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# The Relationship Between Tax Knowledge and Compliance: An Empirical Study

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**Abstract:** Tax payment compliance promotes fiscal deficit and public debt mitigation, which ensures continuous funding to the development of the economy and society. Nevertheless, notwithstanding the government's relentless efforts to increase compliance to tax payment, non-compliance remains a significant issue, particularly in Jordanian companies and this has been having negative effects on the revenues of the Jordanian government. Previous research on tax knowledge and its impact on tax compliance in Jordanian firms listed on the Amman Stock Exchange have been few and far between, thus the primary goal of this study is to investigate the effect of tax knowledge on tax compliance in such a situation. The survey approach was utilized in the research, which included the distribution of questionnaire copies to a hundred and ninety-one listed enterprises in Jordan. A total of 166 questionnaire copies were found and determined to be valid for further examination. The collected data was utilized to evaluate the hypotheses using PLS-SEM. According to the findings, tax knowledge had a favorable and considerable impact on tax compliance. This study recommends future studies to conduct more studies on the study determinants and it contributes to literature and practice through new information which can be used by policymakers of listed companies in Jordan in their quest to enhance the tax payment compliance of the firms.

**Keywords:** Tax compliance, Tax knowledge, Jordanian firms.

## 1.1 Introduction

One of the primary state revenues main sources is taxes and it is used to realize the state budget of the government [1, 2]. Taxation represents the contributions of the people to the state according to law (with no reciprocal services/national partners' money or commodities donations), and this can be used to fund state households of the public at large [3]. Majority of governments in the world largely depend on tax revenue to fund their expenditure along with development objectives that are of long-term categories [4]. Moreover, tax is a government cost imposed businesses that generate revenues, but considering firms and legal bodies aim to obtain higher profits, they often look for solutions to mitigate the taxes they need to pay. Essentially, tax payments shift the company's wealth to the state and thus, majority of companies arrange management structure in a way that eventually decreases their obligations towards tax payment [5]. According to [6], companies seeking for profit, taxable income and positive interest rates continue to search for

ways to ignore their revenues, instead highlighting their costs to mitigate their taxes value [7-9]. Literature on the field of finance shows that the efforts of the companies to mitigate their tax expense are categorized under tax management or tax evasion [10]. Evidently, tax evasion continues to be an attractive topic for academic and policy-maker circles and thus, it is not surprising that the practical implications of tax-related behavior are extensive and indubitable. Although the topic has been persistently debated, several studies dedicated to examining the effects of systematic parameters on the inclination of the people to adhere to tax laws still provide mixed findings and inconclusive evidence [11]. The significance of the topic can be evidenced by [12] tax evasion collected data from 145 countries which constitute US\$3.1 trillion as lost revenues in 2010 alone – this amount exceeds 5% of GDP of the countries, as well as, 54.9% of their health expenditure. In recent empirical findings, tax evasion appears to be decreasing, with average shadow economy (tax evasion

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proxy) exceeding 30% of GDP [13]. As a result, the efficient and timely recourse against tax evasion has become an urgent government task and has attracted the attention of majority of studies. Based on the International Monetary Fund (IMF), tax evasion leads to 2-3% loss of OECD [1] tax revenues annually, with 6-13% attributed to lower income nations [14]. In the U.S. alone, tax evasion reflected three quarters of the fiscal deficit of the country in 2019 alone [15]. Such significant tax evasion amount that is evidenced in developed nations is of increasing concern to their developing counterparts, where tax evasion measurements are challenging because of the extent of informal economy, corrupt officials and auditing high costs. As a result, a tax gap exists in majority of the developing countries' budgets (a gap that reflects the shortage of government revenues stemming from collecting taxes that is lower than what is due. This is exacerbated by low policies enforcement and lack of statistical and behavioral measures which eventually leads to a challenging attempt to find out tax evasion reasons and ultimately wider deficits that have so far have no recourse or solution [16]. In this research, the focus is placed on the Arab country in that requires funds for financing and sustaining its development goals, namely Jordan.

