awareness as an intervening variable?; 12) Does tax authority service positively influence tax compliance among SMEs in East Jakarta with tax awareness as an intervening variable?; and 13) Does tax law enforcement positively influence tax compliance among SMEs in East Jakarta with tax awareness as an intervening variable?.

#### **METHODS**

The population in this study was 252,953 SMEs in East Jakarta. Based on this number, the sample for this study consisted of 124 small and medium-sized enterprise (SME) taxpayers in East Jakarta. The population in this study was small and medium-sized enterprise (SME)

taxpayers in East Jakarta. Sampling was conducted using purposive sampling. The purposive sampling used in this study was judgment sampling, which is the selection of samples based on the fact that the samples or respondents are considered the primary source of information capable of providing the necessary information. Respondents are considered samples that have expertise and knowledge gained from long experience and are expected to be able to provide the data and information needed by researchers and samples. The sample criteria used in this study are as follows: 1) SME taxpayers with a minimum of 1 year of NPWP; 2) SME taxpayers in Jakarta who have regularly and consecutively submitted Annual Tax Notification Letters (SPT) for 3 years; 3) SME taxpayers who have regularly and consecutively submitted Annual Financial Reports for 3 years; and 4) SME taxpayers who are not currently involved in legal issues and/or have not committed tax crimes with permanent legal force for the last 3 years.

The researcher will distribute questionnaires to the accounting and taxation divisions working in the company. For reasons of data adequacy in the Structural Equation Model (SEM) analysis, at least 200 samples are required. The unit of analysis in this study is individuals or employees who handle SME taxes. This study uses primary data sources from individual respondents. Data collection was conducted using a questionnaire containing statements as indicators representing the research constructs or variables.

In general, there are four research paradigms in the literature: positivism, constructivism, participatory, and pragmatism. Given these various understandings of research paradigms, the research paradigm used in this study follows the positivist perspective. The positivist research paradigm is often referred to as the traditional scientific method and is more commonly used for quantitative research than qualitative or mixed-method research. This paradigm is also known as positivist, empirical, and post-positivist research, (Creswell & Creswell, 2018). The method used in this study is a mixed method.

This study uses a data collection method by distributing carefully designed questionnaires to obtain opinions from respondents, which is the selected sample size. The sampling technique used is purposive sampling that meets several predetermined criteria.

As a data collection technique, this study used questionnaires distributed to respondents who are small and medium-sized enterprise (SME) taxpayers. The identities of the respondents were kept confidential by the researcher. The measurement scale used in this study was the Likert scale. The use of the Likert scale will enable the researcher to measure and describe latent variables into variable indicators. These indicators can then be used as a starting point for developing instrument items in the form of statements or questions. The responses provided by respondents to each instrument item using the Likert scale have levels or gradations ranging from strongly agree to strongly disagree. Furthermore, for quantitative analysis purposes, the answers chosen by the respondents are given scores or numbers ranging from 1 to 6, where 1 means "strongly disagree," 2 means "disagree," 3 means "somewhat disagree," 4 means "strongly agree," 5 means "agree," and 6 means "strongly agree."

#### **RESULTS AND DISCUSSION**

# Results

#### **Outer Model Analysis**

The data used in this study were obtained from questionnaires distributed to SME taxpayers in East Jakarta, covering variables of tax knowledge (X1), e-filing tax system (X2), tax authority services (X3), tax law enforcement (X4), tax awareness (Y), and taxpayer compliance (Z). Quantitative data for each variable were obtained from the scores of each statement presented to 100 respondents selected as the sample.

# 1. Convergen Validity Analysis

To test convergent validity, outer loading or loading factor values are used. An indicator is considered to have good convergent validity if the outer loading value is > 0.7.

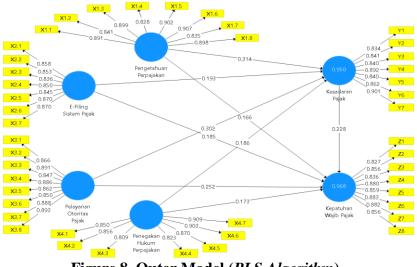


Figure 8. Outer Model (*PLS Algorithm*)

The following are the outer loading values for each item of the research variable statement:

<b>X7</b> • 11	Indicato	ng Outer		
Variable	r	Loading	Validity	
Taxation Knowledge (X1)	X1.1	0.891	Valid	
	X1.2	0.841	Valid	
	X1.3	0.899	Valid	
	X1.4	0.828	Valid	
	X1.5	0.902	Valid	
	X1.6	0.907	Valid	
	X1.7	0.835	Valid	
	X1.8	0.898	Valid	
E-filing Tax System (X2)	X2.1	0.858	Valid	
	X2.2	0.853	Valid	
	X2.3	0.836	Valid	
	X2.4	0.850	Valid	
	X2.5	0.845	Valid	
	X2.6	0.870	Valid	
	X2.7	0.870	Valid	
Tax Authority Services (X3)	X3.1	0.866	Valid	
-	X3.2	0.891	Valid	
	X3.3	0.847	Valid	
	X3.4	0.886	Valid	
	X3.5	0.862	Valid	
	X3.6	0.850	Valid	
	X3.7	0.888	Valid	
	X3.8	0.893	Valid	
Tax Law Enforcement (X4)	X4.1	0.850	Valid	

	X4.2	0.856	Valid
	X4.3	0.809	Valid
	X4.4	0.823	Valid
	X4.5	0.870	Valid
	X4.6	0.903	Valid
	X4.7	0.909	Valid
Tax Awareness (Y)	Y1	0.834	Valid
	Y2	0.841	Valid
	Y3	0.840	Valid
	Y4	0.892	Valid
	Y5	0.840	Valid
	Y6	0.862	Valid
	Y7	0.901	Valid
Taxpayer Compliance (Z)	Z1	0.827	Valid
	Z2	0.856	Valid
	Z3	0.836	Valid
	Z4	0.880	Valid
	Z5	0.859	Valid
	Z6	0.883	Valid
	Z7	0.882	Valid
	Z8	0.856	Valid

Based on the data in Table 1 above, it can be seen that each research variable indicator has an outer loading value > 0.6. This is in accordance with Chin's opinion as quoted by Imam Ghozali (2018:39), which states that an outer loading value between 0.5 and 0.6 is considered sufficient to meet the convergent validity requirements. The data above indicates that there are no indicators with outer loading values below 0.7, meaning that all indicators are deemed suitable or valid for use in the study and can be utilized for further analysis.

