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Research Article

Tax Knowledge, Tax Enforcement Efforts, and Tax Compliance among Agribusinesses in Tagum City

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ABSTRACT

The main objective of this study is to identify the relationship between tax knowledge and tax enforcement efforts towards tax compliance of agri-business owners in Tagum City that could benefit the Agri-business owners, BIR, LGUs, Department of Agriculture (DA), and future researchers. The sample size of 259 was determined using the Slovin formula, and respondents were identified through simple random sampling. The results of this study are based on the data gathered from respondents who are managers, owners, or accounting staff of a registered agri-business through the dissemination of an adopted questionnaire authored by Twum et al. (2020) and Oladele et al. (2019) for the independent variables and Abdulazeez et al. (2018) for the dependent variable. Statistical tools used in this study are mean and Pearson r. The results of this study show that the level of tax knowledge, tax enforcement efforts, and tax compliance are all very high. In addition, the results indicate a positive significant relationship between tax knowledge and tax compliance and relationship between tax enforcement efforts and tax compliance. Thus, the null hypothesis of the two relationships in this study is rejected. The study suggests considering tax knowledge and tax enforcement efforts to improve tax compliance.

Keywords: *Tax knowledge, Tax enforcement efforts, Tax compliance, Agribusiness, Philippines*

Introduction

Tax plays an essential role in the economic development of a country. The taxpayers' tax payment provides money that the government sets aside for advancing a nation and its citizens. As per various authors, the three essential functions of a robust tax system in a country's

development are revenue generation, inequality reduction, and the encouragement of responsible leadership (Cobham, 2005, p. 208). Tax compliance is defined by Song and Yarbrough (1978, p. 443) as self-assessment and readiness to abide by tax laws. Moreover, Maquiling, Manolong, Naong, and Sumaylo

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(2023, p. 41) stated in their study that tax compliance can be viewed from administration and tax return completion. Administration-wise, tax compliance is mainly concerned with registration and tax information agencies, whereas compliance with tax completion returns focuses on filing taxes and meeting deadlines. Correct tax base reporting, timely return filing, and precise liability computation are all considered aspects of tax compliance (Murphy 2008, p. 113). Through taxation, economic growth is encouraged, leading to improved living standards and heightened employment opportunities.

However, tax compliance has become a significant issue in most countries (Sebele-Mpofu & Msipa, 2020, p. 194-198). A study shows that tax compliance is influenced by various elements, including a lack of taxpayer knowledge, which reveals the poor level of tax compliance (Amin et al., 2022, p. 57). Another factor affecting tax compliance would be weak enforcement efforts, which hinders taxpayers' reason to pay their taxes (Slemrod 2019, p.904- 954).

An estimated \$300 billion is the tax gap, or uncollected taxes, in the United States due to non-compliance, as stated by the Internal Revenue Service. These significant tax gaps may occur in other nations. (Alm & McKee 2018, p. 331). Because of this, practically every nation that imposes a tax system has problems with tax compliance (Onwuka 2019, p. 468). Like in other countries with similar economies, taxes remain the primary revenue source. For the government in Thailand. However, some citizens attempt to avoid or evade such tax burdens in illegal ways, which damage the government administration's budget allocation, making the government's aid to lower the tax burden through regulations remain ineffective, as stated by Adebisi & Orsaa (2013, as cited in Thramongsak & Kanjana, 2022 p.2).

In the Philippines, the government prioritizes tax compliance since non-compliance would mean lost income that may be allocated to government programs (Assfaw & Sebhat, 2019, p. 47). According to research, just 60% of business owners are familiar with Philippine tax laws. (Angeles, 2021, p.10) and that it influences taxpayers' compliance with taxes. Moreover, (Dela Cruz, 2017, p. 261) states that out of

the seven registered in a compliance area, only 4% have a compliance rate of 95% to 100%. Out of 900,000 MSMEs are working in an informal economy where they are not keeping books of accounts, are not registered, and are non-compliant, which means they are operating beyond tax laws, as stated by Du-Balabad (2016, as cited in Paco & Quezon 2022, p.6264). Palabrica (2016, as mentioned in Paco & Quezon 2022, p.6265) stated that, unfortunately, taxes are fundamentally wicked in the eyes of the Filipino people instead of being a patriotic measure to help the government pay for its expenses. As of now, there are no existing studies specifically focusing on the tax compliance of agribusinesses in the Philippines. Most available research on tax compliance in the country primarily examines small and medium enterprises (SMEs) in general without distinguishing the unique challenges and circumstances faced by agribusinesses.

Additionally, Maquiling, Manolong, Naong, and Sumaylo (2023, p. 41) stated that the poll in their study revealed how frequently SMEs make unofficial payments as part of their compliance with regulations, mainly to prevent delays when interacting with the government. Typically, informal payments made up only 2% of all the costs incurred by SMEs in the survey. In all places, SMEs located in Davao reported an everyday payment percentage of 3.40 percent of their total expenses compared to Metro Manila residents.

Tax compliance problems in provinces vary widely based on each region's specific economic, social, and regulatory contexts. Cain and Montaña (2021, p.36) noticed, based on their three-year work experience in an accounting firm, that the majority of SMEs continue to struggle with tax compliance issues in Tagum City. One of the examples of failure in paying proper taxes is the shutdown, including eleven salon locations and a few pharmacies in Tagum, which the city's tax administrators managed. Consequently, to provide the beneficiaries with helpful guidance, this study will assist in identifying the significant relationship between each component and tax compliance.

There is only one study on tax compliance that has been published in the province of Davao del Norte; however, this study did not

specifically focus on agribusinesses. This lack of research on the tax compliance of agribusinesses in the province presents a significant gap in the existing literature, highlighting the need for further studies to address this overlooked sector.