The study contributes to extant tax evasion literature as it documents and illustrates the association between tax knowledge and tax evasion. It is high time for government tax authorities decrease the occurrences of tax evasion by making taxpayers aware of the advantages of tax compliance, which could have a positive impact on their attitude and their eventual tax compliance. It is crucial for tax authorities to promote education on tax and tax knowledge to extend awareness on the tax compliance awareness. With tax knowledge in place, taxpayers may be more inclined to comply with tax laws.

## 2. Literature Review

Understanding tax evasion behavior is conceivable when conventional economic and financial variables are taken into account [17], as well as the amount of penalties and audit rates [18]. Despite the importance of enforced tough laws and strong fines, backed by state authority, in reducing instances of tax evasion, the impact of non-coercive measures in enhancing tax compliance behavior should not be overlooked [19]. This may be shown by the fact that the deterrent effect and prospective penalties in the majority of countries are minor in comparison to the high level of tax compliance [20].

Tax evasion behavior may be influenced by ethical views, intrinsic motives, or societal reasons such as values, conventions, and morality [21]. It is feasible for a country to build a social identity for its taxpayers in order to push them toward the common good, with cooperation and cohesion interests supporting this effort [22]. In other words, if people are persuaded that tax compliance is the proper thing to do

and this belief becomes widespread, compliance with tax legislation will become the social norm and a highly acceptable conduct in society [23]. However, if the social norm is for businesses to evade tax payment, then may have diminished intrinsic incentives and drive toward tax payment [24]. This is why, in low-tax cultures, citizens consider tax evasion as reasonable and legitimate [25]. In such a circumstance, tax evasion spreads widely across society [26], resulting in the abolition of ethical tax compliance [27] and a general decline in tax non-compliance morality [28].

Literature indicates that system knowledge and IT can be the strategy to change the performance [29-32]. And increase efficiency [29, 33, 34] In the same way, [35] revealed that tax knowledge can influence the attitude of taxpayers [36] and a significant relationship exists between tax knowledge & positive tax attitude – whereas lack of such knowledge can lead to negative tax attitude. In other words, tax knowledge can change the behavior of people towards tax laws compliance. This is because the attitudes of taxpayers are crucial for their behavior and as such taxpayers' behavior can be influenced through their tax knowledge [37]. Various views and attitudes among Australian public were noted by Coleman and [38] concerning tax system and issues regarding tax payment compliance.

Knowledge is a highly valued situation in which a person is in close contact with their surroundings [31, 39]. More importantly, the unequal knowledge levels/tax system participation among the people could prevent their attitude change and if tax system knowledge can resolve misconceptions on tax, compliance behavior of taxpayers can be changed regardless of their tax morale and the tax laws in place [40]. Literature shows that some researchers showed the influence of awareness of taxpayers of their social obligation towards payment on their compliance, thereafter they will be more inclined towards such compliance [41], while others indicated the advantage of helping taxpayers comply to payment as opposed to incurring higher expenses in imposing activities on those who are not willing. Such assistance can be in the form of provision of education on how to become better and responsible citizens, which could result in higher revenues for the tax authorities as opposed to wasting time, effort and money on pursuing evaders [42].

Knowledge on tax law by the taxpayers can equip them with the right information and understanding the laws and processes of tax obligations compliance [43]. Specific tax knowledge is required for the taxpayers to obtain so that they may understand their tax payment responsibilities, and ultimately comply with the government imposed tax laws [44]. Therefore, tax knowledge is a pre-requisite for voluntary tax compliance system and is crucial in connection to the accurate tax liability determination [45]. Malaysian studies by [46] revealed that the top determinant of taxpayers' compliance behavior based on a self-assessment

system is tax knowledge, and this has been empirically evidenced by [47, 48]. Both studies have illustrated the increased voluntary compliance through increased tax knowledge and such self-assessment system has been extensively used all over the globe highlighting the level of non-compliance. The change in responsibilities for accurately determining tax liability from the tax administration to taxpayers could be the reason behind lack of compliance. Such responsibilities can be met by ensuring the familiarity of taxpayers with the current tax laws. This holds true for Malaysia, where tax returns by the taxpayers are viewed to be their assessment and penalty mechanisms assessment that are applicable in cases of non-submission of an accurate tax return within a specific duration. The taxpayer is directly accountable to the tax authorities in a self-assessment system if the need for an audit arises [49]. Similarly, [50] opined that knowledge regarding tax liability computation by the taxpayer determines his/her ability to calculate accurate tax liability. The studies accept that there are studies reflecting the lack of significant correlation of tax knowledge of respondents and their tax compliance behavior [51].