#### 2. Discriminant Validity Analysis

This section describes the results of the discriminant validity test. The discriminant validity test was conducted by looking at the average variant extracted (AVE) value for each indicator, which must be > 0.5 for a good model. The results of the discriminant validity test are presented in the following table:

Table 2. Average Variant Extracted (AVE)				
Variable	AVE	Validity		
Taxation knowledge	0,767	Valid		
E-filing tax system	0,730	Valid		
Tax authority services	0,763	Valid		
Tax law enforcement	0,741	Valid		
Tax awareness	0,738	Valid		
Tax compliance	0,740	Valid		
~				

Source: PLS Processing Results, 2024

Based on Table 2 above, it can be seen that the AVE values for the variables of tax knowledge, e-filing tax system, tax authority services, tax awareness, and taxpayer compliance are > 0.5. Thus, it can be stated that each variable has good discriminant validity.

### 3. Composite Reliability Analysis

Composite reliability is used to test the reliability of indicators in a variable. A variable can be said to meet composite reliability if it has a composite reliability value of  $\ge 0.7$ . The following are the composite reliability values for each research variable:

Table 3. Composite Reliablity				
Variable	Composite Reliabilty	Reliability		
Taxation knowledge	0,963	Reliable		
E-filing tax system	0,950	Reliable		
Tax authority services	0,963	Reliable		
Tax law enforcement	0,952	Reliable		
Tax awareness	0,952	Reliable		
Tax compliance	0,958	Reliable		
Source: PLS Processing Results, 2024				

Based on Table 3 above, it can be seen that the composite reliability values obtained for all research variables are  $\geq 0.7$ . These results indicate that each variable has met the composite reliability, so it can be concluded that all variables are highly reliable.

### 4. Cronbach's Alpha Analysis

The reliability test with composite reliability above can be strengthened by using Cronbach's alpha value. A variable can be considered reliable or fulfilling Cronbach's alpha if it has a Cronbach's alpha value > 0.7. The following are the Cronbach's alpha values for each variable:

Table 4. Cronbach's Alpha					
Variable	Cronbach's Alpha	Reliabilit y			
Taxation knowledge	0,956	Reliable			
E-filing tax system	0,938	Reliable			
Tax authority services	0,955	Reliable			
Tax law enforcement	0,941	Reliable			
Tax awareness	0,941	Reliable			
Tax compliance	0,950	Reliable			
Source: DLS Processing Desults 2024					

Source: PLS Processing Results, 2024

Based on Table 4, it can be seen that the Cronbach's alpha value of each research variable is  $\geq 0.7$ . Thus, these results indicate that each research variable has met the Cronbach's alpha value requirement, so it can be concluded that all variables have a high level of reliability.

# **Inner Model Analysis**

Hypothesis testing was conducted based on the results of the Inner Model (structural model) testing, which included r-square output, parameter coefficients, and t-statistics. To determine whether a hypothesis could be accepted or rejected, the significance values between constructs, t-statistics, and p-values were examined. Hypothesis testing in this study was conducted using SmartPLS (Partial Least Square) 3.0 software. These values can be seen from the bootstrapping results. The rules of thumb used in this study are t-statistics >1.96 with a

significance level of p-value 0.05 (5%) and positive beta coefficients. The results of the bootstrapping research model can be described as follows:

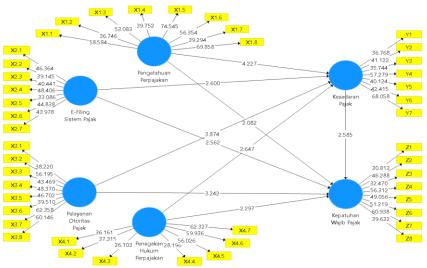


Figure 9. Inner Model (*Boot Strapping*)

# 1. Path Coefficient Test

Path coefficient evaluation is used to show how strong the effect or influence of independent variables is on dependent variables. Meanwhile, coefficient determination (R-Square) is used to measure how much endogenous variables are influenced by other variables. Chin in Ghozali (2018:42) states that an R2 value of 0.67 or higher for endogenous latent variables in a structural model indicates that the influence of exogenous variables (influencing) on endogenous variables (influenced) is categorized as good. If the result is between 0.33 and 0.67, it is categorized as moderate, and if the result is between 0.19 and 0.33, it is categorized as weak.

Based on the outer model scheme shown in Figure 4.1 above, it can be explained that the dominant path coefficient value is shown in the variable of tax knowledge on tax awareness, which is 0.314. The second path coefficient is shown in the variable of tax authority service on tax awareness, which is 0.302. Meanwhile, the smallest value is shown in the variable of tax knowledge on taxpayer compliance, which is 0.166.

Based on the inner model diagram shown in Figure 4.2 above, it can be explained that the largest t-statistic value is shown by the influence of tax knowledge on tax awareness, which is 4.227. The second largest influence is the influence of tax authority services on tax awareness, which is 3.847. Meanwhile, the smallest influence is shown in the variable of tax knowledge on taxpayer compliance, which is 2.082.

Based on the results, it can be seen that the independent variables on tax awareness in this model have positive path coefficient values. This indicates that the larger the path coefficient value of one of the independent variables on the tax awareness variable, the stronger the influence of the independent variables on the tax awareness variable. Meanwhile, the independent variables on taxpayer compliance in this model have positive path coefficient values. This indicates that the greater the path coefficient value of one of the independent variables on the taxpayer compliance variable, the stronger the influence between the independent variables on the taxpayer compliance variable.

# 2. Goodness of Fit Test

Based on data processing using the smartPLS 3.0 program, the R-Square values for tax awareness and taxpayer compliance were obtained as follows:

Table 5. R-Square Value			
Variable R Square Value			
Tax awareness	0,950		
Tax compliance	0,968		
Source: PLS Processing Results, 2024			

Based on the data in Table 5 above, it can be seen that the R-Square value for the tax awareness variable is 0.950. This value explains that tax awareness can be explained by the variables of tax knowledge, e-filing tax system, tax authority services, and tax law enforcement by 95%, while the remaining 5% is influenced by other variables that were not studied. The tax compliance variable has an R-Square value of 0.968. This value indicates that tax compliance can be explained by the variables of tax knowledge, e-filing tax system, tax authority services, tax law enforcement, and tax awareness by 96.8%, while the remaining 3.2% is influenced by other variables that were not studied.