Research Objectives

This research aims to comprehend the fundamentals of tax knowledge, tax enforcement efforts, and tax knowledge. It also attempts to determine the relationship between tax knowledge, tax enforcement efforts, and the tax compliance of Tagum City's agribusinesses. Specifically, the study seeks to answer the following statement: To identify the level of tax knowledge of agri-businesses in terms of Knowledge of tax rights and responsibilities, Knowledge of business income, and Awareness of sanctions. To determine the level of tax enforcement effort perceived by agribusinesses in tax audits, tax penalties, and tax amnesty. To identify the level of tax compliance of agribusinesses in terms of Registering, Filing, Reporting, and Payment. To ascertain the significant relationship between tax knowledge and tax compliance with Agribusinesses in Tagum City. Lastly, to establish the significant relationship between Tax Enforcement Efforts perceived by Agri-businesses in Tagum City and their Tax Compliance.

Hypothesis

The null hypothesis, which will be tested at a significance level of 0.05, asserts no meaningful relationship exists between tax knowledge, tax enforcement efforts, and tax compliance of Tagum City's agribusinesses.

Methods

The methods and procedures employed by the proponents' research study are detailed in this chapter. These include research participants, instruments, design and data-gathering procedures, and statistical data treatment.

Research Participants

The research study participants consist of registered agriculture-related business owners, managers, cashiers, store in-charge, or accounting staff in Tagum City, Davao del Norte,

that have been in operation for a minimum of three years. Businesses that didn't fit the requirements above were not considered respondents to the survey. Using the Raosoft Sample Size Calculator, the sample size was established. The Business Permit and Licensing Office data for 2022 shows that 599 agribusinesses in Tagum City fit the criteria. The study's sample size consists of 235 Tagum City agribusinesses. However, we allowed for 10% of the sample size in case the selected samples are unavailable, which makes the sample size 259 in this study. After that, the researchers calculated the proportion of respondents in each barangay to determine the sample size, ensuring every barangay in Tagum City had a representative. Respondents were identified through Simple Random Sampling using a Research Randomizer.

In addition, the researchers considered the constraints, such as the time and resources available for manually distributing survey questionnaires, when calculating the total number of respondents.

Research Instrument

An adapted survey questionnaire was used to conduct this study. The tax knowledge questionnaire was authored by Twum et al. (2020). Oladele et al. (2019) wrote the questionnaire for tax enforcement efforts, and tax compliance was authored by Abdulzeez et al. (2018). Survey forms were utilized to gather data from the respondents. The researchers modified the questions to include only relevant questions relevant to the study.

The respondents were provided data on the two criteria using a five-part Likert scale in the questionnaire. Five points were assigned to each item on the five-point scale: 5 for Strongly Agree, 4 for Moderately Agree, 3 for Agree, 2 for Disagree, and 1 for Very Disagree. The questionnaires were selected because they contained common questions that could be sent out to many respondents in Tagum City at a low cost and in a short time. The questionnaire consists of three (3) parts. The first two parts are under the independent variable, Tax Knowledge and Tax Enforcement Efforts; the third is under the dependent variable, Tax Compliance, which uses a five-point Likert Scale to

design its questions. The tool utilized in collecting data for the research is the questionnaire. The questionnaire was first submitted to the adviser for review and revisions. Followed by the validation of each item by a panel of experts, the questionnaire determined the reliability of the index.

Research Design and Procedure

The descriptive correlational study approach found a significant association between the variables. The researchers used this approach to examine whether the independent variables and dependent variable are related without assuming a cause-and-effect relationship and prefer to explore in an ethical, simple and non-causal way without any complexities that Regression Analysis have.

To gather information, the researchers have (1) Obtained permission to conduct the study; (2) formalized and validated the survey questionnaire with feedback from the panel members; (3) distributed survey questionnaires to the appropriate respondents; and (4) gathered, evaluated, and analyzed the data. The questionnaire was distributed face-to-face because the survey respondents are situated in and around Tagum City. The researchers also provided an informed consent form by the respondents, which stated that all information provided would be kept completely confidential, that participation in the study is entirely voluntary, and that participants are free to decline participation at any time if it makes them feel uncomfortable. The researchers examined the survey questionnaires to ensure all questions were completed. The survey results were subsequently forwarded to the designated statistician to obtain a legitimate statistical treatment, interpretation, and analysis.

To determine the impacts of each study variable, statistical treatment was used. Pearson r and the mean make up this data. The mean shall be employed to calculate the total of the set of data characterizing the three variables. The significant relationship between the variables was analyzed using Pearson r .

Result and Discussion

This chapter assessed the tax knowledge and tax enforcement efforts of agribusinesses

in Tagum City regarding Tax Compliance. This chapter presents the levels of Tax Knowledge, Tax Enforcement Efforts, and Tax Compliance by the overall mean score, standard deviation, and descriptive level of the measured indicator. It also presents the relationship between Tax Knowledge and Tax Compliance and the relationship between Tax Enforcement Efforts and Tax Compliance.

RO1: Level of Tax Knowledge among Agribusinesses in Tagum City

Presented in Table 1 below is the indicator's mean score of Tax Knowledge with a computed mean of 4.65, which is described as very high with a standard deviation of 0.408.

Awareness of Sanctions has the highest mean score of 4.76 among the three Tax Knowledge indicators with a 'very high' descriptive level. This means that agribusiness owners are aware of the sanctions if they do not comply with their tax obligations. According to the study of Palil and Mustapha (2011, p. 31), awareness of sanctions has a strong effect as an indicator of tax knowledge towards tax compliance. Moreover, it is anticipated that tax authorities' sanctions and penalties linked to non-compliance will raise taxpayer awareness of their corresponding tax liability (Mukhlis 2015, p.162).

Knowledge of Business Income is the indicator with a 'very high' descriptive level and the second-highest mean score of 4.62. This result indicates that agribusiness owners are knowledgeable in handling their business income and dealing with their tax obligations. According to Kasipillai and Abdul-Jabbar (2006, p.75), a person or business is considered non-compliant if they understate their income, overstate their deductions, fail to file their tax returns within the allotted time, or fail to pay their assessed taxes by the deadline thus if a business is compliance then, therefore, they are knowledgeable in reporting their business income and deductions accurately, file and pay their tax obligations on time. In a self- assessment system, the taxpayer is personally liable to the tax authorities if an audit is required and, in a similar vein, asserted that the taxpayer's capacity to compute an accurate tax liability is determined by

his or her understanding of tax liability computation based on their business income (Fauziati, 2020, p. 25).

