

Taxing the Digital Economy: Bridging the Impact of E-Commerce Tax Regulations on Taxpayer Compliance

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Abstract

This study investigates the effectiveness of e-commerce tax regulations in enhancing taxpayer compliance by conducting a systematic literature review of 20 academic articles published between 2019 and 2025. With the rapid growth of the digital economy, governments across developed and developing countries have introduced new legal frameworks to address the taxation challenges associated with online transactions. This study identifies key regulatory, institutional, and behavioral factors that influence taxpayer compliance in e-commerce contexts. The findings reveal that tax knowledge, regulatory clarity, service quality, and enforcement mechanisms such as audits and penalties positively influence compliance. However, challenges such as regulatory complexity, low tax literacy, limited digital infrastructure, and cross-border enforcement remain persistent barriers, especially in emerging economies. This study also highlights significant differences in regulatory approaches across regions, with Southeast Asian countries such as Indonesia and Malaysia taking proactive steps to bridge tax policy and digital trade. The study concludes that successful implementation of e-commerce tax regulation depends not only on legal mandates but also on the perceived fairness, efficiency, and accessibility of tax systems. The findings provide practical insights for policymakers to enhance tax compliance by focusing on simplification, education, and trust-building strategies in the digital economy.

Keywords: e-Commerce Taxation, Tax Compliance, Digital Economy, Taxpayer Behavior, Regulatory Challenges.

1. Introduction

The rapid growth of electronic commerce (e-commerce) over the past decade has significantly transformed the global economic landscape, including in Indonesia. The digital economy in Southeast Asia is projected to reach a value of USD 330 billion by 2025, with e-commerce as its primary sector ([Google, Temasek, & Bain, 2022](#)). This development has compelled governments to adjust their tax regulations to optimize state revenue and ensure tax compliance among digital business operators ([OECD, 2020](#)). Tax knowledge and taxpayer awareness are key factors influencing tax compliance. A study by Susanti and [Trisnawati \(2024\)](#) found that

tax knowledge has a significant effect on the compliance of e-commerce taxpayers. Similarly, research by [Khamis & Mastor \(2021\)](#) showed that both knowledge of e-commerce tax regulations and taxpayer awareness positively influence tax compliance. In addition to internal taxpayer factors, fiscal policies such as tax incentives also play a role. [Rotinsulu et al. \(2023\)](#) examined the impact of tax incentives and income levels on tax compliance among MSMEs engaged in e-commerce and found both factors to be significant.

E-commerce transactions in Indonesia are estimated to reach USD 44 billion by 2024, placing the country among the largest digital markets in Southeast Asia ([Google, Temasek, & Bain, 2023](#)). This growth reflects a shift in economic activity toward the digital realm, which in turn brings implications for tax policy. In response, Indonesia has made several adjustments to its tax framework, such as the imposition of Value Added Tax (VAT) on digital products through [Minister of Finance Regulation No. 48/PMK.03/2020](#). However, the effectiveness of this regulation in enhancing tax compliance remains a subject of academic inquiry. [Hartanto \(2021\)](#) found that despite the implementation of e-commerce tax regulations, challenges persist in monitoring digital transactions and raising tax awareness among online entrepreneurs. The application of e-commerce tax regulations is not without structural and technical obstacles. [Alyanaililmuna \(2023\)](#) noted that the weakness of digital transaction tracking systems and low digital literacy among MSME e-commerce players are major barriers to the effective implementation of digital taxation. This aligns with the findings of [Palupi and Arifin \(2023\)](#), who emphasized that the integration of digital reporting systems and the dissemination of policies are crucial aspects for improving tax compliance.