The above reviewed studies confirm the role of tax knowledge in the tax compliance decision and the tax knowledge validity as the element that enhances compliance towards tax payment. However, the author of this study believes that the use and measurement of tax knowledge in literature have been inconsistent, and as such, proposes that tax knowledge constitutes three elements, which are general, legal and procedural knowledge and future studies may use the framework for analyzing and measuring tax knowledge as a driver and determinant of tax compliance. In other words, literature indicate inconclusive results when it comes to the tax knowledge-tax compliance relationship, with the importance of the former to the latter being a new interest [44]. Based on the above discussion of literature, it is clear that tax knowledge is associated with tax compliance despite the inconsistent results reported. Most studies dedicated to the tax evasion topic inadvertently ignored tax compliance, while others examined the relationship between the two at the individual level rather than business level. This highlights the need for studies to tackle the examination of the relationship between the constructs because of the influence of tax knowledge on tax compliance behavior. Consequently, as yet, there has been no study that examined the tax knowledge-tax compliance relationship in the context of the Middle East and Arab countries, stressing on the need for such investigation, particularly in the context of Jordan. Based on the above and the deterrence theory, the study formulates the following hypothesis for testing;

***H1: There is a positive relationship between tax knowledge and tax compliance.***

## Social Learning Theory

According to the social learning theory, the environment affects human behavior [52] and that learning behavior is among the important elements of the environment, with individuals in the environment directly or indirectly influencing others behavior. Based on the theory's postulation, individuals and groups learn from one another, particularly using orientations, imitations and observations. In the context of this study, where tax compliance behavior is in focus, social learning theory is aligned with the tax knowledge acquisition of taxpayers via social learning process. According to [53], tax knowledge is a pre-requisite of taxpayers' compliance behavior determination. In the same way, social learning can be connected to obedience and compliance [54] and that enhanced compliance is possible through shared learning. Thus, this study uses the social learning theory as the underpinning theory.

### Measurement

This study measures tax knowledge in companies by 15 items adopted from [55], which were tweaked to be aligned with the study objectives. This sub-section is dedicated to the measuring the perceptions of respondents concerning the items using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Basically, strongly disagree indicates unfair tax rate, whereas strongly agree indicates fair tax rate. Tax rate measurement is measured by the items tabulated in Table 1.

Table 1 *Measurement of Tax Knowledge*

Items
1. I am knowledgeable about the numerous tax rights and duties.
2. Tax education has increased my awareness of my need to pay my taxes.
3. My tax knowledge has taught me that tax rates are reasonable and justifiable.
4. Tax education has increased my awareness of the perks and privileges associated with taxation.
5. My tax knowledge has equipped me with the ability to estimate my own income.
6. Tax knowledge has aided me in self-auditing my own income.
7. Tax knowledge has equipped me with the ability to forecast my business's income and profit.
8. I've received instruction on how to properly maintain my accounting records.
9. I've been taught to seek help in maintaining financial records.
10. Tax education has made me aware of the need of preparing and presenting accounts to tax inspectors.
11. As a result of tax education, I am competent to undertake self-assessment.
12. My tax knowledge has made me aware of the consequences of non-compliance.
13. Tax education has made me aware of the possibility of my firm being shut down for non-compliance.

14. Tax education has made me aware of the consequences of non-compliance.

15. Tax education has increased my awareness of the possibility of prosecution for non-compliance.

Adapted : [55]

To assess tax compliance, five questions from [56]) were used, with respondents asked to offer their thoughts on a five-point Likert scale ranging from 1 (strongly disagree) to 5. (strongly agree). In instance, 1 denotes non-compliance with sales tax payment requirements, while 5 denotes compliance with sales tax payment requirements. The tax compliance construct's measurement components are listed in Table 2.

