

## NEUROECONOMICS: TAX PLANNING AND THE ROLE OF DIGITAL LITERACY AS A MODERATION

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### Abstract

Taxpayer awareness in fulfilling their tax needs is closely related to individual logical awareness. Corporate taxpayer awareness is closely related to tax planning in order to save business. This study aims to determine the psychological and logical realm of tax planning. The research method used is quantitative and through incidental techniques, 100 respondents were obtained. The results of the study indicate that Tax Literacy has an effect on Tax Planning, as well as Taxpayer Morale has an effect on Taxpayer Planning. Furthermore, digital literacy has been shown to moderate the relationship between tax literacy and tax planning, but does not act as a moderator in the influence of tax morale on tax planning. Based on the results of this study, tax planning can be improved by considering the role of individual psychological and logical aspects from a neuroeconomic perspective. The rational and logical aspects of individual tax planners can be the basis for triggering reasonable tax planning and not violating applicable regulations.

**Keywords:** Neuroeconomics, Tax Planning, Tax Literacy, Tax Morale

## INTRODUCTION

In general, taxes are the main source of state revenue. The realization of tax revenue in 2023 reached IDR1,869.2 trillion, which exceeded the target of the 2023 State Budget (APBN) of IDR1,718.0 trillion. However, in the previous year, 2022, the realization of revenue of IDR1,547 trillion did not reach the target of IDR1,717 trillion. The economic downturn in 2020 and 2021 caused by the pandemic lowered the revenue target, but the realization actually exceeded the revenue target. This can be seen in table 1 below.

**Table 1.**  
**The Revenue from Taxpayers**

<b>Year</b>	<b>Revenue Target</b>	<b>Realization</b>
2019	1.546 Trillion	1.518 Trillion
2020	1.404 Trillion	1.546 Trillion
2021	1.229 Trillion	1.285 Trillion
2022	1.717 Trillion	1.547 Trillion
2023	1.718 Trillion	1.869 Trillion

Source: Directorate General of Taxes Performance Report (2024)

The existence of this phenomenon, encourages this study to examine in general the rationality of taxpayers in fulfilling their tax obligations. The problem related to the payment of tax obligations is a representation of a social dilemma where there is a conflict of interest between individuals and public interests. In general, taxpayers want to enrich themselves to the maximum by outsmarting the basis for calculating the tax value that should be, but on the other hand, the taxes that must be paid to the state are used to finance various public and state interests (Arianty, 2023). Taxpayer awareness regarding this phenomenon is based on various psychological factors that are stimulated based on human nerves. Humans tend to act based on various literacies, information and knowledge that are processed in the brain's anatomical function (Suryati et al., 2021; Dickaut et al., 2010). Researchers argue that taxpayers have a tendency to process their needs, by looking for the best solution in outsmarting the basis for calculating the taxes charged, this aims to lower the tax obligations paid. The instinct in carrying out this strategy is a representation of the cognitive process of the human brain's function in determining the best decision to meet its needs, both in terms of tax obligations and personal gain. This is also in line with the explanation of Suryati et al (2021) that neuroscience, in this case neuroeconomics, underlies individual activities in organizations as taxpayer functions in designing, implementing regulations and making decisions in business activities including tax planning in them. The ability to plan business including tax activities in it is also effective in the context of the sustainability of the business of every business actor who is also a corporate taxpayer ((Poltak et al., 2021; Prawoto et al., 2023).

One of the tax planning factors reviewed from the anatomical function of the human brain is tax understanding. Tax literacy is an understanding and knowledge of taxation, including how to calculate, pay, and report taxes. This is done with the concept of self-assessment, so that brain function is fully reflected in the perspective of literacy that is understood. Tax planning as a business action of corporate taxpayers cannot be carried out optimally without previously obtained literacy as knowledge in the cognitive realm (Goyal & Kumar, 2020). After the cognitive realm of tax literacy is fulfilled by corporate taxpayers, the tax planning carried out will also form a basic decision on the taxable figures that are transformative and responsible to be decided (De Clercq, 2023). Previous research conducted by Saida & Andani (2022); Rachmawati & Ramayanti (2022)