This study aims to analyze the effectiveness of e-commerce tax policy in enhancing taxpayer compliance through a literature review approach. By reviewing various previous studies, this research seeks to identify the main challenges in implementing e-commerce taxation policies and provide recommendations to enhance the effectiveness of these regulations in improving tax compliance. In line with the research objectives and current phenomena, the research questions can be formulated as follows: (1) What are the forms and implementations of tax regulations on e-commerce transactions in Indonesia and other countries? (2) What factors influence taxpayer compliance in the context of e-commerce taxation? and (3) What are the challenges and barriers in implementing e-commerce tax regulations that impact taxpayer compliance? The findings of this study are expected to contribute to the development of more responsive, equitable, and sustainable digital tax policies.

2. Literature Review

2.1. Tax Regulation on E-Commerce

The Indonesian government has issued several regulations to govern taxation in the e-commerce sector. One of the key policies is Government Regulation No. 80 of 2019 concerning Trade through Electronic Systems (*Perdagangan Melalui Sistem Elektronik, or PMSE*), which outlines the tax obligations of digital business operators. Additionally, Minister of Finance Regulation No. 210/PMK.010/2018 stipulates the tax treatment of e-commerce transactions, including the obligation for digital platforms to report and collect Value Added Tax (VAT). The implementation of these regulations continues to face various challenges, such as low awareness among digital entrepreneurs and insufficient supporting infrastructure. Digital commerce has significantly reshaped both the global and national economic landscapes. In the context of taxation, e-commerce presents distinct challenges due to its cross-border nature and intangible characteristics. [Riphat \(2021\)](#) noted that digital trade requires a tax system that is

adaptive to technological changes and evolving business models.

Different countries have developed their own approaches to regulating e-commerce taxation. The European Union, for instance, reformed its VAT framework for e-commerce on July 1, 2021, introducing the Import One Stop Shop (IOSS) system to simplify VAT reporting for foreign sellers ([European Commission, 2021](#)). In Australia, the 10% Goods and Services Tax (GST) was extended to cover digital goods imported from abroad starting July 1, 2018. This regulation applies to foreign sellers with an annual turnover exceeding AUD 75,000 ([Australian Taxation Office, 2018](#)).

2.2. Tax Compliance

Tax compliance is a crucial aspect of any tax system, as it directly impacts the effectiveness of government revenue collection. [James and Alley \(2004\)](#) define tax compliance as the willingness of individuals and other entities to act in accordance with the spirit as well as the letter of the tax law and administration without the application of enforcement activity. This definition emphasizes that compliance involves not only formal adherence to laws but also includes moral and psychological dimensions. Tax compliance becomes even more critical in the context of e-commerce, given the sector's digital and often complex nature. Several theoretical approaches have been developed in the tax literature to explain taxpayer behavior, particularly in the digital economy. The most commonly used frameworks include the Economic Deterrence Theory, the Theory of Planned Behavior (TPB), and the Slippery Slope Framework (SSF). The Economic Deterrence Theory, proposed by [Allingham and Sandmo \(1972\)](#), suggests that taxpayers are rational agents who will comply when the benefits of compliance outweigh the costs of non-compliance.

Economic models alone are often insufficient to fully explain taxpayer behavior. Thus, psychological approaches such as Ajzen's Theory of Planned Behavior (1991) have gained traction. TPB posits that tax compliance is driven by behavioral intentions, which are shaped by three components: attitude toward the behavior, subjective norms, and perceived behavioral control. In the context of taxation, this theory implies that improving taxpayer attitudes, reinforcing supportive social norms, and enhancing understanding of tax obligations can boost compliance. [Feld and Frey \(2007\)](#) further developed the Slippery Slope Framework (SSF), which combines economic and psychological factors. They argue that tax compliance is influenced by two main factors: the power of tax authorities and the level of trust in those authorities. In the e-commerce context, trust in the digital tax system plays a vital role. If business operators perceive the system as non-transparent or fear misuse of digital data, they are more likely to underreport or avoid tax obligations ([Feld & Frey, 2007](#)). This is supported by [Haq and Tarmidi \(2024\)](#) who found that trust in the Directorate General of Taxes to manage digital transaction data significantly affects the compliance of online entrepreneurs in Indonesia.