Table 2 Measurement of Sales Tax Compliance

Items
1. I was able to make voluntary tax payments.
2. I pay my taxes without contemplating how to save money.
3. I have never been audited when I have submitted my taxes with the relevant tax authorities.
4. I've always complied with all applicable tax laws (obedience to tax payment)
5. I am certain that by paying my taxes, I am doing the right thing.

Adapted: [56]

### 3. Research Method

In order to address the research questions, a quantitative study technique was used in this study. The study's sample comprised of Jordanian listed enterprises classified into three sectors based on ASE (financial sector, industrial sector, and service sector). This research concentrated on the industrial and service sectors, which accounted for 56 and 135 enterprises, respectively, as of 2021. A total of 171 questionnaire copies were obtained from respondents over a 1-month period, however 5 were incomplete and were therefore excluded from further research, leaving 166 usable questionnaire copies. According to [57, 58]), a response rate of 30% or more is regarded acceptable in a survey study.

Furthermore, since this research comprises a single latent construct, a 5:1 ratio provided by [59] was used to determine the number of observations to the number of latent study variables, and so 166 usable replies was judged appropriate. Furthermore, [57, 58] demonstrated that the least sample determination, desired power level, significance level, and number of predictors must all be considered. The needed sample size, according to them, may be estimated using the formula:  $N [50 + 8m]$ , where  $m$  is the number of independent latent variables and  $n$  denotes the number of instances. As a result, the research applied the method to produce the fewest number of instances, which turned out to be 58 – and as a

result, 166 examples or observations are eligible for further investigation.

### 4. Data Analysis

PLS-SEM was used in this work to analyze data and evaluate the proposed hypothesis. Scholars agree on the efficacy of PLS-SEM in certain settings [59] and its benefit of ease for assessing models with higher-order latent variables [60]. PLS-SEM has also been shown to be a competent tool for evaluating latent variables with multiple observable variables, making it an appropriate alternative to use in circumstances when data features do not match the normality and sample size assumptions [59]. [60, 61] offered a rule of thumb for examining the validity and reliability of a measurement model utilizing Composite Reliability (CR) and Cronbach's Alpha (CA) values in this respect. Table 3 shows both values, and based on the table, the values above 0.70, establishing the variables dependability and internal consistency. The literature on indicator reliability suggests a cut-off value of 0.40. (e.g., [59, 60]).

In addition, the research acquired the Average Variance Extracted (AVE) value to support the measurement model's validity (see Table 3 for AVE values). The AVE readings were all more than 0.50.

Table 3  
CRONBACH ALPHA, AVE, AND ITEM LOADING.

Latent construct	Items	Loading	CR	CA	AVE
Tax Compliance (TM)	TC1	0.789	0.818	0.810	0.682
	TC2	0.809			
	TC3	0.809			
	TC4	0.748			
	TC5	0.671			
Tax Knowledge (TK)	TK14	0.808	0.896	0.838	0.603
	TK1	0.798			
	TK2	0.824			
	TK3	0.765			
	TK4	0.798			
	TK5	0.824			
	TK6	0.765			
	TK7	0.798			
	TK8	0.824			
	TK9	0.765			
	TK10	0.798			
	TK11	0.824			
	TK12	0.765			
TK13	0.798				

As suggested by [59], several of the items were omitted since the AVE values fluctuated from 0.40 to 0.70 (see Table 3), which required the removal of certain values. More than half of the indicator's volatility can be accounted for by the model's variables. Table 4 shows the results of the Squared-AVE test for discriminant validity, and it was shown to have higher values than the correlation with other variables. The validity and reliability of the measurement model were established as a consequence of the preceding experiments. Following the study of the measurement model, hypotheses were tested using the structural model. The PLS algorithm and bootstrapping approach, with a resample of 5000, were used to analyze the path coefficients and the significance level of each variable in the structural model. Table 5 shows the results of the structural model evaluation. The correlation between tax knowledge and tax compliance was found to be significant ( $= 0.127$ ,  $t = 2.365$ ,  $p 0.001$ ), which supports the hypothesis. However, the research model explained 21% (R<sup>2</sup>) of the dependent variable, namely tax compliance, which indicates its high exploratory strength.