Table 6. F-Square Value					
Variable Tax Awareness Taxpayer Compliance					
Taxation knowledge	0,120	0,047			
Tax awareness		0,082			
E-filing tax system	0,060	0,082			
Tax authority services	0,108	0,107			
Tax law enforcement	0,059	0,076			
Tax compliance					
~					

Source: PLS Processing Results, 2024

Based on Table 6, it can be seen that the influence of tax knowledge, e-filing tax system, tax authority services, and tax law enforcement on taxpayer compliance through tax awareness obtained a value of 0.082 or 8.2%. This means that indirectly, tax knowledge, e-filing tax system, tax authority services, and tax law enforcement contribute 8.2% to taxpayer compliance through tax awareness, while the remaining 91.8% is influenced by other factors that were not studied.

The goodness of fit assessment is determined by the Q-Square predictive relevance value, where a Q2 value > 0 indicates that the model has predictive relevance, while a Q2 value < 0 indicates that the model has little predictive relevance. The results of the Q-Square value calculation with blind folding are as follows:

Table 7. Results Q <sup>2</sup>						
$SSO \qquad SSE \qquad \begin{array}{c} Q^2 \ (=1-\\ SSE/SSO) \end{array}$						
E-Filing Tax System	868.000	868.000				
Taxpayer Compliance	992.000	290.159	0.708			
Tax Awareness	868.000	265.866	0.694			
Tax Authority Services	992.000	992.000				
Tax Law Enforcement	868.000	868.000				
Taxation Knowledge	992.000	992.000				
Source: DIS Processing Posults 2024						

Source: PLS Processing Results, 2024

Based on Table 7 above, the Q-Square value for tax awareness is 0.694, while for taxpayer compliance it is 0.708. This indicates that the Q-Square value is above 0. Thus, from these results, it can be stated that this research model has good goodness of fit.

#### 3. Hypothesis Test

The direct influence of tax knowledge, e-filing tax system, tax authority services, and tax law enforcement on tax awareness and taxpayer compliance, as well as tax awareness on taxpayer compliance, can be seen from the path coefficient presented in the following table:

Table 8. Direct Influence					
Hypothesis	Effect	Original Sample	T- Statistic	P- Values	Results
H1	Tax knowledge => Tax awareness	0,314	4,227	0,000	Accepted
H2	E-filing tax system => Tax awareness	0,193	2,600	0,010	Accepted
Н3	Tax authority services => Tax awareness	0,302	3,874	0,000	Accepted
H4	Tax law enforcement => Tax awareness	0,186	2,647	0,009	Accepted
Н5	Tax knowledge => Tax compliance	0,166	2,082	0,038	Accepted
H6	E-filing tax system => Taxpayer compliance	0,185	2,562	0,011	Accepted
H7	Tax authority services => Tax compliance	0,252	3,242	0,001	Accepted
H8	Tax law enforcement => Taxpayer compliance	0,173	2,297	0,022	Accepted
Н9	Tax awareness => Tax compliance	0,228	2,585	0,010	Accepted

Source: PLS Results, 2024

Based on Table 8 above, it can be seen that the tax knowledge variable has a positive and significant effect on tax awareness of 4.227 > 1.96. The e-filing tax system variable has a positive and significant effect on tax awareness of 2.600 > 1.96. The tax authority service variable has a positive and significant effect on tax awareness of 3.874 > 1.96. The tax law enforcement variable has a positive and significant effect on tax awareness, with a value of 2.647 > 1.96. The tax knowledge variable has a significant effect on tax payer compliance, with a value of 2.082 > 1.96. The e-filing tax system variable has a positive and significant effect on tax payer compliance, with a value of 2.562 > 1.96. The tax authority service variable has a positive and significant effect on taxpayer compliance at 3.242 > 1.96. The tax law enforcement variable has a positive and significant effect on taxpayer compliance at 2.297 > 1.96. The tax awareness variable has a positive and significant effect on taxpayer compliance at 2.297 > 1.96. The tax awareness variable has a positive and significant effect on taxpayer compliance at 2.297 > 1.96. The tax awareness variable has a positive and significant effect on taxpayer compliance at 2.297 > 1.96. The tax awareness variable has a positive and significant effect on taxpayer compliance at 2.297 > 1.96. The tax awareness variable has a positive and significant effect on taxpayer compliance at 2.585 > 1.96.

The indirect influence of tax knowledge, e-filing tax system, tax authority service, and tax law enforcement on taxpayer compliance through tax awareness can be seen from the total indirect effect presented in the following table:

Table 9. Indirect Influence					
Hypothesis	Effect	Original Sample	T- Statistic	P- Values	Results
H10	Tax knowledge => Tax compliance mediated by tax awareness	0,072	2,213	0,028	Accepted
H11	E-filing tax system => Tax compliance mediated by tax awareness	0,044	1,751	0,081	Rejected
H12	Tax authority services => Tax compliance mediated by tax awareness	0,069	2,039	0,042	Accepted
H13	Tax law enforcement => Tax compliance mediated by tax awareness	0,042	1,801	0,073	Rejected

Source: PLS Results, 2024

Based on Table 9 above, it can be seen that tax awareness can mediate the influence between tax knowledge and taxpayer compliance by 2.213 > 1.96. This indicates that tax knowledge can increase taxpayer compliance if SME taxpayers have strong tax awareness. Tax awareness cannot mediate the influence between the e-filing tax system and taxpayer compliance, with a value of 1.751 < 1.96. This indicates that the e-filing tax system cannot increase taxpayer compliance if SME taxpayers do not have strong tax awareness. Tax awareness can mediate the influence between tax authority services and taxpayer compliance if SME taxpayers have strong tax awareness. Tax awareness can mediate the influence between tax authority services and taxpayer compliance by 2.039 > 1.96. This indicates that tax authority services can increase taxpayer compliance if SME taxpayers have strong tax awareness. Tax awareness cannot mediate the influence between tax authority services can increase taxpayer compliance if SME taxpayers have strong tax awareness. Tax awareness cannot mediate the influence between tax authority services can increase taxpayer compliance if SME taxpayers have strong tax awareness. Tax awareness cannot mediate the influence between tax law enforcement and taxpayer compliance, with a value of 1.801 < 1.96. This indicates that tax authority increase taxpayer compliance if SME taxpayers do not have strong tax awareness.