2.3. Electronic Commerce (E-Commerce)

Electronic commerce (e-commerce) refers to the buying and selling of products, services, and information through electronic networks, primarily the internet. According to [Laudon and Traver \(2021\)](#), e-commerce is defined as the use of the Internet and the Web to transact business. It encompasses not only the sale of goods but also services, digital marketing, online payments, and supply chain management. The defining characteristics of e-commerce include digitization, globalization, and automation, which enable transactions to occur anytime and anywhere,

eliminating geographical constraints. As [Chaffey \(2015\)](#) notes that e-commerce offers 24/7 availability, global reach, and improved customer service through digital platforms. However, the borderless and paperless nature of e-commerce makes transaction monitoring more complex, especially in terms of taxation.

The rapid growth of e-commerce presents significant challenges to tax systems worldwide. The digital business model often lacks a physical presence (nexus), complicating the ability of tax authorities to fairly and effectively impose income and consumption taxes on digital transactions. [OECD \(2020\)](#) states that the digitalization of the economy is undermining the effectiveness of the international tax system, particularly with respect to nexus and profit allocation rules. In response, OECD and G20 member countries have developed global digital tax frameworks, such as Pillar One and Pillar Two, to address profit allocation and minimum taxation in the digital age.

Indonesia has also begun adapting its tax policies to accommodate these changes by introducing VAT on digital goods and services under PMSE regulations since 2020. This regulation mandates foreign digital companies—such as Google, Netflix, and Facebook—to collect and remit VAT for digital services consumed by Indonesian users (Directorate General of Taxes, 2020).

3. Research Method

This study employs a descriptive qualitative approach using a literature review method as the primary technique to analyze the effectiveness of tax regulations on e-commerce transactions and their impact on taxpayers' compliance. This approach was selected because it allows for a comprehensive understanding of the issue by systematically examining a range of relevant literature. According to [Snyder \(2019\)](#), literature review is a valuable method for synthesizing existing knowledge, identifying research gaps, and constructing a conceptual framework for a given phenomenon. Therefore, this method is appropriate for addressing research questions that are conceptual and normative in nature, particularly in the context of digital tax regulation.

The data sources for this study consist of national and international academic journal articles, textbooks on digital taxation, official regulations issued by the Directorate General of Taxes (DGT) and the OECD, research reports from reputable institutions, and policy-related articles. The literature was selected based on inclusion criteria, namely: published between 2019 and 2025, relevant to the topics of e-commerce taxation and tax compliance, grounded in strong academic or empirical foundations, and sourced from credible publications—preferably those that have undergone a peer-review process. Exclusion criteria include sources that are purely opinion-based without scientific grounding or that are not relevant to the research focus. Data collection was conducted by identifying relevant keywords such as “e-commerce taxation,” “digital tax compliance,” “online transactions regulation,” and “Indonesian digital taxation.” Literature was then retrieved and selected from several academic databases, including Scopus, Emerald, and Science Direct. Following this, key information was extracted from each source, including policy context, key findings, methodology, and conclusions related to tax compliance. After thorough screening, 20 selected studies were included as the core references for this article.

Data analysis was carried out using a qualitative-descriptive approach through thematic analysis, which involved categorizing the literature based on major themes such as regulatory effectiveness, factors influencing compliance, implementation barriers, and best practices from

other countries. This analytical technique is based on the thematic synthesis approach proposed by [Thomas and Harden \(2008\)](#), which aims to integrate findings from multiple studies through an interpretative process to generate a more holistic understanding. To ensure the validity and reliability of the review findings, the researcher applied source triangulation by comparing literature from different perspectives—academic, policy-related, and practical. Furthermore, the study adhered to the principles of transparency and systematic selection, as recommended by [Kitchenham and Charters \(2007\)](#), throughout the literature review process.