Lastly, the lowest mean score, with a mean of 4.59 and a 'very high' descriptive level, is the Knowledge of Tax Rights and Responsibilities. This implies that agribusiness owners are knowledgeable and aware of their tax rights and responsibilities. This result is supported by Negaro's (2019, p. 265) study that a voluntary tax compliance system requires tax expertise, which is essential for accurately determining their liability for taxes. Wasserman and Bornman (2020, p. 10) also added that for taxpayers to fully understand their tax payment responsibilities and eventually adhere to the regulations enforced by the government, they must acquire specific tax knowledge. Furthermore, ensuring people know the most recent tax rules can help fulfill these obligations. This is true for Malaysia, where taxpayers' tax returns are seen as their assessment and are subject to assessment penalties for failing to file an appropriate

tax return within a given time frame Alshirah (2022, p.1395)

The agribusiness owners' tax knowledge aggregate mean of 4.65 with a 'very high' descriptive level. This means that tax knowledge is very evident among agribusinesses in Tagum City. About this result, the study of Mukhlis et al. (2015, p. 161) stated that tax knowledge and tax compliance show a strong and positive correlation also it was found in the Eriksen & Fallan (1996, p. 388) study that getting more tax knowledge improved tax compliance and decreased tax evasion. Twum (2020, p. 222) added that tax education is applied to promote tax literacy to increase SME compliance in the setting of developing nations. In addition, according to Palil and Mustapha (2011, p. 32), familiarity with tax rights and obligations, employable income, personal relief, and awareness of tax offenses, penalties, and fines are measures of one's level of tax education that also results to a positive correlation to the tax compliance behavior of every taxpayer.

Table 1. Level of Tax Knowledge among Agribusinesses in Tagum City

Indicator	Mean	SD	Descriptive Level
Knowledge of Tax Rights and Responsibilities	4.59	0.507	Very High
Knowledge of Business Income	4.62	0.513	Very High
Awareness of Sanctions	4.76	0.436	Very High
Overall	4.65	0.408	Very High

RO2: Level of Tax Enforcement Efforts among Agribusinesses in Tagum City

The mean scores for the Tax Enforcement Efforts, with a cumulative mean of 4.45, which is defined as very high, with a standard deviation of 0.601, are shown in Table 2 below.

To corroborate the investigation results, Oladele et al. (2019, p. 34) state that the tax enforcement effort is an innovative system that plays a vital role in enhancing tax compliance and aiding the tax authorities in carrying out their responsibilities. The tax penalty is one of the indicators of tax enforcement effort that has a very high mean, indicating that the majority of respondents view this variable as essential to compliance since the majority of the respondents stated that being penalized, mainly when discovered, can result in sealing up of

taxpayers' properties as restraints which increases tax compliance.

Furthermore, a tax audit is the second indicator that received a very high mean. This is a crucial instrument for accelerating tax compliance. In this regard, Oyedokun (2015, as cited in Oladele et al., 2019, p.30) proposed that during tax audits, tax authorities should drag corporate bodies, individuals, and charity organizations to full compliance and consider monitoring cash flows to survive. Moreover, the latter stated that exposure to tax audits demands accurate reporting, enhances taxpayer collaboration, adequate tax returns, identification of tax abnormalities, and standardized programs that help tax audits contribute to better tax compliance.

Tax amnesty, on the other hand, is the indication with the lowest mean. The study backs

this up by Wang & Hsieh (2015, as cited in Oladele et al., 2019, p.31), attesting that tax amnesties have been continuously utilized by many developed countries such as the US, Italy, and Argentina and garnered desired results which also aims to regularize their tax status and total compliance. In the study of Oladele et al. (2019, p. 34), results show that tax amnesty has the probability of lessening tax defaulters, propels the proclamation of all assets and income against illegal tax assessment, resulting in a wide tax net, and can better the tax compliance rate. This descriptive result could

be the least priority but still needs to change the fact that it is described as very high in the parameter limits, and it can inculcate willingness to comply with tax requirements by the taxpayers.

Generally, a tax enforcement effort that is secure and more equitable is a top priority that every administration should adopt as it helps ensure that the economy is suited for everyone, which provides fairness for workers and honest taxpayers (Hendricks & Hanlon 2021, pp 2 par.5).

Table 2. Level of Tax Enforcement Efforts as Perceived by Agri-businesses in Tagum City

Indicator	Mean	SD	Descriptive Level
Tax Audit	4.45	0.661	Very High
Tax Penalty	4.55	0.641	Very High
Tax Amnesty	4.34	0.664	Very High
Overall	4.45	0.601	Very High

RO3: Level of Tax Compliance among Agribusinesses in Tagum City

The mean scores for Tax Compliance, with a cumulative mean of 4.76, which is defined as very high, with a standard deviation of 0.371, are shown in Table 3 below.

With a 'very high' descriptive level, payment has the highest mean score (4.93) out of the 4 Tax Compliance measures. This means that the agribusinesses are aware of and pay their taxes in compliance with their compliance as business owners. Rahman (2017, p 231) found that payment as one of the indicators of tax compliance has sufficient convergent validity. This means that the payment is about tax compliance. In addition, Maquiling, Manolong, Naong, and Sumaylo (2023, p. 47) supported the idea that to guarantee tax payments, the tax administrator must ensure that tax laws are followed and encourage taxpayer participation. In addition, the cost of complying with taxes significantly influences a taxpayer's desire to make tax payments, which is why the study by Oghuma (2018, p. 559) confirmed that payment hinders tax compliance. Furthermore, the complexity of tax law is associated with rising compliance costs, which could contribute to

non-compliance (Sinnasamy & Bidin 2017, p.69).