#### Discussion

#### 1. The Effect of Tax Knowledge on Tax Awareness

Based on the research results, the t-value obtained was 4.227 > 1.96, meaning that tax knowledge has a significant and positive influence on tax awareness. The path coefficient is 0.314, which means that the contribution of tax knowledge to tax awareness is 31.4%, and the remaining 68.6% is other factors that were not studied. The indicator that most reflects tax knowledge is statement item X1.6, which is understanding clearly the procedures that must be followed to report taxes through the available system, with a factor loading value of 0.907. This indicates that understanding clearly the procedures that must be followed to report taxes through the available system can increase taxpayers' tax knowledge, thereby influencing their tax awareness. The results of this study support the research conducted by Kurniati et al. (2016) and Manuputty and Sirait (2016), which stated that tax knowledge has a significant effect on tax awareness.

#### 2. The Effect of the E-filing Tax System on Tax Awareness

Based on the research results, the t-value is 2.600 > 1.96, meaning that the e-filing tax system has a significant and positive influence on tax awareness. The path coefficient is 0.193, indicating that the contribution of the e-filing tax system to tax awareness is 19.3%, with the remaining 80.7% attributed to other factors not examined in this study.

The indicators that most reflect the e-filing tax system are items X2.6 and X2.7, namely motivation to continue using e-filing and commitment to continue using e-filing continuously, with factor loadings of 0.870. This indicates that taxpayers' motivation to continue using e-filing and their commitment to use e-filing continuously can increase the use of the e-filing tax system, thereby influencing taxpayers' awareness. The results of this study support the research conducted by Aqiila and Furqon (2021) and Krisnawati (2021), which stated that the e-filing tax system has a significant effect on tax awareness.

#### 3. The Effect of Tax Authority Services on Tax Awareness

Based on the research findings, the t-value is 3.874 > 1.96, indicating that tax authority services have a significant and positive influence on tax awareness. The path coefficient is 0.302, meaning that the contribution of tax authority services to tax awareness is 30.2%, with the remaining 69.8% attributed to other factors not examined in this study. The indicator that most reflects tax authority services is statement item X3.8, which is satisfaction with the services provided by the tax authority, with a factor loading value of 0.893. This indicates that the services and thereby influence taxpayer awareness. The results of this study support the research conducted by Krisnawati (2021), which states that tax authority services have a significant effect on tax awareness. However, it does not support the results of the research conducted by Ramadhani and Umaimah (2023), which states that tax authority services do not affect tax awareness.

### 4. The Effect of Tax Law Enforcement on Tax Awareness

Based on the research results, the t-value is 2.647 > 1.96, meaning that tax law enforcement has a positive and significant impact on tax awareness. The path coefficient is 0.186, indicating that the contribution of tax law enforcement to tax awareness is 18.6%, with the remaining 81.4% attributed to other factors not examined in this study. The indicator that most reflects tax law enforcement is statement item X4.7, which states that a lack of strict law enforcement can encourage tax evasion, with a factor loading value of 0.909. This indicates that strict law enforcement can encourage tax evasion to increase tax awareness, thereby influencing taxpayer awareness. The results of this study support the research conducted by Karma and Lestari (2018), which states that tax law enforcement has a significant effect on tax awareness.

# 5. The Effect of Tax Knowledge on Taxpayer Compliance

Based on the research results, the t-value is 2.082 > 1.96, meaning that tax knowledge significantly influences taxpayer compliance. The path coefficient is 0.166, indicating that the contribution of tax knowledge to taxpayer compliance is 16.6%, with the remaining 83.4% attributed to other factors not examined in this study. The results of this study support the research conducted by ((Sanusi et al., 2021), (Meiryani et al., 2021), (Herawati et al., 2018), (Purba, 2020), (Wibawa et al., 2021), (Mulyani et al., 2019), (Nurlis & Ariani, 2020), (Asrinanda, 2018), (Mujiyati & Khalimaturrosyida, 2022), (Inasius, 2019), (Septyana & Suprasto, 2019), (Seralurin et al., 2021), (Orkaido Deyganto, 2018), (Ardy et al., 2018)) which states that tax knowledge has a significant effect on taxpayer compliance. However, the results of this study do not support the research conducted by ((H. K. S. Negara & Purnamasari, 2018), (Lestari & Daito, 2020), (Margaret, Damayanti, & Rusliyawati, 2022), (Magribi, Hernita & Kusumadewi, 2024) which states that tax knowledge has no effect on taxpayer compliance.

### 6. The Effect of e-Filling Tax System on Taxpayer Compliance

Based on the results of the study, a t-value of 2.562 > 1.96 was obtained, meaning that the e-filing tax system has a significant and positive effect on taxpayer compliance. The path coefficient is 0.185, which means that the contribution of the e-filing tax system to taxpayer compliance is 18.5%, with the remaining 81.5% being other factors that were not studied. The results of this study support the research conducted by, ((Atawodi & Ojeka, 2012), (Meiryani et al., 2021), (Sifile et al., 2018), (Purba et al., 2020), (Solichah et al., 2019), (Mustapha et al., 2021), (Natasya et al., 2019), (Prakoso et al., 2020), (Hamilah & Aliza, 2021), (Purba, 2020), (Wibawa et al., 2021), (Puspitasari et al., 2021), (Natasya et al., 2019)) which states that the e-filing tax system has a significant effect on taxpayer compliance. However, it does not support the results of research conducted by (Tracey, 2020) which states that the e-filing tax system has no effect on taxpayer compliance.