4. Findings and Discussions

Providing a breakdown of the journal articles reviewed in this study, this classification offers insights into the diversity and credibility of the literature sources used to evaluate the effectiveness of tax regulations on e-commerce transactions and their influence on taxpayer compliance by focusing on the indexation and quality rank of the publications.

Table 1. Identity of Previous Journal Articles

No	Journal Index	Rank	Quantity	Percentage
1	SCOPUS	Q1	1	5%
2		Q2	5	25%
3		Q3	6	30%
4		Q4	8	40%
Total			20	100%

The distribution of journal quality, as illustrated in Table 1, shows that the majority of studies (70%) were published in Q3 and Q4 journals, indicating a strong contribution from emerging but robust research fields. Only 5% of articles were sourced from Q1 journals, reflecting the relatively recent focus of high-impact journals on e-commerce taxation issues. These previous articles provide highly contextual and operational perspectives, particularly useful for understanding the unique challenges of e-commerce tax compliance in emerging markets. This literature review is diverse in scope and credibility, blending international theoretical frameworks with local empirical evidence. This variety ensures a comprehensive understanding of how tax regulations are implemented across different jurisdictions and their relative success in influencing taxpayer compliance in the digital economy. The concentration of articles in high-to-lower-ranked journals underscores the need for further high-impact research in this rapidly evolving area of fiscal policy.

4.1. E-Commerce Tax Regulations in Indonesia and Other Countries

This distribution of the previous reviewed journal articles by country offering insight into the geographic scope of research related to e-commerce taxation and its impact on taxpayer compliance. The distribution highlights the focus areas of academic inquiry and reveals how different jurisdictions are addressing the challenges of digital taxation.

Table 2 presents the distribution of the 20 articles based on the country context in which the research was conducted. It shows that Indonesia and Malaysia dominates the sample with both of five articles. Tanzania and the USA each contributed two articles, while Africa, Brazil, the European Union (EU), Kenya, Ukraine, and Vietnam are represented by one article each. The distribution suggests that Southeast Asian countries, particularly Indonesia and Malaysia, are currently at the forefront of research and discourse related to e-commerce taxation. This reflects both the rapid growth of digital economies in these regions and the regulatory challenges faced

by their governments.

Table 2. Articles Distribution

No	Country	Number of Articles
1	Africa	1
2	Brazil	1
3	EU	1
4	Indonesia	5
5	Kenya	1
6	Malaysia	5
7	Tanzania	2
8	Ukraine	1
9	USA	2
10	Vietnam	1
	Total	20

Research from more developed regions such as the EU and the USA indicates a focus on adapting long-standing tax systems to address cross-border digital transactions. The literature reflects diverse geographic context, it is heavily concentrated in Southeast Asia, indicating both a high level of policy activity and academic interest in digital taxation in the region. The inclusion of studies from Africa, Europe, and North America enriches the review with comparative insights, helping to better understand global trends, local challenges, and the potential for cross-jurisdictional learning in shaping effective e-commerce tax regulation. Emerging economies like Tanzania, Kenya, and Brazil are still in the early stages of regulatory development.

The regulation of e-commerce taxation has become a focal point of fiscal policy in both developing and developed countries, particularly as the digital economy continues to expand rapidly. Based on the synthesis of the previous reviewed studies, it is evident that Indonesia and various other countries have taken distinct approaches in developing legal frameworks to address the taxation challenges posed by online transactions. In Indonesia, the government has proactively regulated e-commerce taxation to expand its tax base amidst the rapid digitalization of commerce. Key regulations, such as [PMK No. 48/PMK.03/2020](#), require foreign digital service providers to collect and remit value-added tax (VAT) on sales made to Indonesian consumers. Research by [Mulyani et al. \(2023\)](#) and [Indrawan & Sastradipraja \(2020\)](#) highlights that Indonesia's reliance on a self-assessment system, combined with initiatives like e-filing and taxpayer education, are pivotal strategies to increase compliance. Indonesia's approach demonstrates a strong emphasis on combining regulatory enforcement with service quality improvement and taxpayer support.