Table 5. RESULT OF HYPOTHESES TESTING (DIRECT RELATIONSHIP)

H	Relationship	Path coefficient	T.V	P V	Decision
H1	TK -> TC	0.127	2.365	0.009**	Supported

### 5. Discussion

The major goal of the research was to investigate the impact of tax knowledge on tax compliance, with the premise that tax knowledge is one of the most important factors of tax compliance. This research postulated a positive and substantial association between tax knowledge and tax compliance (H1), and the empirical findings confirmed the hypothesis and largely accepted the two's strong and positive relationship. The studies also emphasized the importance of tax expertise in both company tax compliance and tax compliance. This finding indicates that the more the taxpayers' tax knowledge, the greater their compliance with tax payment. As a result, it is critical for taxpayers to understand taxation, especially the significance of taxes in the country's financial progress. Taxpayers' conduct is influenced by their perception of taxes; hence, their understanding of the taxation idea should be enough to enable them to satisfy their duties and collect their tax rights. Tax knowledge is supposed to raise taxpayers' understanding of how to satisfy their tax responsibilities [62].

The research findings are consistent with those published by [63], indicating that tax knowledge has an impact on tax compliance. They are also consistent with the findings of [64], which found that tax knowledge had an impact on taxpayer compliance with regard to tax payment. Similarly, [65] research found that lack of awareness about taxes might lead to negative attitudes toward them, but enough knowledge can lead to favorable sentiments.

In general, academics have focused on discovering strategies to improve tax compliance, and the majority of them advocate for tax knowledge upgrading [66]. Kamleitner et al. (2012) discovered the need of enhancing company level tax knowledge for taxpayers to grasp and deal with the revenue entities administrative and legislative requirements in the same result quality.

Furthermore, assuming that compliance with relevant tax law is dependent on comprehension of the legislation [66], one method of increasing tax compliance is to improve tax awareness among taxpayers [46]. As a result, it is beneficial to create a tax knowledge framework in which tax knowledge drives tax compliance, with tax compliance behavior as the ultimate goal. It is suggested that the idea of tax knowledge remains vague in tax compliance behavior and is often utilized in a more broad sense, as a consequence of which a standardized universal framework of the term remains elusive despite its value in future research [67]. In conclusion, the results of this research suggest a strong and favorable association between tax knowledge and tax compliance among Jordanian listed enterprises.

### 6. Conclusion, Policy Implications, Limitations and Recommendations

Based on the research goals met, various contributions to theory and practice in the context of Jordanian enterprises may be noted. Theoretically, this research adds to the accounting literature, especially the tax compliance-tax knowledge link in the context of Jordanian listed enterprises and firms in other developing countries. Literature on this issue is still sparse, and to the best of the author's knowledge, this study is the first to evaluate the influence of tax knowledge on tax compliance in the Middle East environment, specifically in Jordan, demonstrating the study's contribution to closing the literature gap. The findings revealed that tax knowledge has a considerable influence on tax compliance, but as with previous research, it has limitations that must be considered when interpreting and generalizing the findings. These restrictions should be considered as possibilities for other research routes in the future. The research model explained 21% of the overall variation in sales tax compliance, indicating that there are other factors at work when it comes to the remaining 79% variance. Future research may look at different constructions and their impact on tax compliance, utilizing the current one as a stepping stone. This is particularly true for the Middle Eastern Arab nations. Future research may use the theoretical framework produced in this study while keeping the geographical location in mind, as well as expanding the study to investigate additional Middle Eastern nations.