Reporting is the indicator with the second-highest mean score of 4.76 and a "very high" descriptive level. This implies that agribusiness reports their business income accurately as part of their compliance. According to a self-assessment system, tax compliance refers to the obligation to file the annual tax return and accurately report actual incomes (Sommerfeld 1994, pp 345), and Murphy (2008, p.113) added that tax compliance also entails truthful reporting of its tax base. Additionally, when considering tax compliance from a personal consequence standpoint, one must weigh the benefits of underreporting against the greater risk of being discovered and subject to fines to maximize revenue (McGraw & Scholz 1991 pp 33). Business taxpayers may need help with income tax administration when burdensome reporting and record-keeping obligations are imposed. For individuals who attempt to abide by the tax code, this has resulted in higher tax expenses (Baurer 2005, p 359).

Third, the highest mean score of 4.75 is the Registering with a 'very high' descriptive level. This is evident in the fact that agribusinesses register their businesses to operate. Rahman

(2017, p 231) states that the significant increase in registered individual taxpayers resulted from the government's efforts to promote taxation. Furthermore, Muturi and Kiarie's (2015, pp 280-281) tax compliance study shows a significant positive link between

online tax registration and implementing a tax system in Meru County, Kenya. filing, and tax remittance are strongly positively correlated. This suggests that the government can collect more money if SBE taxpayers use the tax system.

Table 3. Level of Tax Compliance as Perceived by Agri-businesses in Tagum City

Indicator	Mean	SD	Descriptive Level
Registering	4.75	0.389	Very High
Filing	4.59	0.456	Very High
Reporting	4.76	0.436	Very High
Payment	4.93	0.302	Very High
Overall	4.76	0.371	Very High

RO4: Significance of the Relationship between Tax Knowledge and Tax Compliance among agri-businesses in Tagum City

Lastly, Filing as one of the indicators of Tax Compliance got the lowest mean score of 4.59 but still had a 'very high' descriptive level. This means that agribusinesses file their tax returns as part of their compliance. According to Oghuma's (2018, p. 559) study, filing is one of the factors that deter tax compliance. Kiring'a et al. (2017, p. 45195) added that there is a substantial correlation between tax compliance and perceptions of the simplicity and convenience of tax filing. Enachescu et al. (2019, p.129) found that taxpayers who have a positive experience paying their taxes are more motivated to comply with government regulations and feel more compliant.

The agribusiness owners' tax compliance aggregate mean of 4.76 with a 'very high' descriptive level. Tax compliance is very evident among agribusiness owners in Tagum City. It is also supported by the study of Simuyu and Jagongo (2019, pp 45196), which shows that there is a substantial correlation between the perception of tax filing as straightforward and easy to submit, as well as the system's security, which enhances tax compliance rates. Moreover, according to research by Motwani et al. (2015, p. 20), using tax systems in India is voluntary. They also found that this voluntary use increases tax compliance when taxpayers file their tax forms and make payments. Similar to this, the findings of Muturi and Kiarie's (2015,

p. 281) study on tax compliance show that tax compliance among small taxpayers in Meru County, Kenya, and the adoption of a tax system through tax registration, tax return

Table 4 below illustrates the significance of the relationship between tax knowledge and tax compliance. It shows that the R-value of 0.575 indicates a positive correlation between the variables with a P-value of 0.001, accomplishing the study's fourth objective. The agribusinesses demonstrate a positive and direct relationship between tax knowledge and tax compliance. This suggests that the null hypothesis should be rejected because the P-value is less than the 5% significance level.

This relationship is hinged in social learning theory. Within the framework of this study, which focuses on the process of tax compliance behavior, it is consistent with the methods of obtaining tax information through social learning. The notion holds that people and societies pick up knowledge from one another through observations, imitations, and orientations. The way that taxpayers learn about taxes through social learning is related to the notion of social learning. Similarly, compliance and obedience can be connected to social learning. (Mandari 2017, p. 63) and Vaughan (2005, p. 14) corroborated that shared learning can accelerate compliance. In addition, the Social Learning Theory's applicability to appreciation strategies is that if taxpayers feel their compliance will be rewarded, they will strive to pay more attention to and abide by tax laws (Jatmiko, 2006, p. 89). Additionally, Wassermann and Bornman

(2022, p.1-11) proved that knowledge of tax law is essential for taxpayers to understand their responsibilities and ultimately comply with their obligations.

Thus, a strong correlation exists between tax compliance and tax knowledge of Tagum

City's agribusinesses. This correlation shows that when agribusinesses have a high level of tax knowledge, their tax compliance is also very much evident.

Table 4. Significance of the Relationship between Tax Knowledge and Tax Compliance

Variables	Mean	SD	r-value	p-value	Decision
Tax Knowledge	4.65	0.49			
Tax Compliance	4.76	0.371			
			0.0575	<0.001	Reject HO

Interpretation: Significant Positive Relationship

*Significant at 0.05 significance level

RO5: Significance of the Relationship between Tax Enforcement Efforts and Tax Compliance among agri-businesses in Tagum City

Table 5 below illustrates the significance of the relationship between tax enforcement efforts and tax compliance. It shows that the fifth objective of the study is achieved, with an R-value of 0.617, indicating a positive correlation between the variables and a P-value of 0.001. The null hypothesis should be rejected because the P-value is less than the 5% significance level, indicating that the tax enforcement efforts viewed by agri-businesses are positively associated and directly proportional to tax compliance.

This is supported by the study of Chelangat (2022, p.55), who unveiled that tax enforcement efforts strongly influence tax compliance, suggesting that inspections with SMEs should be constant and enforce stricter fines and penalties for non-compliance. This is anchored in the theory of Allingham-Sandmo (1972, as cited in Chelangat 2022 p.11), which implies that where the possibility of detection is high, and the penalties for non-compliance in taxes

are severe, compliance will be very evident. Allingham and Sandmo (1972 p 323) discovered that taxpayer behavior, including tax rate, fraud penalties, and the chance of getting caught, was influenced by the costs and advantages of evasion, such as compliance. This suggests that relatively few people will avoid paying taxes if there is a substantial likelihood of discovery and harsh penalties. In addition to low penalties, low audit probabilities result in a significant expected return on evasion. This approach, therefore, expects a high level of non-compliance. Therefore, tax administrators have applied the concepts of this philosophy to a considerable extent while refining enforcement strategies that rely primarily on penalties and the fear of being discovered.