Malaysia offers a parallel case, having introduced the Digital Service Tax (DST) in 2020. Studies by [Khamis & Mastor \(2021\)](#) and [Ahmad et al. \(2023\)](#) demonstrate that Malaysia balances enforcement through audits and penalties with efforts to enhance voluntary compliance. Taxpayer perceptions of fairness, trust in tax authorities, and service quality are central to compliance behavior among Malaysian e-commerce businesses. Malaysia's regulatory environment highlights that fostering a supportive compliance culture is just as important as legal enforcement mechanisms. In the European Union, the e-commerce tax strategy centers on VAT reform. The introduction of the One-Stop Shop (OSS) system allows

businesses to register, declare, and pay VAT for all EU sales in one place. [Abramova et al. \(2021\)](#) explain that the EU's goal is to harmonize digital taxation, reduce administrative burdens, and prevent VAT fraud. Unlike emerging economies, the EU leverages high digital maturity and inter-country coordination to enforce compliance across borders effectively. Meanwhile, the United States relies on a decentralized approach to e-commerce taxation. States are empowered to require out-of-state sellers to collect and remit sales tax based on economic nexus thresholds. Research by [Howard et al. \(2019\)](#) underscores the difficulties in ensuring voluntary compliance, particularly for use tax obligations, in a system where state-level variations create complexity for both consumers and businesses.

In emerging economies such as Tanzania, Kenya, Brazil, and Vietnam, efforts to regulate e-commerce taxation are still developing. Challenges such as low taxpayer literacy, fragmented regulatory environments, and enforcement difficulties dominate the discourse. Although Tanzania and Kenya have introduced simplified electronic tax systems, their effectiveness is limited by technological and social barriers. Similarly, Vietnam has imposed tax obligations on foreign providers but struggles with cross-border enforcement. While developed countries focus on harmonizing regulations and leveraging technology to enhance compliance, developing countries like Indonesia and Malaysia prioritize building taxpayer awareness, simplifying procedures, and progressively improving enforcement capabilities. The success of e-commerce tax regulations across various jurisdictions depends not only on legal mandates but also on the perceived fairness, simplicity, and efficiency of tax systems, as well as the authorities' ability to foster voluntary compliance through trust and quality service delivery.

4.2. Factors Affecting E-Commerce Taxpayer Compliance

Taxpayer compliance in the realm of e-commerce is shaped by a variety of interrelated factors. Understanding the various factors that influence compliance is essential for designing policies. This table provides a structured overview of the thematic insights gained from the literature and serves as a foundation for a deeper discussion on the factors affecting the taxpayer compliance on the e-commerce transaction.

Table 3 provides a comprehensive overview of the various factors identified in recent studies that influence taxpayer compliance in the context of e-commerce taxation. Each study explored specific regulatory, psychological, institutional, and technological dimensions affecting compliance behavior among online business actors. The majority of the studies demonstrate that specific regulatory, institutional, and individual factors have a positive influence on e-commerce tax compliance. Factors such as tax knowledge, clarity of tax regulations, appropriate tax rates, and VAT regulation and enforcement were frequently associated with improvements in taxpayer compliance. Tax knowledge and awareness emerge as the most consistently positive factors affecting compliance. Studies by [Hamid et al. \(2019\)](#), [Indrawan & Sastradipraja \(2020\)](#), [Meiryani et al. \(2021, 2022\)](#), [Shahroni \(2022\)](#), and [Astuti et al. \(2024\)](#) reveal that when e-commerce taxpayers understand tax obligations, applicable rates, and regulations, they are more likely to comply voluntarily. Additionally, tax literacy was emphasized by [Lusala et al. \(2025\)](#) as a crucial driver, especially in emerging markets where education on digital tax obligations is still developing.