also found that tax literacy influences tax planning decisions. However, on the other hand, Noreen & Kristanto (2021) found something else that the complexity of tax regulations actually leads people to negative behavior related to taxes and represents inappropriate tax planning. Taxpayers have high morals, so they tend not to make tax reduction efforts that are included in tax planning. Internal and external factors, morals are an awareness that arises from within a person's conscience. However, related to good taxpayer morals, it can motivate taxpayers to carry out tax planning and this does not violate the rules in the legislation, because it is self-assessment. If taxpayers have better morals, then taxpayers will be better at carrying out tax planning without violating applicable laws. This research is supported by research conducted by Nathania (2016) that taxpayer morals partially have a significant influence on tax planning. Meanwhile, research by Anissa and Handayani (2015) showed opposite results.

The novelty of this research is the role of digital literacy as a moderator. This role is based on this fast-paced digital era. Digital literacy plays a crucial role as a bridge that strengthens the influence of tax literacy and taxpayer morals on effective tax planning. Easy access to various tax information through online platforms, official tax authority websites, applications, and discussion forums allows taxpayers with good digital literacy to deepen their understanding of tax regulations, rights, and obligations ((Bassey et al., 2022)). The ability to search, evaluate, and utilize this information effectively will improve the quality of tax planning made, help identify legitimate tax saving opportunities, and avoid potential risks of non-compliance ((Nyantakyi et al., 2024)). Furthermore, digital literacy also facilitates moral values in the implementation of tax obligations. Transparency of information, ease of online tax reporting, and interaction with tax authorities through digital channels can increase taxpayer awareness and accountability ((Meiryani et al., 2023)). Taxpayers who are proficient in digital literacy tend to more easily understand the positive impact of tax compliance on national development and have access to various sources of information that strengthen their moral awareness in carrying out tax obligations (Siagian et al., 2024). Thus, digital literacy not only improves technical understanding of taxation but also strengthens the ethical dimension in planning and implementing tax obligations. However, the role of digital literacy is still being tested at the level of tax compliance ((Triansyah & Rahmat Putra, 2025)). Based on the phenomena that occur and various differences in research results, the researcher aims to explore; 1.) What is the role of tax literacy in tax planning? 2. What is the role of tax morality in tax planning? 3.) What is the role of digital literacy in moderating the relationship between tax literacy and tax planning? 4.) What is the role of digital literacy in moderating the relationship between tax morality and tax planning?

## REVIEW OF LITERATURE

### Neuroeconomics

One of the subfields in behavioral finance that identifies the anatomical mechanisms of the brain is neuroeconomics where individual behavior is influenced by psychological factors is neuroeconomics (Maharani 2014). Neuroeconomics is a relatively new study, but this field of study requires a broader empirical study in Indonesia. This study is based on the concept of neuroeconomics in its role in explaining taxpayer behavior that is influenced by psychological factors. Several findings from neuroeconomic studies are discussed to provide an understanding of the contribution of the field of study to the development of science, especially behavioral accounting. The main objective of neuroeconomic science is to absorb a better understanding of taxpayer behavior by identifying psychological factors that impact tax planning behavior as a form of such behavior and are linked to the working mechanisms of the brain ((Clarke, 2020)).

Mardhhatilla et al (2023), explains that tax literacy is a form of effort to increase individual absorption of tax obligations so as to raise awareness in order to comply with taxes. Ghina et al, (2021) found that Tax Literacy is an alternative to increasing tax compliance. In order to realize the motivation and intention of taxpayers to pay taxes, an active role is needed from all taxpayers, and in realizing a society that complies with tax regulations. Tax literacy can be interpreted as the ability of individuals, namely Taxpayers (WP), in order to understand, access, and utilize tax information that aims to reflect taxpayer awareness in fulfilling their tax obligations (Ibda, 2019). In line with this research, tax literacy is interpreted as a dynamic process of developing tax calculation logic by following the dynamics of Indonesian conditions and gaining motivation within oneself to manage the existence of various factors that impact tax decision-making and its consequences. In addition, it also aims to find out the best solution in overcoming tax problems and using this knowledge as a basis for determining tax decision-making ((Bornman & Wassermann, 2020)). The decisions taken can be represented in various forms, in this context tax planning. Saida & Andani (2022); Rachmawati & Ramayanti (2022) found that tax literacy has an effect on tax planning decisions.