Therefore, it can be concluded that there is a significant relationship between tax enforcement efforts perceived by agri-businesses and tax compliance of agri-businesses in Tagum City, and this correlation exemplifies that when tax enforcement efforts perceived by agri-businesses are very highly evident, the compliance in tax is also very much evident.

Table 5. Significance of the Relationship between Tax Enforcement Efforts and Tax Compliance

Variables	Mean	SD	r-value	p-value	Decision
Tax Enforcement Efforts	4.45	0.601			
Tax Compliance	4.76	0.371			
			0.617	<0.001	Reject HO

Interpretation: Significant Positive Relationship

*Significant at 0.05 significance level

Conclusion

The conclusions that were compiled utilizing statistical techniques and instruments are presented in this chapter. There is a very high degree of tax knowledge, tax enforcement efforts, and tax compliance. Findings suggest that improving tax education programs and stricter enforcement mechanisms could further enhance compliance rates. Policymakers should consider targeted tax awareness campaigns for agribusinesses and digitalized tax monitoring systems to strengthen enforcement.

Social Learning Theory and the Allingham Sandmo Theory support the conclusions above. The Social Learning Theory states that a business owner will comply if they have seen and experienced it firsthand, particularly after learning that taxes significantly impact a region's growth (Jatmiko, 2006, p. 86). According to Wassermann and Bornman (2020, p. 1–11), understanding tax law is essential for taxpayers to understand their obligations and ultimately comply with their responsibility. Additionally, Alshirah's (2022, p.1397) research shows that taxpayer compliance with tax payment increases as tax knowledge increases.

Meanwhile, the Allingham Sandmo Theory supports the relationship between tax enforcement efforts and tax compliance. This theory proves that the relationship between the two variables is always positive, and according to the study of Bork (2004, p.730), it shows that Bork [2004, p. 730] that tax enforcement and tax compliance are always correlated by demonstrating that tax enforcement could, when combined with high tax rates and high redistributive transfer, have an effect of lower tax evasion.

Recommendations

In addition to the study's execution, the analysis and findings helped the researchers provide recommendations aimed at reducing the challenges faced by agribusinesses in complying with tax regulations. It was determined that tax enforcement efforts and tax knowledge are closely related to and impact tax compliance. Given the research's findings below, the proponents would want to suggest the following:

First, for the owners of agribusiness SMEs, this study shows that they may hire a professional accountant, tax advisor, or bookkeeper to help them comply with the paperwork requirements of their industry. Additionally, for them to be informed and aware of the consequences of failing to file their taxes, they should attend any seminars or workshops that are explicitly focused on filing and complying with their taxes.

Second, the Bureau of Internal Revenue (BIR) and Local Government Units, this study will help policymakers develop efficient tax rules and regulations as well as programs and initiatives that will uphold the education and awareness of all agribusiness owners. In addition, implement a digital tax filing system that for any business especially agribusinesses to reduce paperwork and organize tax seminars for the owners to be aware.

Third, the Department of Agriculture this study will help the department to organize more seminars and workshops in partnership with Bureau of Internal Revenue and Local Government Unit to not just only discuss about agriculture but also about tax and responsibilities of agribusiness owners.

Fourth, to the public, since it provides fresh information on the problem currently afflicting the sector, especially small-scale farmers, people will be more knowledgeable of the benefits and possible uses of preventing non-compliance.

Lastly, to the Present and Future Scholars and Researchers, it is beneficial to those who plan to do similar research on the same topic to utilize the results of this study as a foundation for further improvement and to spread awareness. For them also to conduct a longitudinal study to measure the long-term impact of tax enforcement on compliance.

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References

Abdulazeez, T 2018, Determinants of Tax Compliance among Small and Medium Enterprises. Retrieved February 24, 2023, from <https://www.proquest.com/openview>

Ali, B.J, Omar W.A.W, & Bakar R 2016, Accounting Information System (AIS) Moderating effect of organizational culture. International Journal of Economics, Commerce and Management, pp. 138-158. Retrieved February 24, 2023, from

<https://www.researchgate.net/303247197>

Allingham, M. & Sandmo, A 1972, Income Tax Evasion: A Theoretical Analysis, Journal of Public Economics, 1, p 323-338.

Alm, J. & McKee, M 2018, Audit Certainty, Productivity, and Taxpayer Compliance, pp. 331. Retrieved May 1, 2023, from <https://papers.ssrn.com>

Alm, J 2018, What motivates tax compliance, Journal of Economic Surveys, p. 1-36. Retrieved February 24, 2023, from <https://doi.org/10.1111/joes.1227>

Alkhatib, A. A., Hamad, M. Z., & Hermas, M. D 2020, The Impact of Tax Ethics and Knowledge on Tax Compliance among Palestinian Taxpayers, International Journal of Academic Research in Business and Social Sciences, 10(6), 346-352. Retrieved January 28, 2023, from <https://doi.org/10.6007>

Alshirah, M 2022, The Relationship between Tax Knowledge and Compliance: an Empirical Study. Information Science Letter, Volume 10, Pages 1393 - 1397. Retrieved March 10, 2023, from <https://www.naturalpublishing>

Amin, S., Putri, Z., Abu S., & Zuberi, I 2022, Exploring the Influence of Tax Knowledge in Increasing Tax Compliance by Introducing Tax Education at Tertiary Level Institutions, Open Journal of Accounting 11: pp. 57-70. Retrieved February 2, 2023, from <https://www.scirp.org/journal/115934>