### 7. The Effect of Tax Authority Services on Taxpayer Compliance

Based on the research results, a t-value of 3.242 > 1.96 was obtained, meaning that tax authority services have a significant and positive effect on taxpayer compliance. The path coefficient is 0.252, which means that the contribution of tax authority services to taxpayer compliance is 25.2%, while the remaining 74.8% is due to other factors that were not examined. The results of this study support the research conducted by ((Mas'ud et al., 2014), (Kurniawan & Daito, 2021), (Septyana & Suprasto, 2019), (Sukesi & Yunaidah, 2020), (Seralurin et al., 2021), (Sania & Yudianto, 2018), (Ardy et al., 2018)), which states that tax authority services have a significant effect on taxpayer compliance. However, this differs from the research conducted by ((Andreas & Savitri, 2015), (Putra et al., 2019), (Purba, 2020), (S. Negara & Purnamasari, 2019), (Seralurin et al., 2021), (Artawan et al., 2020)), which states that tax authority services have no effect on taxpayer compliance.

#### 8. The Effect of Tax Law Enforcement on Taxpayer Compliance

Based on the research findings, the t-value obtained was 2.297 > 1.96, indicating that tax law enforcement has a significant and positive impact on taxpayer compliance. The path coefficient is 0.173, meaning that the contribution of tax law enforcement to taxpayer compliance is 17.3%, while the remaining 82.7% is attributed to other factors not examined in this study. The results of this study support the research conducted by ((Bibler et al. 2019), (Oladede et al. 2019), (Gakboro et al. 2023), (Nurjanah et al., 2023)) which states that tax law enforcement has a significant effect on taxpayer compliance. However, it does not support the findings of (Oladede et al. 2019), which state that tax law enforcement does not influence taxpayer compliance.

# 9. The Effect of Tax Awareness on Taxpayer Compliance

Based on the results of the study, a t-value of 2.585 > 1.96 was obtained, meaning that tax awareness has a significant and positive effect on taxpayer compliance. The path coefficient is 0.228, which means that the contribution of tax awareness to taxpayer compliance is 22.8%, while the remaining 77.2% is due to other factors that were not examined. The results of this study support the research conducted by ((Le et al., 2021), (Putra et al., 2019), (Hartikayanti & Siregar, 2019), (Asrinanda, 2018), (Rahmayanti et al., 2020), (Triandani & Apollo, 2020), (H. K. S. Negara & Purnamasari, 2018), (Sofiana et al., 2020), (Mujiyati & Khalimaturrosyida, 2022), (Le et al., 2021), (Sania & Yudianto, 2018), (Ardy et al., 2018)), which states that tax awareness has a significant effect on taxpayer compliance. However, several studies show that tax awareness does not affect taxpayer compliance, ((Putri et al., 2020), (Nurlela et al., 2021), (Herman & Waluyo, 2020).

#### 10. The Effect of Tax Knowledge on Tax Compliance Mediated by Tax Awareness

Based on the results of the study on the indirect effect of tax knowledge on taxpayer compliance through tax awareness, a t-value of 2.213 > 1.96 was obtained, meaning that tax awareness can mediate the relationship between tax knowledge and taxpayer compliance. Tax awareness can partially mediate the relationship between tax knowledge and taxpayer compliance. This indicates that tax knowledge can increase taxpayer compliance by involving tax awareness or if taxpayers, especially SMEs, do not have strong tax awareness.

# 11. The Effect of E-filing Tax System on Taxpayer Compliance Mediated by Tax Awareness

Based on the results of the study on the indirect effect of the e-filing tax system on taxpayer compliance through tax awareness, a t-value of 1.751 < 1.96 was obtained, meaning that tax awareness cannot mediate the relationship between the e-filing tax system and taxpayer compliance. Tax awareness cannot partially mediate the relationship between the e-filing tax system cannot increase taxpayer compliance without involving tax awareness or if taxpayers do not have strong tax awareness.

#### 12. The Effect of Tax Authority Services on Tax Compliance Mediated by Tax Awareness

Based on the results of the study on the indirect effect of tax authority services on taxpayer compliance through tax awareness, a t-value of 2.039 > 1.96 was obtained, meaning that tax awareness can mediate the relationship between tax authority services and taxpayer compliance. Tax awareness can partially mediate the relationship between tax authority services can increase taxpayer compliance by involving tax awareness or if taxpayers, especially SMEs, do not have strong tax awareness.

# 13. The Effect of Tax Law Enforcement on Taxpayer Compliance Mediated by Tax Awareness

Based on the results of the study on the indirect effect of tax law enforcement on taxpayer compliance through tax awareness, a t-value of 1.801 < 1.96 was obtained, meaning that tax awareness cannot mediate the relationship between tax law enforcement and taxpayer compliance. Tax awareness cannot partially mediate the relationship between tax law enforcement tax law enforcement and taxpayer compliance. This means that tax law enforcement cannot increase taxpayer compliance without involving tax awareness or if taxpayers, especially SMEs, do not have strong tax awareness.

# CONCLUSION

Based on the problem formulation, results, and discussion above, the conclusions of the research conducted on sea freight forwarding companies are as follows:

- 1. Tax knowledge has a positive and significant effect on brand awareness among SMEs in East Jakarta;
- 2. The E-Filing Tax System has a positive and significant effect on brand awareness among SMEs in East Jakarta;
- 3. Tax authority services have a positive and significant effect on brand awareness among SMEs in East Jakarta;
- 4. Tax Law Enforcement has a positive and significant impact on Brand Awareness among SMEs in East Jakarta;
- 5. Tax Knowledge has a positive and significant impact on Tax Compliance among SMEs in East Jakarta;

- 6. E-Filing Tax System has a positive and significant impact on Tax Compliance among SMEs in East Jakarta;
- 7. Tax Authority Services have a positive and significant effect on Tax Compliance among SMEs in East Jakarta;
- 8. Tax Law Enforcement has a positive and significant effect on Tax Compliance among SMEs in East Jakarta;
- 9. Brand Awareness has a positive and significant effect on Tax Compliance among SMEs in East Jakarta;
- 10. Tax knowledge has a positive and significant effect on tax compliance mediated by tax awareness among SMEs in East Jakarta;
- 11. The e-filing tax system does not have a positive and significant effect on tax compliance mediated by tax awareness among SMEs in East Jakarta;
- 12. Tax Authority Service has a positive and significant effect on Tax Compliance mediated by Tax Awareness among SMEs in East Jakarta;
- 13. Tax Law Enforcement does not have a positive and significant effect on Tax Compliance mediated by Tax Awareness among SMEs in East Jakarta.