### References

1. Sutrasna, K.V.P.Y., et al., *The Influence of*

- the State Budget of Income and Expenditure on the Defense Budget.* International Journal of Social Science And Human Research, 2022. **5**(1).
2. Jiang, H.-D., L.-J. Liu, and H.-M. Deng, *Co-benefit comparison of carbon tax, sulfur tax and nitrogen tax: The case of China.* Sustainable Production and Consumption, 2022. **29**: p. 239-248.
  3. Albab, F.N.U. and E. Suwardi, *The Effect of Tax Knowledge on Voluntary Tax Compliance with Trust as a Mediating Variable: A Study on Micro, Small, and Medium Enterprises (MSMEs).* The Indonesian Journal of Accounting Research, 2021. **24**(3): p. 381-406.
  4. Nguyen, V.M.H., et al., *The Effects of Emotion, Trust and Perception on Tax Compliance: Empirical Evidence from Vietnam,* in *Advances in Taxation.* 2021, Emerald Publishing Limited.
  5. Salehi, M., H. Tarighi, and T.A. Shahri, *The effect of auditor characteristics on tax avoidance of Iranian companies.* Journal of Asian Business and Economic Studies, 2020.
  6. Watts, M.M., *2003 Tax Act Requires Revision to Macrs Tables.* Available at SSRN 420400, 2003.
  7. Ali, B.J. and M.S. Oudat, *Accounting Information System And Financial Sustainability Of Commercial And Islamic Banks: A Review Of The Literature.* Journal of Management Information & Decision Sciences, 2021. **24**(5): p. 1-17.
  8. Ali, B.J., A.A. Salameh, and M.S. Oudat, *The Relationship Between Risk Measurement And The Accounting Information System: A Review In The Commercial And Islamic Banking Sectors.* PalArch's Journal of Archaeology of Egypt/Egyptology, 2020. **17**(6): p. 13276-13290.
  9. Alshweesh, R.G.M. and B.J. Ali, *An Empirical Study on the Influence of Online Service Quality on Customer Satisfaction: A Study of Royal Jordanian Airline.* European Journal of Business and Management 2017. **9**(18): p. 78-88.
  10. Purwaka, A.J., et al., *Cost of capital, corporate tax plannings, and corporate social responsibility disclosure.* Jurnal Akuntansi, 2022. **26**(1): p. 1-22.
  11. Górecki, M.A. and N. Letki, *Social norms moderate the effect of tax system on tax evasion: Evidence from a large-scale survey experiment.* Journal of Business Ethics, 2021. **172**(4): p. 727-746.
  12. Murphy, R., *The cost of tax abuse. A Briefing Paper on the Cost of Tax Evasion Worldwide.* Tax Justice Network, Chesham, 2011.
  13. Medina, L. and M.F. Schneider, *Shadow economies around the world: what did we learn over the last 20 years?* 2018: International Monetary Fund.
  14. Dabla-Norris, E., et al., *The quality of tax administration and firm performance: evidence from developing countries.* International Tax and Public Finance, 2020. **27**(3): p. 514-551.
  15. Gale, W.G. and A. Krupkin, *How big is the problem of tax evasion? Brookings Institution.* 2019.
  16. AbdelNabi, M., K. Wanas, and S. Mansour, *How can tax compliance be incentivized? An experimental examination of voice and empathy.* Review of Economics and Political Science, 2021.
  17. Alm, J., Y. Liu, and K. Zhang, *Financial constraints and firm tax evasion.* International Tax and Public Finance, 2019. **26**(1): p. 71-102.
  18. Keller Jr, C.E., *An experimental investigation of how ethical orientations, tax rates, penalty rates, and audit rates affect tax compliance decisions.* 1997: The University of Tennessee.
  19. Bird, R. and K. Davis-Nozemack, *Tax avoidance as a sustainability problem.* Journal of Business Ethics, 2018. **151**(4): p. 1009-1025.
  20. Mascagni, G., C. Nell, and N. Monkam, *One size does not fit all: a field experiment on the drivers of tax compliance and delivery methods in Rwanda.* 2017.