Amah, C.O., & Nwaiwu, J.N 2018, Tax Audit Practice and Down South Tax Revenue Generation in Nigeria, pp. 110. Retrieved March 10, 2023, from <https://seahipaj.org/journals-ci>

Angeles, I 2021, "Categorizing Taxpayers: A Mixed-Method Study on Small Business Tax Compliance in the Philippines," The South East Asian Journal of Management 5 (2), pp. 10. Retrieved March 9, 2023, from <https://doi.org/10.21002>

Assfaw, A. M., & Sebhat, W 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, 5(1), p. 32-58. Retrieved March 9, 2023, from <http://dx.doi.org/10.32602>
- 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). pp. 178. Retrieved February 11, 2023, from <https://doi.org/10.5539>
- Bachas, P 2021, "Targeting Tax Enforcement Efforts on Larger Firms: Necessary Distortion?". pp. 392. Retrieved March 1, 2023, from openknowledge.org/10986/35336.
- Baurer, L. I. 2005, Tax Administrations and Small and Medium Enterprises (SMEs) in Developing Countries, Consultant Small and Medium Enterprise Department World Bank Group, pp. 359. Retrieved February 12, 2023, from <https://www.researchgatenet.com>
- Bergeron, A., Tourek, G., and Weigel, J 2019, The Impact of Reducing Tax Rates and Strengthening Enforcement on Revenue Collection in the DRC, The Abdul Latif Jameel Poverty Action Lab, pp. 665. Retrieved February 11, 2023, from povertyactionlab.org/evaluation/elasticity-tax-compliance-evidence-low-capacity-state
- Bork, Rainald 2004, "Stricter Enforcement may increase tax evasion", *European Journal of Political Economy*, Volume 20, Pages 725-737. Retrieved February 22, 2023, from <https://doi.org/10.1016/>
- Bornman M., Alimbekova G., & Espaeva D 2018, "Tax Literacy in the Digital Economy," *J. Econ. Res. Bus. Adm.* (1), pp. 1-16. Retrieved February 21, 2023, from <https://doi.org/10.26577>
- Cain, J & Montañó VS 2021, "Measures of Tax Compliance among Small and Medium Enterprises in Tagum City: an Exploratory Factor Analysis", *The International Journal of Business Management and Technology*, 5(2), pp 35-36. Retrieved February 11, 2023, from <https://www.theijbmt.com/0938>
- Centre for Tax Policy and Administration (CTPA) 2004, Compliance Risk Management: Managing and Improving Tax Compliance. pp. 219. Retrieved December 13, 2023, from <https://www.oecd.org/tax/administration>
- Chandarasorn, M 2012, Public Management as Citizen Compliance: A Case Study of Income Tax Compliance Behavior in Thailand, pp. 5. Retrieved April 25, 2023, from <https://kuscholarworks.ku.edu>
- Chelangat, J 2022, Deterrents of Tax Compliance among Agri-Business Small and Medium Enterprises in Kericho Town, Kericho County- Kenya, pp. 55. Retrieved December 13, 2023, from <https://www.researchgate.com>
- Chowdhury, G, Farhana, K, & Mannan, K 2020, Socio-economic Factors of Tax Compliance: An Empirical Study of Individual Taxpayers in the Dhaka Zones, Bangladesh. *Munich Personal RePEc Archive*, pp. 7. Retrieved February 3, 2023, from <https://mpa.ub.uni-muenchen>
- Cobham, A. 2005, Taxation policy and development. Oxford: The Oxford Council on Good Governance, pp. 208. Retrieved February 13, 2023, from <https://www.files.ethz.ch/isn/110040>
- Cristobal, A.P. & De La Cruz-Cristobal, M.C 2017, Practical research 2 for senior high school. Quezon City, C&E Publishing Inc, pp. 74. Retrieved February 2, 2023, from <https://siagrey.files.wordpress.com/2018>
- Cummings, R.C., Martinez-Vazquez, J., McKee, M. & Torgler, B. 2005, Effects of Culture on Tax Compliance: A Cross Check of Experimental and Survey Evidence, pp. 546. Retrieved April 25, 2023, from <https://doi:10.2139/>
- Dela Cruz, R 2017, Quezon City Medium Taxpayers identified and profiled from BIR Media Release forewarned of their level of tax compliance, pp. 261-268. Retrieved December 13, 2023, from <https://www.bir.gov.ph>
- Enachescu, S. 2018, "Emotions and tax compliance among small business owners: An experimental survey", *International Review of Law and Economics* 2018 p 128-130. Retrieved December 15, 2023, from <https://doi/10.1016>