H1. Tax Literacy has an effect on tax planning

Tax morale is a motivation that unites a person in complying with their obligations as a taxpayer. It also refers to a person's sense of will or instinct in voluntarily contributing to the country by complying with and paying taxes on time. Taxpayer morale has an impact on determining public compliance and awareness in exercising rights and obligations in tax regulations. A good level of taxpayer morality can encourage taxpayers to carry out tax planning activities (Nathania, 2016). Tax planning in general does not violate the rules in the legislation, because of its self-assessment nature. If taxpayers have a high level of morality, the higher the taxpayers will carry out tax planning without violating applicable laws (Nadila & Silalahi, 2022; Lestari, 2019).

H2. Taxpayer Morale Affects Tax Planning

Digital literacy acts as a significant catalyst in strengthening the influence of tax literacy on the effectiveness of tax planning ((Mpofu & Mhlanga, 2022)). In this digital information era, a deep understanding of tax regulations (tax literacy) becomes more effective when supported by the ability to access, evaluate, and utilize this information online (digital literacy). Taxpayers who have good digital literacy can easily search for the latest regulatory interpretations, use online tax calculators, understand electronic reporting formats, and utilize various sources of tax information available on the internet (Mohammed & Tangl, 2024; Saptono et al., 2023). This ease of access and understanding of information allows taxpayers to make tax plans that are more accurate, strategic, and in accordance with applicable provisions. Furthermore, digital literacy also facilitates communication and interaction between taxpayers and tax authorities and with online tax consultation service providers. Digital platforms allow taxpayers to ask questions, participate in virtual tax socialization, and get the latest information updates more efficiently ((Arianty, 2023; Mpofu & Mhlanga, 2022)). The ability to effectively utilize these digital tools and platforms will improve taxpayers' understanding of the tax implications of their various financial decisions, resulting in more comprehensive and adaptive tax planning to changes in the tax environment ((Al-Rahamneh & Bidin, 2022; Kouam & Asongu, 2022; Setyowati et al., 2020). Thus, digital literacy not only expands the reach of tax information but also empowers taxpayers to apply this knowledge in their tax planning.

H3. Digital Literacy moderates the relationship between Tax Literacy and tax planning

Digital literacy plays a crucial role in balancing the moral impact of tax with tax planning strategies. In this information age, easy access to data and analytics enables taxpayers to better understand the ethical implications of their tax decisions. With adequate digital literacy, individuals and business entities can access information on how taxes contribute to social and economic development, as well as the consequences of aggressive tax avoidance ((Abu-Silake et al., 2024)). This helps foster awareness of the moral responsibility to contribute fairly, encourages stronger ethical considerations in every tax-related decision, and moderates the tendency to focus solely on fiscal benefits. Furthermore, digital literacy empowers taxpayers to distinguish between legitimate tax avoidance and illegal tax evasion ((Hayat et al., 2022)). Digital platforms provide resources to understand tax regulations, available incentives, and the boundaries of ethical tax planning practices. With this in-depth understanding, taxpayers can make informed decisions that optimize their tax position without violating moral or legal principles. This encourages responsible and transparent tax planning practices, which ultimately contributes to a fairer and more sustainable tax system for all parties ((Al-Mawali et al., 2022)).

H4. Digital Literacy moderates the relationship between Tax Moral and tax planning

## RESEARCH METHOD

This study uses quantitative and associative research methods. The data used are primary data obtained through the distribution of questionnaires. The population in this study was companies or corporate taxpayers of KPP Madya Malang. The sampling method in this study was non-probability sampling, namely, incidental sampling. Incidental sampling is a sampling technique based on coincidence, namely, anyone who accidentally meets the researcher can be used as a sample, if the person is suitable to be used as a sample. Not all individual taxpayers are used as research objects because the number is quite large. The technique for determining the number of samples in this study uses the Slovin formula. Based on this, the number of samples determined in this study is 99,912, rounded up to 100 samples. The dependent variable in this study is tax planning, while the independent variables are Tax Literacy and Taxpayer Morale. The statistical test tool used in this study is SmartPLS3.