21. Alm, J. and B. Torgler, *Culture differences and tax morale in the United States and in Europe*. Journal of economic psychology, 2006. **27**(2): p. 224-246.
22. Wenzel, M., *The multiplicity of taxpayer identities and their implications for tax ethics*. Law & Policy, 2007. **29**(1): p. 31-50.
23. Young, A., et al., *Individual tax compliance in China: a review*. International Journal of Law and management, 2016.
24. Luttmer, E.F. and M. Singhal, *Tax morale*. Journal of economic perspectives, 2014. **28**(4): p. 149-68.
25. Kemme, D.M., B. Parikh, and T. Steigner, *Tax morale and international tax evasion*. Journal of World Business, 2020. **55**(3): p. 101052.
26. Lee, S., *Changes in the effect of corporate tax avoidance on the cost of debt over the past 25 years*. Pacific Accounting Review, 2022.
27. Lin, K.Z., S. Cheng, and F. Zhang, *Corporate social responsibility, institutional environments, and tax avoidance: evidence from a subnational comparison in China*. The International Journal of Accounting, 2017. **52**(4): p. 303-318.
28. Alasfour, F., M. Samy, and R. Bampton, *The determinants of tax morale and tax compliance: Evidence from Jordan*, in *Advances in taxation*. 2016, Emerald Group Publishing Limited.
29. Alawamleh, H.A., et al., *The Challenges, Barriers And Advantages Of Management Information System Development: Comprehensive Review*. Academy of Strategic Management Journal, 2021. **20**(5): p. 1-8.
30. Salameh, A., et al., *From Citizens Overview: Which Antecedents' Can Assist to Increase Their Satisfaction Towards the Ubiquity of Mobile Commerce Applications?* International Journal of Interactive Mobile Technologies, 2020. **14**(17): p. 45-55.
31. Ali, B.J., W.A.W. Omar, and R. Bakar, *Accounting Information System (AIS) and organizational performance: Moderating effect of organizational culture*. International Journal of Economics, Commerce and Management, 2016. **4**(4): p. 138-158.
32. Ali, B.J., R. Bakar, and W.A.W. Omar, *The Critical Success Factors of Accounting Information System (AIS) And It's Impact on Organisational Performance of Jordanian Commercial Banks*. International Journal of Economics, Commerce and Management, 2016. **4**(4): p. 658-677.
33. Ali, B.J. and I.A.A. AlSondos, *Operational Efficiency and the Adoption of Accounting Information System (Ais): A Comprehensive Review of the Banking Sectors*. International Journal of Management, 2020. **11**(6).
34. Shibly, M., et al., *The Relationship between Administrative Empowerment and Continuous Improvement: An Empirical Study*. Revista Geintec-Gestao Inovacao E Tecnologias, 2021. **11**(2): p. 1681-1699.
35. Abdullah, S., et al., *Property taxation: the encouraging factors for payment among the taxpayers*. Journal of Financial Management of Property and Construction, 2022.
36. Niemirowski, P. and A.J. Wearing, *Taxation agents and taxpayer compliance*. J. Austl. Tax'n, 2003. **6**: p. 166.
37. Palil, M.R., M. Akir, and W. Ahmad, *The perception of tax payers on tax knowledge and tax education with level of tax compliance: A study the influences of religiosity*. ASEAN Journal of Economics, Management and Accounting, 2013. **1**(1): p. 118-129.
38. Murphy, K., *An examination of taxpayers' attitudes towards the Australian tax system: Findings from a survey of tax scheme investors*. Austl. Tax F., 2003. **18**: p. 209.
39. AL-Qudah, M.K.M., A. Osman, and B.J.A.R. Ali, *Effect of human resource*