#### REFERENCES

- Adhiambo, O. J., & Theuri, J. M. (2019). Effect of Taxpayer Awareness and Compliance Cost on Tax Compliance Among Small Scale Traders in Nakuru. *International Academic Journal of Economics and Finance*, 3(3), 279–295.
- 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.
- Alm, J., & Torgler, B. (2011). Do Ethics Matter? Tax Compliance and Morality. *Journal of Business Ethics*, 101(4), 635–651. https://doi.org/10.1007/s10551-011-0761-9
- Alshira'h, A. F., Al-Shatnawi, H. M., Al-Okaily, M., Lutfi, A., & Alshirah, M. H. (2020). Do public governance and patriotism matter? Sales tax compliance among small and medium enterprises in developing countries: Jordanian evidence. *EuroMed Journal of Business*, 16(4), 431–455. https://doi.org/10.1108/EMJB-01-2020-0004
- Andreas, & Savitri, E. (2015). The Effect of Tax Socialization, Tax Knowledge, Expediency of Tax ID Number and Service Quality on Taxpayers Compliance with Taxpayers Awareness as Mediating Variables. *Procedia - Social and Behavioral Sciences*, 211(September), 163–169. https://doi.org/10.1016/j.sbspro.2015.11.024
- Ardy, A., Ristanto, A. B., & Damayanti, T. W. (2018). Indonesian Taxpayers' Compliance: A Meta-Analysis. Accounting and Finance Research, 7(3), 1–29.
- Artawan, I. G. P., Widnyana, I. W., & Kusuma, I. G. A. T. (2020). The effect of service quality to build taxpayer trust and satisfaction on increasing taxpayer compliance in Gianyar regency. *International Journal of Contemporary Research and Review*, 11(09), 21868– 21883.
- Asante, S., & Baba, A. (2011). Tax Compliance Among Self-Employed in Ghana: Do Demographic Characteristics Matter? *International Business and Management*, 3(1), 86–91. https://doi.org/10.3968/j.ibm.1923842820110301.070
- Asrinanda, Y. D. (2018). The Effect of Tax Knowledge, Self Assessment System, and Tax Awareness on Taxpayer Compliance. *International Journal of Academic Research in Business and Social Sciences*, 8(10), 539–550. https://doi.org/10.6007/ijarbss/v8i10/4762
- Atawodi, O. W., & Ojeka, S. A. (2012). Factors That Affect Tax Compliance among Small and Medium Enterprises (SMEs) in North Central Nigeria. *International Journal of Business and Management*, 7(12), 87–96. https://doi.org/10.5539/ijbm.v7n12p87

- Benkraiem, R., Uyar, A., Kilic, M., & Schneider, F. (2021). Ethical behavior, auditing strength, and tax evasion: A worldwide perspective. *Journal of International Accounting*, *Auditing and Taxation*, 43, 100380. https://doi.org/10.1016/j.intaccaudtax.2021.100380
- Besley, T., & Persson, T. (2014). Why do developing countries tax so little? *Journal of Economic Perspectives*, 28(4), 99–120. https://doi.org/10.1257/jep.28.4.99
- Chebusit, C., Namusonge, G. S., Biraori, O. E., & Kipkoech, E. C. (2014). Factors Affecting Tax Compliance Among Small and Medium Enterprises in Kitale. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, 1(3), 60–75.
- Creswell, J. W., & Creswell, D. J. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Fifth Edit). SAGE, Publication, Inc.
- Darussalam, Septriadi, D., Kristiaji, B. B., & Vissaro, D. (2019). Era Baru Hubungan Otoritas Pajak dengan Wajib Pajak. DDTC.
- Fagbemi, T. O. & Abogun, S. (2013). Influencing Voluntary Tax Compliance of Small and Medium Enterprise in Kwara State. *Journal of Management Science*, 7(4), 122–125.
- Frederick Mpambara, Benjamin Byiringiro, M. D. (2013). Assessment of challenges faced by tax collectors and tax payers in rural areas: A case study of Nyaruguru District. *East African Journal of Science and Technology*, 2(2), 1–18.
- Hamilah, H., & Aliza, S. (2021). the Influence of the E-Filing Implementation, Taxation Socialization, and Tax Penalties on Individual Taxpayer Compliance in Kpp Pratama Jakarta Timur. *Dinasti International Journal of Management Science*, 3(2), 343–358. https://doi.org/10.31933/dijms.v3i2.1046
- Hartikayanti, H. N., & Siregar, I. W. (2019). Effect of Motivation and Awareness on Tax Compliance Among Sme'S: (Case Study in Cimahi, Indonesia). *International Journal* of Organizational Innovation, 12(2), 255–265.
- Herawati, H., Tabroni, R., & Lusiana, S. (2018). The Effectiveness of the Tax Regulation Socialization Strategies on Tax Payers' Comprehension and Compliance in Implementing Their Tax Obligations. *The International Journal of Business Review* (*The Jobs Review*), 1(2), 145–154. https://doi.org/10.17509/tjr.v1i2.12980
- Herman, & Waluyo. (2020). the Effect of Tax Planning Aspects and Tax Awareness To the Umkm Taxpayer Compliance (Study on Sme Tax Mandatory in Karawaci Area of Tangerang City). *Journal of Accounting and Finance Management*, 1(3), 30–52.
- Inasius, F. (2019). Factors Influencing SME Tax Compliance: Evidence from Indonesia. International Journal of Public Administration, 42(5), 367–379.
- Jarwa, T., Ratnawati, T., Nugroho, M., Jarwa, T., Ratnawati, T., & Nugroho, M. (2021). Tax Compliance Modeling Regarding Individual Characteristics, Information Technology Knowledge And Sanctions On Taxpayer Awareness, Ability, Willingness And Compliance As Impacts Of The Development Of The Central Busines District Of Surabaya City. PalArch's Journal of Archaeology of Egypt/Egyptology, 18(7), 98–109.
- Kamleitner, B., Korunka, C., & Kirchler, E. (2012). Tax compliance of small business owners: A review. *International Journal of Entrepreneurial Behaviour and Research*, *18*(3), 330–351. https://doi.org/10.1108/13552551211227710
- Khalil, S., & Sidani, Y. (2020). The influence of religiosity on tax evasion attitudes in Lebanon. Journal of International Accounting, Auditing and Taxation, 40, 100335. https://doi.org/10.1016/j.intaccaudtax.2020.100335
- Kurniawan, I., & Daito, A. (2021). the Effect of Tax Sanctions and Tax Authorities Services on Tax Compliance and Taxpayer Awareness As Moderation Variable (Survey on Corporate Taxpayers Domiciled in Tangerang). *Dinasti International Journal of Management Science*, 2(3), 371–380. https://doi.org/10.31933/dijms.v2i3.699