## RESULTS AND DISCUSSION

The results of statistical testing begin with Validity and Reliability testing. Validity testing consists of convergent validity and Discriminant Validity testing. Convergent Validity testing consists of AVE and Communality testing, while discriminant validity is tested with the AVE Root. Table 1 presents the results of the AVE and Communality tests below:

**Table 1.**  
**AVE dan Communality**

Construct	AVE	Communality
LP	0,648	0,648
MP	0,662	0,662
PP	0,735	0,762
LD	0,793	0,749

Source: SmartPLS3 data processing (2024)

In analyzing convergent validity using SmartPLS, there is an AVE approach, which is the average loading squared from the construct indicators, and AVE is equivalent to the communality value (Ghozali and Latan, 2020). AVE and communality values of more than 0.5 are the convergent validity criteria that must be met. The AVE and communality data in Table 1 AVE and

Communality above show good convergent validity, meaning that the latent variable can represent more than half of its indicators. Convergent validity can also be evaluated through outer loading, the general rule is that the outer loading value is expected to be above 0.7, as described in Table 2 Outer loading below:

**Table 2.**  
**Outer Loadings**

<b>Instrument</b>	<b>LP</b>	<b>MP</b>	<b>PP</b>	<b>LD</b>
LP1	0,758			
LP2	0,882			
LP3	0,868			
LP4	0,847			
LP5	0,773			
LP6	0,777			
LP7	0,779			
MP1		0,783		
MP2		0,846		
MP3		0,842		
MP4		0,902		
MP5		0,869		
MP6		0,824		
MP7		0,927		
PP1			0,863	
PP2			0,879	
PP3			0,801	
PP4			0,829	
PP5			0,858	
PP6			0,783	
LD1				0,747
LD2				0,738
LD3				0,871
LD4				0,852
LD5				0,779

Source: SmartPLS3 data processing (2024)

Discriminant validity measures whether the constructs in the model are higher than other values. The parameters used are the square root of the average AVE and cross-loading.

**Table 3.**

**Square Root of AVE**

<b>Construct</b>	<b>AVE</b>	<b>LP</b>	<b>MP</b>	<b>LD</b>	<b>PP</b>
LP	<b>0,818</b>	<b>0,805</b>			
MP	0,762	0,679	<b>0,813</b>		
LD	0,778	0,611	0,622	<b>0,802</b>	
PP	0,735	0,737	0,771	0,639	<b>0,857</b>

Source: SmartPLS3 data processing (2024)

Next, reliability testing is carried out by conducting Cronbach's Alpha and Composite Reliability tests with the conditions of more than 0.6 and more than 0.7, respectively. The results are shown in the following table 5:

**Table 5.**  
**Cronbach Alpha and Composite Reliability**

<b>Construct</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>
LP	0,728	0,847
MP	0,915	0,932
LD	0,902	0,926
PP	0,940	0,951

Source: SmartPLS3 data processing (2024)

Structural model testing is done by looking at the R-square value, with an R-square value of 0.75, so that it can be concluded that it is moderate. The results of the SmartPLS 3.0 calculation produce path coefficients that can explain the relationship or influence between constructs in the following table:

**Table 6.**  
**Direct Effect**

<b>Hypotheses</b>	<b>Path Coefficient</b>	<b>P-Values</b>	<b>Desc.</b>
H1: LP → PP	0,285	0,029	Accepted
H2: MP → PP	0,285	0,006	Accepted

Source: SmartPLS3 data processing (2024)

The results of the study show that Tax Literacy has been proven to have an effect on Tax Planning. Based on the test results, it confirms that tax literacy absorbed by the logical realm of corporate taxpayers stimulates taxpayer behavior in carrying out tax planning. Tax planning is based on tax understanding, because it is unlikely that tax planning will be carried out without tax expertise (Goyal & Kumar, 2021; Hanlon et al., 2022). Tax planning expertise can be said to be based on the aim of saving tax obligations more precisely (Fthoui & Ghardallou, 2020). Corporate taxpayers tend to choose the type of tax that is in accordance with their business or business category, but tax payments and reporting are routine, timely and in accordance with the rules. This aims to adjust the existence and adapt so that the business and business continue to survive and grow (Bauer et al., 2019). This proves that neuroeconomics has been empirically proven to underlie tax planning behavior.