- Eriksen, K. & Fallan, L. 1996, "Tax Knowledge and Attitudes Towards Taxation: A Report on A Quasi- Experiment", *Journal of Economic Psychology*, 17(3), pp. 387-402. Retrieved February 9, 2023, from <https://researchgatenet.com>
- Fauziati, P., Minovia, A.F., Muslim, R.Y. & Nasrah, R., 2020. The impact of tax knowledge on tax compliance case study in Kota Padang, Indonesia, *Journal of Advanced Research in Business and Management Studies*, 2(1), pp.22-30. Retrieved February 9, 2023, from <https://www.researchgate.net/publication/330672821>
- Hantono, H 2021, Knowledge, Tax Awareness, Tax Morale towards Tax Compliance Boarding House Tax, *International Journal of Research- Granthaalayah*, pp. 49-65. Retrieved April 26, 2023, from <https://doi.org/10.29121/granthaalayah.v9.i1.2021.2966>
- Hakim, T., Karia, A., David, J., Ginsad, R., Lokman, N. & Zolkafli, S. 2022, Impact of Direct and Indirect Taxes on Economic Development: A Comparison Between Developed and Developing Countries, *Cogent Economics & Finance*, 10(1), pp.72. Retrieved February 16, 2023, from <https://www.tandfonline.com/action/showCitFormats?doi=10.1080%2F23322039.2022.2141423>
- Hendricks, G. & Hanlon, S. 2021, Better Tax Enforcement Can Advance Fairness and Raise More Than \$1 Trillion of Revenue Center for American Progress, Retrieved December 9, 2023, from <https://www.americanprogress.org>
- Inasius, F 2019, Factors Influencing SME Tax Compliance: Evidence from Indonesia, *International Journal of Public Administration*, 42:5, p. 367-379. Retrieved February 9, 2023, from <https://doi.org/01900692.2018>
- Jatmiko, A. N. 2006, Pengaruh Sikap Wajib Pajak Pada Pelaksanaan Sanksi Denda, Pelayanan Fiskus dan Kesadaran Perpajakan Terhadap Kepatuhan Wajib Pajak, pp. 86-90. Retrieved February 9, 2023, from <https://eprints.undip.ac.id/>
- Kasipillai, J. & Abdul-Jabbar, H. 2006, "Gender and ethnicity differences in tax compliance", *Asian Academy of Management Journal*, Vol. 11 No. 2, pp. 73-88. Retrieved February 9, 2023, from http://eprints.usm.my/35944/1/AAMJ_11
- Kimutai, K 2019, "Factors Affecting Tax Compliance in the Agricultural Sector in Kenya: A Case of Horticultural Farmers in Naivasha, Nakuru County.", pp. 1-70, Retrieved March 12, 2023, from <http://ikesra.kra.go.ke/handle/123456789/602>
- Kiring'a, S.E., Jagongo, A., Kiio, J.M., 2017, "Impact of online tax filing on tax compliance among small and medium enterprises in Kibwezi Sub- County in Kenya", *International Journal of Current Research*, Vol. 9 No. 4, pp. 45196-45206. Retrieved February 9, 2023, from <https://ir-library.ku.ac.ke.com>
- KPMG 2020, Tax in the time of Corona - KPMG Philippines. Retrieved February 9, 2023, from <https://kpmg.com/ph/en/home/>
- Lai, M.L, Zalilawati, Y., Amran, M.M. & Choong, K.F 2013, Quest for Tax Education in Non-accounting Curriculum: A Malaysia Study, *Asian Social Science*, p. 154-162. Retrieved February 9, 2023, from <http://dx.doi.org/10.5539>
- Leonard A., Herman B., & Richard J. Zeckhauser 2018, "Amnesty, Enforcement, and Tax Policy" *Tax Policy and the Economy*, pp. 55-85. Retrieved March 1, 2023, from www.jstor.org/stable
- Lim, S & Youde, S 2019, Tax Compliance, pp. 5. Retrieved February 29, 2023, from <https://link.springer.com>
- Mandari, H. & Koloseni D 2017, Electronic fiscal device acceptance for tax compliance among trading business community in Tanzania: the role of awareness and trust. pp. 63. Retrieved February 29, 2023, from <https://ijecm.co.uk/wp-content/uploads/2017/03/5310>
- Maneekwan Chandarasorn 2012, Public Management as Citizen Compliance: A Case Study of Income Tax Compliance Behavior in Thailand. pp. 542-546. Retrieved December 13, 2023, from <https://core.ac.uk/213399623>

- Maquiling R., Manolong D., Naong T., & Sumaylo G. 2023, Factors Influencing Voluntary Tax Compliance of Self-Employed Individuals in Davao City, pp. 41-50. Retrieved December 17, 2023, from <https://orcid.org/0000-0002-2568-9436>
- McGraw, K. M., & Scholz, J. T. 1991, Appeals to Civic versus Attention to self- interest effects on tax compliance. *Law and society review*, Vol. 25, pp. 471-498. Retrieved March 20, 2023, from <https://doi.org/10.2307/3053724>
- Mohamad, M & Mohd Ali, M.A 2017, Examining the Factors of Tax Non- Compliance: A Case Study of Small and Medium Enterprises in Metro Area, *EDP Sciences Les Ulis*. pp. 661. Retrieved February 9, 2023, from <https://doi.org/10.1051/shsconf/2017360>
- Motwani, B., Haryani, S. & Matharu, S. 2015, "Profession as the determinant on the adoption of e-taxation", *A Journal of New Delhi Institute of Management*, Vol. 13 No. 2, pp. 15-23. Retrieved February 10, 2023, from <https://doi.org/10.20968>
- 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*, pp. 161-168. Retrieved March 9, 2023, from <https://doi.org/10.5430/>
- Murphy, K 2008, Enforcing tax compliance: to punish or persuade?, pp. 113. Retrieved from January 28, 2023, from <https://www.onlinelibrary.wiley>
- Musimenta D., Muhwezi M., Nkundabanyanga S.K., Akankunda B., and Nalukenge I 2017, Tax compliance of small and medium enterprises: a developing country perspective, *Journal of Financial Regulation and Compliance*, pp. 149-175. Retrieved February 29, 2023, from <https://doi.org/10.1108/JFRC-08-2016-00>
- Muturi, H.M. & Kiarie, N. 2015, "Effects of online tax system on tax compliance among small taxpayers in Meru county, Kenya", *International Journal of Economics, Commerce and Management*, Vol. 3 No. 12, pp. 280-297 Retrieved December 12, 2023, from <http://hdl.handle.net/11295/74865>
- Negoro, G.T. 2019, The effect of Tax Audit on Tax Compliance: In the case of Burayu City Administration Revenue Authority, pp. 265. Retrieved January 28, 2023, from <https://doi.org/10.4236/ojacct>
- Newman, W 2018, Literature review on the impact of tax knowledge on tax compliance among small medium enterprises in a developing country, *International Journal of Entrepreneurship*, pp. 1-15. Retrieved February 9, 2023, from <https://www.proquest.com>
- Nurlis, N. & Meiliyah, A 2020, Tax Awareness Moderates Knowledge and Modernization of Tax Administration on Tax Compliance, *International Journal of Management Studies and Social Science Research*, pp. 256-257. Retrieved February 9, 2023, from <https://doi.org/10.24912>
- Oghuma, RI 2018, Tax audit, penalty and tax compliance in Nigeria, *International Academic Conference Proceedings*. pp. 559. Retrieved February 6, 2022, from <http://research.icanig.org/>
- Oladele, R., Foluso, A., Ahmodu, A., Yusuff, S., Alade, M. 2019, Tax Enforcement Tools and Tax Compliance in Ondo State, Nigeria, Vol 8 No. 2, pp. 27-38 Retrieved December 13, 2012, from <http://doi:10.2478>
- Olaoye, C. O., Ayeni-Agbaje, A. R., & Alaran-Ajewole, A. P. 2017, Tax information, administration and knowledge on taxpayers' compliance of block moulding firms in ekiti state, *Journal of Finance and Accounting*, pp. 131-138. Retrieved March 1, 2023, from <https://doi.org/10.11648>
- Onuoha, L.N., & Dada, S.O 2016, Tax audit and investigation as imperatives for efficient tax administration in Nigeria, *Journal of Business Administration and Management Sciences Research*, pp. 99-112. Retrieved March 1, 2023, from <https://api.semanticscholar.org/Corpus>
- Onwuka, I.O., Okoro, B.C. & Onodugo, V.A. 2019, Measuring corporate governance performance beyond the financial metrics: A study based on deposit money banks in