- Le, H. T. D., Bui, M. T., & Nguyen, G. T. C. (2021). Factors Affecting Electronic Tax Compliance of Small and Medium Enterprises in Vietnam. *Journal of Asian Finance, Economics and Business*, 8(1), 823–832. https://doi.org/10.13106/jafeb.2021.vol8.no1.823
- Marandu, E. E., Mbekomize, C. J., & Ifezue, A. N. (2015). Determinants of Tax Compliance: A Review of Factors and Conceptualizations. *International Journal of Economics and Finance*, 7(9). https://doi.org/10.5539/ijef.v7n9p207
- Mardiasmo. (2018). Perpajakan (2018th ed.). ANDI Yogyakarta.
- Mas'ud, A., Manaf, N. A. A., & Saad, N. (2014). Do Trust and Power Moderate Each Other in Relation to Tax Compliance? *Procedia - Social and Behavioral Sciences*, 164(August), 49–54. https://doi.org/10.1016/j.sbspro.2014.11.049
- Meiryani, M., Siagaan, P., Fernando, E., Wahyuningtias, D., & Novianty, N. (2021). The Effect of Knowledge of Tax Regulation, Tax Rate and Tax Applications on Taxpayer Compliance. 2nd International Conference on Internet and E-Business, 2, 157–164.
- Mujiyati, & Khalimaturrosyida, R. (2022). Determinant of Tax Compliance of MSME Taxpayers During the Covid-19 Pandemic. *Proceedings of the International Conference on Economics and Business Studies (ICOEBS 2022)*, 655(23), 216–223. https://doi.org/10.2991/aebmr.k.220602.028
- 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). https://doi.org/10.5430/ijfr.v6n4p161
- Mulyani, L., Kurniawan, A., & Umiyati, I. (2019). Analysis of Knowledge of Taxation Regulations, Tax Awareness and Performance of Account Representative (Ar) on Tax Mandatory Compliance. *JTAR (Journal of Taxation Analysis and Review)*, *1*(1), 12–27.
- Mustapha, B., Rildwan, O., Eleda, T., & Moronke, L. (2021). Integrated e-tax filing management system on tax compliance behaviour in Nigeria. *Academy of Accounting and Financial Studies Journal*, 25(5), 1528–2635.
- Natasya, N., Tandililing, E. M., Angelus, M., & Kevin, K. (2019). Tax E-Filing System Acceptance Level on the Taxation Compliance: An Application of the UTAUT Approach. *The Winners*, 20(1), 33. https://doi.org/10.21512/tw.v20i1.5572
- Negara, Hari Kusuma Satria and Purnamasari, D. I. (2019). The Effect of Tax Knowledge, Tax Awareness and Fiscal Service on Taxpayer Compliance (A Study of MSMEs in the Special Region of Yogyakarta). *International Journal of Computer Science and Network*, 8(5), 398-402.
- Negara, H. K. S., & Purnamasari, D. I. (2018). The Influence of Taxation Knowledge and Tax Awareness on UMKM To Taxpayer Compliance in the Special Province of Yogyakarta. *Research in Management and Accounting*, 1(2), 85–91. https://doi.org/10.33508/rima.v1i2.2594
- Negara, S., & Purnamasari, D. indri. (2019). The Effect of Tax Knowledge, Tax Awareness and Fiscal Service on Taxpayer Compliance. *International Journal of Computer Science and Network*, 8(5), 398–402.
- Nkwe, N. (2013). Tax Payers' Attitude and Compliance Behavior among Small Medium Enterprises (SMEs) in Botswana. *Business and Management Horizons*, 1(1), 113–137.
- Nurlela, I., Kurniawan, A., & Umiyati, I. (2021). The Effect of Awareness, Morality, Tax Culture, and Distributive Justice on the Taxpayer Compliance. ACCRUALS (Accounting Research Journal of Sutaatmadja), 5(01), 112–129. https://doi.org/10.35310/accruals.v5i01.699
- Nurlis, N., & Ariani, M. (2020). Tax Awareness Moderates Knowledge and Modernization of Tax Administration on Tax Compliance, Survey on MSME taxpayers in South

Tangerang City, Indonesia. International Journal of Management Studies and Scoial Science Research, 2(5), 250–259.