The test results also show that Tax Morale has been proven to have no effect on tax planning. Based on these statistical findings, it proves that the morale of corporate taxpayers is based on the cognitive domain which aims to carry out good tax planning in accordance with tax provisions without violating the law (Korostelkina et al., 2020). Tax morale reflects intrinsic motivation in order to comply with the obligation to pay taxes so that it indirectly contributes to tax planning (Czarnowski et al., 2021). The norm of life which also represents the taxpayer's instinct is the individual's belief that there is a moral perspective. On the other hand, Tax Obligations require individuals to carry out transparent reporting in tax obligations and are related to their behavior. This is shown in the tendency of corporate taxpayers to save on business, by utilizing the self-assessment loophole, so that morality becomes biased. In terms of tax morality,

tax planning is still based on fulfilling tax obligations without violating regulations. This loophole is carried out with the ability of human reasoning and logic to manage the tax base.

**Table 7.**  
**Moderation Test**

Hypotheses	Path Coefficient	P-Values	Desc.
H3	0,370	0,017	Accepted
H4	0,028	2,641	Rejected

Source: SmartPLS3 data processing (2024)

The results of the H3 test show that digital literacy acts as a significant moderator and even increases the influence of tax literacy on effective tax planning. In the digital era, understanding tax concepts and regulations becomes more optimal when individuals have the ability to access, process, and utilize tax information online (digital literacy). The ease of finding the latest regulations, accessing tax forms and applications, and participating in online discussions related to taxes empowers taxpayers to plan their obligations better and more accurately. Digital literacy opens the door to more interactive and interesting tax learning and understanding methods. Online platforms provide various resources such as explanatory videos, infographics, and tax calculation simulations that can significantly improve taxpayer understanding. The ability to use this technology effectively not only deepens tax knowledge but also facilitates more strategic tax planning in accordance with regulatory developments. Thus, digital literacy not only moderates, but actively increases the positive impact of tax literacy on the quality and efficiency of tax planning. The results of the Hypothesis 4 test show that digital literacy does not have a moderating effect on the relationship between tax morale and tax planning. Although digital literacy intuitively seems to support all aspects of online interactions, including taxation, some studies have shown that digital literacy may not significantly moderate the relationship between tax morale and tax planning. One perspective suggests that tax morale, as an internal belief and value, tends to be a key driver of ethical tax compliance and planning behavior, regardless of an individual's level of digital literacy. Research by Triansyah & Rahmat Putra (2025) found that tax morale directly affects tax compliance, and this influence is not significantly strengthened or weakened by digital literacy. This suggests that individuals with high tax morale are more likely to engage in responsible tax planning, whether or not they are proficient in digital technology.

Furthermore, the primary focus of digital literacy is on the technical ability to use technology and access information online. While this is important for navigating digital tax systems, such as e-filing or searching for regulatory information, this ability may not directly affect the ethical considerations underlying tax morale. Previous research suggests that factors such as socialization of compliance norms, trust in government, and tax law enforcement may have a stronger influence in moderating the relationship between tax morale and actual tax planning actions (Al-Rahamneh & Bidin, 2022; Prastiwi & Diamastuti, 2023)). Digital literacy, in this context, plays more of a role as a tool that facilitates the implementation of tax planning, rather than as a factor that changes how moral values are translated into such actions. Thus, although digital literacy is important for interacting with the modern tax system, evidence from previous research suggests that its influence as a moderator in the relationship between tax morale and tax planning may be limited. Tax morale as an internal commitment to civic duty is likely to be a more fundamental driver, and the effectiveness of ethical tax planning is more influenced by factors

related to legal awareness, institutional trust, and social norms, rather than simply the ability to use digital technology.