- Nigeria, Business Strategy & Development, pp 468 Retrieved March 21, 2023, from <https://doi.org/10.1002/>
- Paco, D & Quezon, M 2022, Tax Awareness and Compliance of Micro and Small Enterprises, Vol. 6 No. 4, 2022, pp. 6264-6265. Retrieved December 13, 2023, from <https://www.journalppw.com>
- Palil, M. R., & Mustapha, A. F. 2011, Determinants of tax compliance in Asia, European Journal of Social Sciences, 24(1), pp. 7-32. Retrieved December 13, 2023, from <https://www.researchgate.net>
- Rahman A 2017, Tax Compliance in Indonesia: The Role of Public Officials as Taxpayers, pp. 231. Retrieved December 17, 2023, from <https://ris.utwente.nl/thesis>
- Samuel, A. B., & Vismanadham, P 2013, An assessment of business income taxpayers tax knowledge, tax complexity, and tax compliance: a case of Amhara Regional State of Ethiopia, International Journal of Science And Research, pp. 37. Retrieved February 19, 2023, from <https://www.ijsr.net/archive/v5i5/NOV16>
- Sebele, F. & Chinoda, T 2019, Knowledge, Tax System Complexity Perceptions and Attitudes of the Commercial Sugarcane Farmers and Their Influence on Tax Compliance in the Lowveld Area, Zimbabwe, 4(4), pp. 412. Retrieved February 19, 2023, from <https://www.researchgate>
- Sebele-Mpofu, F. Y., & Msipa, C 2020, Feasibility of administering informal sector taxation: Approaches and hurdles. A case of the informal sector in Bulawayo Zimbabwe, pp. 194-198. Retrieved February 30, 2023, from <https://www.ijisrt.com/assets/upload/files/IJISRT20FEB047>
- Simuyu, K.E. & Jagongo, A. (2019), "Impact of online tax filing on tax compliance among small and medium enterprises in Kibwezi Sub-county in Kenya", International Journal of Current Research, Vol. 9 No. 1, pp. 45196-45206. Retrieved December 17, 2023, from <https://doi.org/10.1108>
- Sinnasamy, P, & Bidin, Z 2017, The moderating effect of probability of detection on the determinants influencing excise duty non-compliance in Malaysia, pp. 69. Retrieved February 22, 2023, from <https://www.researchgate.net>
- Slemrod, J 2019, Tax Compliance and Enforcement. Journal of Economic Literature, 57(4), pp. 904-954. Retrieved February 25, 2023, from <https://doi.org/10.1257/>
- Sommerfield, A 1994, Concepts of Taxation, San Diego: Dryden Press, pp 345-347. Retrieved February 25, 2023, from <https://doi.org/11.1347/>
- Song, YD, & Yarbrough, T 1978, Tax Ethics and Taxpayers Attitude: A Survey Public Administration Review, pp. 442-452. Retrieved March 3, 2023, from <https://doi.org/10.2307>
- Thamrongsak, S, Kanjana, P 2022, Personal Income Tax in Thailand: Problems that are hidden, pp. 2. Retrieved December 13, 2023, from <https://so03.tci-thaijo.org>.
- Twum, K.K., Amaniampong, M.K., Assabil, E.N., Adombire, M.A., Edisi, D., Akuette, C 2020, "Tax Knowledge and Tax Compliance of Small and Medium Enterprises in Ghana", Southeast Asia Journal of Contemporary Business, Economics and Law, 21(5), pp. 222-227. Retrieved February 23, 2023, from <http://seajbel.com/SEAJBEL21267-1>
- Vaughan, G. & Hogg M.A 2005. Introduction to social psychology, pp. 14. Retrieved January 28, 2023, from <https://library.hugonote.com>
- Wassermann, M. & Bornman M 2020, Tax knowledge for the digital economy, Journal of Economic and Financial Sciences, 13(1), p. 1-11. Retrieved February 23, 2023, from <https://doi.org/10.4102/>
- Youde, S. & Lim, S 2019, Tax Compliance. Global Encyclopedia of Public Administration, Public Policy, and Governance, pp.1-5. Retrieved: February 23, 2023, from <https://doi.org/10.1007>
- Yang, J., Chen ML., Fu, CY., & Chen, XD 2020, Environmental Policy, Tax, and The Targe of Sustainable Development, Environmental Science and Pollution Research, 27(5), pp. 117-132. Retrieved March 12, 2023, from <https://www.researchgate.net/publication/332757199>

Yusnidar, J. S. D. 2015, Pengaruh faktor-faktor yang mempengaruhi kepatuhan wajib pajak dalam melakukan pembayaran pajak bumi dan bangunan perdesaan dan perkotaan, *Jurnal Perpajakan (JEJAK)*, 1(1), Retrieved February 23, 2023, from <https://media.neliti.com/pubication>