- Orkaido Deyganto, K. (2018). Factors Influencing Taxpayers' Voluntary Compliance Attitude with Tax System: Evidence from Gedeo Zone of Southern Ethiopia. *Universal Journal of Accounting and Finance*, 6(3), 92–107. https://doi.org/10.13189/ujaf.2018.060302
- Prakoso, A., Wicaksono, G., Puspita, Y., & Kusumaningrum, N. (2020). The Effect Of Implementation Of E-Filing Systems On Personal Tax Compliance. 000(2018). https://doi.org/10.4108/eai.5-8-2020.2301125
- Purba, H. (2020). Effect Of E-Filing System Implementation And Tax Knowledge On Taxpayer Compliance With Account Representative Services As Mediation Variable (Case Study on Personal Taxpayers at KPP Pratama, East Tangerang). EPRA International Journal of Research & Development (IJRD), 7838(October), 66–80. https://doi.org/10.36713/epra4508
- Purba, H., Sarpingah, S., & Nugroho, L. (2020). The Effect of Implementing E-Filing Systems on Personal Tax Compliance With Internet Knowledge As Moderated Variables (Case Study on Personal Taxpayers At Kpp Pratama Jakarta Kramatjati). *International Journal of Commerce and Finance*, 6(1), 166–180.
- Puspitasari, S. D., Asdar, M., & Munizu, M. (2021). The Effect Of Account Representative Performance, Self Assessment System, And Tax Service Quality On Taxpayer Compliance Effect Of Taxpayer Awareness And Compliance Costs On Tax Compliance Among Small Scale Traders In Nakuru Town, Kenya. *Journal of Applied Bussines and Entrepreneurship*, 4(1).
- Putra, P., Ambarita, C., & Simatupang, B. (2019). Tax Compliance of Village-Owned Enterprises Based on Government Regulation (PP) No 23 Year of 2018. The 3rd International Conference Community Research and Service Engagements, IC2RSE 2019, 4th December 2019, North Sumatra, Indonesia, 23. https://doi.org/10.4108/eai.4-12-2019.2293810
- Putri, V., Maryani, M., Dewi, R., Prasetyo, B., & Gusnandar, S. (2020). The Effect Of Taxpayer Awareness And Modernization Of Tax Administration System On Personal Taxpayer Compliance. *Journal Of Archaeology Of Egypt*, 17(4), 2741–2748.
- Rahmayanti, N. P., Sutrisno T., S., & Prihatiningtias, Y. W. (2020). Effect of tax penalties, tax audit, and taxpayers awareness on corporate taxpayers' compliance moderated by compliance intentions. *International Journal of Research in Business and Social Science* (2147-4478), 9(2), 118–124. https://doi.org/10.20525/ijrbs.v9i2.633
- Randlane, K. (2012). Tax Compliance and Tax Attitudes : The Case of Estonia. *Journal of Management & Change*, 29(1), 89–103.
- Randlane, K. (2016). Tax Compliance as a System: Mapping the Field. *International Journal* of Public Administration, 39(7), 515–525. https://doi.org/10.1080/01900692.2015.1028636
- Saad, N. (2014). Tax Knowledge, Tax Complexity and Tax Compliance: Taxpayers' View. *Procedia - Social and Behavioral Sciences*, 109(1), 1069–1075. https://doi.org/10.1016/j.sbspro.2013.12.590
- Sania, A. F., & Yudianto, I. (2018). Analysis of Factors that Influence Taxpayers Compliance in Fulfilling their Taxation Obligations: Study of Small Medium Entrepreneur (SMEs) Taxpayers Based on eCommerce in the Bandung Area. *Journal of Accounting Auditing* and Business, 1(2), 17. https://doi.org/10.24198/jaab.v1i2.18270
- Sanusi, S., Omar, N., Sanusi, Z. M., & Muslichah, I. (2021). The application of the responsive regulation theory on indirect tax compliance among small and medium enterprises in Malaysia. *Management and Accounting Review*, 20(2), 137–160. https://doi.org/10.24191/MAR.V20i02-06

- Sebhat, W., & Assfaw, A. M. (2019). Analysis of Tax Compliance and Its Determinants: Evidence from Kaffa, Bench Maji and Sheka Zones Category B Tax Payers, SNNPR, Ethiopia. *Journal of Accounting Finance and Auditing Studies (JAFAS)*, 5(1), 32–58. https://doi.org/10.32602/jafas.2019.2
- Septyana, K. P., & Suprasto, H. B. (2019). Effect of taxation knowledge, fiscus service, and tax sanctions on tax obligation compliance with tax amnesty as moderated variables. *International Research Journal of Management, IT and Social Sciences*, 6(6), 111–117. https://doi.org/10.21744/irjmis.v6n6.773
- Seralurin, Y. C., Kbarek, J. T., & ... (2021). The Effect of Tax Socialization and Tax Service Quality on Taxpayer Compliance with Tax Knowledge Asintervening Variables. ... Asian Journal of ..., November, 54–72.
- Sifile, O., Kotsai, R., Mabvure, J. T., & Chavunduka, D. (2018). Effect of e-tax filing on tax compliance: A case of clients in Harare, Zimbabwe. *African Journal of Business Management*, 12(11), 338–342. https://doi.org/10.5897/ajbm2018.8515
- Sofiana, L., Muawanah, U., & Setia, K. A. (2020). The Effect of Tax Sanctions and Income Levels on Taxpayer Compliance With Awareness as Intervening Variables. *International Journal of Envitonmental, Sustainability, and Social Sciences*, 2(1), 51– 56.
- Solichah, N. N., Isnalita, & Soewarno, N. (2019). The Effect of E-Filing Implementation, Level of Tax Comprehension, and Tax Sanction on Formal Compliance of Individual Taxpayer. 101(Iconies 2018), 293–296. https://doi.org/10.2991/iconies-18.2019.58
- Sukesi, S., & Yunaidah, I. (2020). The effect of tax socialization, superior service, and service quality on taxpayers' satisfaction and compliance. *Journal of Economics, Business, & Accountancy Ventura*, 22(3), 347–359. https://doi.org/10.14414/jebav.v22i3.1698
- Tracey, G. (2020). AIS Electronic Library (AISeL) The Effect of e-Filing on Tax Compliance among Micro Enterprises in Jamaica The Effect of e-Filing on Tax Compliance among Micro Enterprises in Jamaica. *International Conference on Information Resources Management (CON-IRM)*.
- Triandani, M., & Apollo, A. (2020). Effect the Understanding of Taxation, Tax Sanctions and Taxpayer Awareness of Taxpayer Compliance (Research on Taxpayers of Individual Entrepreneurs in Tangerang Region). *Dinasti International Journal of Digital Business Management*, 2(1), 87–93. https://doi.org/10.31933/dijdbm.v2i1.638
- Vincent, O. (2021). Assessing SMEs tax non-compliance behaviour in Sub-Saharan Africa (SSA): An insight from Nigeria. Accounting, Corporate Governance & Business Ethics, 8(1).
- Waluyo. (2016). The Effect Of Addition Of Taxpayers Number, Tax Audit, Tax Billing, And Taxpayers Compliance Toward Tax Revenue. 01(1), 37–44.
- Wibawa, I. P. A. S., Jati, I. K., Sari, M. M. R., & Wirajaya, I. G. A. (2021). Open Access The Influence of Tax Understanding, Technology Readiness, Ease of Using E-Filing on MSME Individual Taxpayers Compliance. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(1), 112–119.
- Ya'u, A., Saad, N., & Mas'ud, A. (2020). Effects of economic deterrence variables and royalty rates on petroleum profit tax compliance in Nigeria: an empirical analysis. *International Journal of Energy Sector Management*, 14(6), 1275–1296. https://doi.org/10.1108/IJESM-12-2019-0011