## CONCLUSION

The results of this study indicate that Tax Literacy and Tax Morality have an effect on Tax Planning. Tax Literacy that is logically absorbed by corporate taxpayers becomes a trigger for taxpayers in carrying out tax planning. While tax morality reflects the appropriateness of taxpayers in fulfilling their responsibility to pay taxes. By utilizing the self-assessment loophole, taxpayers tend to manage their tax imposition in order to save, and this is a decision that does not violate the law. Literacy. Digital literacy has been shown to moderate the relationship between the influence of tax literacy on tax planning, but does not moderate the relationship between tax morality and planning. The implications of the finding that digital literacy does not significantly moderate the relationship between tax morality and tax planning have several important consequences for the formulation of tax policies and practices. First, efforts to increase compliance and responsible tax planning should be more focused on strengthening tax morality itself through educational campaigns on good citizenship values, increasing transparency and accountability in the use of tax funds by the government, and fair and effective law enforcement. While digital literacy remains crucial to facilitate taxpayers' interaction with the modern tax system, the main investment in improving compliance should target ethical aspects and awareness of obligations, not merely the technical ability to use digital platforms. Second, this study indicates that tax compliance improvement strategies cannot rely solely on digitalization as the main solution. While digital platforms facilitate reporting and access to information, this does not automatically increase moral awareness or encourage more ethical tax planning. Governments and tax authorities need to develop a more holistic approach, combining easy digital access with efforts that directly instill moral tax values and increase taxpayers' trust in the tax system. This includes educational programs that emphasize the importance of taxes for national development, the negative consequences of tax evasion, and building open and transparent dialogue between the government and taxpayers. Thus, effective tax policies must recognize that compliance is the result of a combination of easy digital access and the internalization of strong moral values. This study is limited to a quantitative approach, while psychological research requires in-depth information exploration. Further research can consider qualitative and mixed method approaches to obtain more complex results.

## REFERENCES

- Abu-Silake, S. A., Alshurafat, H., Alaqrabawi, M., & Shehadeh, M. (2024). Exploring the key factors influencing the actual usage of digital tax platforms. *Discover Sustainability*, 5(1). <https://doi.org/10.1007/s43621-024-00241-2>
- Al-Mawali, H., Al Natour, A. R., Zaidan, H., Shishan, F., & Rumman, G. A. (2022). Examining the Factors Influencing E-Tax Declaration Usage among Academics' Taxpayers in Jordan. *Informatics*, 9(4). <https://doi.org/10.3390/informatics9040092>
- Al-Rahamneh, N. M., & Bidin, Z. (2022). The Effect of Tax Fairness, Peer Influence, and Moral Obligation on Sales Tax Evasion among Jordanian SMEs. *Journal of Risk and Financial Management*, 15(9). <https://doi.org/10.3390/jrfm15090407>
- Arianty, F. (2023). *e-Bupot Unification as an Application to Fulfill Tax Obligations for Tax Withholder*. 43. <https://doi.org/10.3390/proceedings2022083043>