- polarization, training and development, and human resource stimulation on the strategic planning of human resources: evidence from the Government Ministry in Jordan. *Advances in Environmental Biology*, 2014: p. 675-679.
40. Fjeldstad, O.-H. and K. Heggstad, *Local government revenue mobilisation in Anglophone Africa*. 2012.
  41. Cialdini, R.B., *Social motivations to comply: Norms, values and principles*. Taxpayer compliance, 1989. **2**: p. 200-227.
  42. Devos, K. *Assessing the effectiveness of general anti-avoidance tax rules in Australia and the United Kingdom*. in *Global Business and Technology Association Annual International Conference 2016*. 2016. Global Business and Technology Association.
  43. Newman, W., et al., *Literature review on the impact of tax knowledge on tax compliance among small medium enterprises in a developing country*. *International Journal of Entrepreneurship*, 2018. **22**(4): p. 1-15.
  44. Wassermann, M. and M. Bornman, *Tax knowledge for the digital economy*. *Journal of Economic and Financial Sciences*, 2020. **13**(1): p. 1-11.
  45. NEGARO, G.T., *The effect of Tax Audit on Tax Compliance: In the case of Burayu City Administration Revenue Authority*. 2019, ADDIS ABABA UNIVERSITY.
  46. Loo, E.C., C. Evans, and M.A. McKerchar, *Challenges in understanding compliance behaviour of taxpayers in Malaysia*. *Asian Journal of Business and Accounting*, 2012. **3**(2): p. 2010.
  47. Palil, M.R., *Tax knowledge and tax compliance determinants in self assessment system in Malaysia*. 2010, University of Birmingham.
  48. Mohd Isa, K., *Corporate taxpayers' compliance variables under the self-assessment system in Malaysia: a mixed methods approach*. 2012, Curtin University.
  49. Arifiyanto, M.N., et al., *Legal politics regulation of self assessment system principles for taxpayer property reporting in general provisions and taxation procedures*. *Research, Society and Development*, 2020. **9**(11): p. e36791110105-e36791110105.
  50. Fauziati, P., et al., *The impact of tax knowledge on tax compliance case study in Kota Padang, Indonesia*. *Journal of Advanced Research in Business and Management Studies*, 2020. **2**(1): p. 22-30.
  51. Engida, T.G. and G.A. Baisa, *Factors influencing taxpayers' compliance with the tax system: An empirical study in mekelle city, Ethiopia*. *eJTR*, 2014. **12**: p. 433.
  52. Bandura, A. and R.H. Walters, *Social learning theory*. Vol. 1. 1977: Englewood cliffs Prentice Hall.
  53. Mandari, H. and D.N. Koloseni, *Electronic fiscal device (EFD) acceptance for tax compliance among trading business community in Tanzania: the role of awareness and trust*. 2017.
  54. Vaughan, G. and M.A. Hogg, *Introduction to social psychology*. 2005.
  55. Twum, K.K., et al., *Tax knowledge and tax compliance of small and medium enterprises in Ghana*. *South East Asia Journal of Contemporary Business, Economics and Law*, 2020. **21**(5): p. 2289-1560.
  56. Woodward, L. and L.M. Tan. *Small business owners' attitudes toward GST compliance: a preliminary study*. in *Australian Tax Forum*. 2015.
  57. Bougie, R. and U. Sekaran, *Research methods for business: A skill building approach*. 2019: John Wiley & Sons.
  58. Sekaran, U. and R. Bougie, *Research methods for business: A skill building approach*. 2016: john wiley & sons.
  59. Hair Jr, J.F., M.C. Howard, and C. Nitzl, *Assessing measurement model quality in PLS-SEM using confirmatory composite analysis*. *Journal of Business Research*, 2020. **109**: p. 101-110.
  60. Hair Jr, J.F., et al., *Advanced issues in partial least squares structural equation*

- modeling*. 2017: saGe publications.
61. Hair Jr, J.F., et al., *A primer on partial least squares structural equation modeling (PLS-SEM)*. 2021: Sage publications.
  62. Wijayanti, D.W. and N. Sasongko, *Pengaruh Pemahaman, Sanksi Perpajakan, Tingkat Kepercayaan pada Pemerintah dan Hukum Terhadap Kepatuhan Dalam Membayar Wajib Pajak (Studi Wajib Pajak pada Masyarakat di Kalurahan Pajang Kecamatan Laweyan Surakarta)*. 2017.
  63. Widayati, N. and A. Nurlis, *Faktor-faktor Yang Mempengaruhi Kemauan Membayar Pajak Wajib Pajak Orang Pribadi Yang Melakukan Pekerjaan Bebas (Studi kasus pada KPP Pratama Gambir Tiga)*. Makalah Simposium Nasional Perpajakan XIII (yang dipresentasikan pada tahun 2010), 2010.
  64. Oktaviani, R., et al., *The effects of taxpayer knowledge and taxation socialization on taxpayer compliance: The role of taxpayer awareness in developing Indonesian economy*. *Accounting*, 2020. **6**(2): p. 89-96.
  65. Hofmann, E., E. Hoelzl, and E. Kirchler, *Preconditions of voluntary tax compliance: Knowledge and evaluation of taxation, norms, fairness, and motivation to cooperate*. *Zeitschrift für Psychologie/Journal of Psychology*, 2008. **216**(4): p. 209-217.
  66. Wong, R.M., *Can education improve tax compliance? Evidence from different forms of tax education*. 2015.
  67. Bornman, M. and P. Ramutumbu, *A conceptual framework of tax knowledge*. *Meditari Accountancy Research*, 2019.