- Basse, E., Mulligan, E., & Ojo, A. (2022). A conceptual framework for digital tax administration - A systematic review. In *Government Information Quarterly* (Vol. 39, Issue 4). Elsevier Ltd. <https://doi.org/10.1016/j.giq.2022.101754>
- Bornman, M., & Wassermann, M. (2020). Tax knowledge for the digital economy. *Journal of Economic and Financial Sciences*, 13(1). <https://doi.org/10.4102/jef.v13i1.461>
- Clarke, C. (2020). Functionalism and the role of psychology in economics. *Journal of Economic Methodology*, 27(4), 292–310. <https://doi.org/10.1080/1350178X.2020.1798016>
- De Clercq, B. (2023). Tax literacy: what does it mean? *Meditari Accountancy Research*, 31(3), 501–523. <https://doi.org/10.1108/MEDAR-04-2020-0847>
- Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. In *International Journal of Consumer Studies* (Vol. 45, Issue 1, pp. 80–105). Blackwell Publishing Ltd. <https://doi.org/10.1111/ijcs.12605>
- Hanlon, M., Yeung, K., & Zuo, L. (2022). Behavioral Economics of Accounting: A Review of Archival Research on Individual Decision Makers\*. In *Contemporary Accounting Research* (Vol. 39, Issue 2, pp. 1150–1214). John Wiley and Sons Inc. <https://doi.org/10.1111/1911-3846.12739>
- Hayat, N., Salameh, A. A., Mamun, A. Al, Helmi Ali, M., & Makhbul, Z. K. M. (2022). Tax Compliance Behavior Among Malaysian Taxpayers: A Dual-stage PLS-SEM and ANN Analysis. *SAGE Open*, 12(3). <https://doi.org/10.1177/21582440221127190>
- Korostelkina, I., Dedkova, E., Varaksa, N., & Korostelkin, M. (2020). Models of tax relations: Improving the tax culture and discipline of taxpayers in the interests of sustainable development. *E3S Web of Conferences*, 159. <https://doi.org/10.1051/e3sconf/202015906014>
- Kouam, J. C., & Asongu, S. A. (2022). Effects of taxation on social innovation and implications for achieving sustainable development goals in developing countries: A literature review. *International Journal of Innovation Studies*, 6(4), 259–275. <https://doi.org/10.1016/j.ijis.2022.08.002>
- Meiryani, Alkhanifani, D., & Ramadhanti, V. (2023). The Effect of E-System Modernization, Self Efficacy and Digital Literacy Capabilities on Taxpayer Compliance. *E3S Web of Conferences*, 426. <https://doi.org/10.1051/e3sconf/202342601020>
- Mohammed, H., & Tangl, A. (2024). Taxation Perspectives: Analyzing the Factors behind Viewing Taxes as Punishment—A Comprehensive Study of Taxes as Service or Strain. *Journal of Risk and Financial Management*, 17(1). <https://doi.org/10.3390/jrfm17010005>
- Mpofu, F. Y., & Mhlanga, D. (2022). Digital Financial Inclusion, Digital Financial Services Tax and Financial Inclusion in the Fourth Industrial Revolution Era in Africa. *Economies*, 10(8). <https://doi.org/10.3390/economies10080184>
- Nyantakyi, G., Sarpong, F. A., Asiedu, F., Adjei Bimpeh, D., Kwasi Anenyah Ntoso, J., & Ofeibea Nunoo, L. (2024). Unearthing the mediating role of political affiliation in tax compliance determinants: new evidence from Ghana. *Cogent Business and Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2316886>
- Poltak, H., Arriela Doloksaribu, T., & Gunaisah, E. (n.d.). *Students' Perceptions of the Movie Story of Joy Inspiring Entrepreneurs*. <https://doi.org/10.33258/birci.v4i3.2157>
- Prastiwi, D., & Diamastuti, E. (2023). Building Trust and Enhancing Tax Compliance: The Role of Authoritarian Procedures and Respectful Treatment in Indonesia. *Journal of Risk and Financial Management*, 16(8). <https://doi.org/10.3390/jrfm16080375>

- Prawoto, B., Arriela Doloksaribu, T., & Firdaus, R. (2023). DETERMINAN SUSTAINABILITY DALAM KONSEP KEUANGAN EKONOMI KREATIF. *SIBATIK JOURNAL | VOLUME*, 2(7). <https://doi.org/10.54443/sibatik.v2i7.1062>
- Saptono, P. B., Hodžić, S., Khozen, I., Mahmud, G., Pratiwi, I., Purwanto, D., Aditama, M. A., Haq, N., & Khodijah, S. (2023). Quality of E-Tax System and Tax Compliance Intention: The Mediating Role of User Satisfaction. *Informatics*, 10(1). <https://doi.org/10.3390/informatics10010022>
- Setyowati, M. S., Utami, N. D., Saragih, A. H., & Hendrawan, A. (2020). Blockchain technology application for value-added tax systems. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 1–27. <https://doi.org/10.3390/joitmc6040156>
- Triansyah, I., & Rahmat Putra, R. (2025). Pengaruh Literasi Pajak Terhadap Kepatuhan Wajib Pajak Dengan Literasi Digital Sebagai Pemoderasi. *EKOMA: Jurnal Ekonomi*, 4(4). <https://databoks.katadata.co.id/>