Regulatory clarity, particularly surrounding VAT regulations and the administration of digital economy transactions, was another important factor found to enhance compliance.

Table 3. Variables Influenced E-Commerce Tax Compliance

Author(s)	Year	Factor Influenced	Effect
Hamid et al.	2019	Tax Knowledge, Tax Regulation, Tax Rate	Positive
Howard et al.	2019	Information Disclosure and Form Design	Negative
Indrawan & Sastradipraja	2020	Taxpayer Awareness, Service Quality, Tax Revenue and Tax Knowledge	Positive
Zhang et al.	2020	Social Responsibility and Values	Negative
Abramova et al.	2021	VAT Regulation and E-commerce Growth	Positive
Khamis & Mastor	2021	Service Quality, Tax Awareness, Fairness	Positive
Meiryani et al.	2021	Tax Knowledge, Tax Rate	Positive
Meiryani et al.	2022	Tax Knowledge, Tax Service	Positive
Mpofu	2022	Tax Regulation	Positive
Shahroni et al.	2022	Tax Knowledge, Morale, Complexity	Positive
Tofan & Bostan	2022	VAT Regulation and Data Security	Positive
Trang	2022	Institutional, Social, and Psychological	Positive
Ahmad et al.	2023	Tax service	Positive
Khamis & Mastor	2023	Audits and Penalties	Positive
Mukama et al.	2023	Tax Principles Adaptation	Positive
Mulyani et al.	2023	Regulatory Structure, Cyber Security, Tax Literacy	Positive
Tongora	2023	Fairness, Awareness, Service Quality	Negative
Astuti et al.	2024	Tax Rate, Tax Knowledge, Tax Regulation	Positive
Morini et al.	2024	Tax Regulation	Negative
Lusala et al.	2025	Tax Literacy	Positive

Research by [Abramova et al. \(2021\)](#) and [Tofan & Bostan \(2022\)](#) underscores the importance of clear, streamlined VAT systems that accommodate the complexities of cross-border and online commerce. Effective tax regulation adaptation, as discussed in studies on Indonesia and the EU, was shown to bridge the gap between traditional tax models and digital business realities. Institutional factors, such as service quality, audits, and penalties, also play a vital role. [Khamis & Mastor \(2021, 2023\)](#) and [Ahmad et al. \(2023\)](#) found that improving the quality of tax services will make tax processes simpler, more accessible, and more transparent, directly strengthens taxpayer compliance. Moreover, enforcement mechanisms like audits and fair penalties act as significant deterrents to non-compliance, particularly when they are perceived as just and properly administered.

For instance, [Howard et al. \(2019\)](#) found that overly complicated information disclosure formats discouraged taxpayers from complying. Similarly, [Zhang et al. \(2020\)](#) noted that although social responsibility and moral values influence behavior, they are insufficient on their own without regulatory and institutional reinforcement. [Tongora \(2023\)](#) and [Morini et al. \(2024\)](#) highlighted that perceptions of unfairness in tax systems or complexity in procedures could negatively impact taxpayer willingness to comply.

Beyond regulatory and service-related factors, social, institutional, and psychological elements also emerged as significant. [Trang \(2022\)](#) demonstrated that when taxpayers perceive strong social norms, institutional support, and psychological confidence in the fairness of the system, compliance behavior improves significantly. This suggests that compliance is not only a matter

of rule-following but also of building trust, social expectations, and institutional credibility. Strengthening compliance requires a holistic approach that combines regulatory improvements (clear, simple, and fair rules), taxpayer support (quality service delivery), strong enforcement (fair audits and penalties), and soft elements like trust-building, education, and addressing psychological perceptions. Bridging the impact of tax regulations on compliance thus depends not only on what rules are imposed but also on how they are communicated, enforced, and perceived by the digital business community.

4.3. Challenges and Barriers in the Implementation of E-Commerce Tax Regulation

The implementation of e-commerce tax regulations faces numerous challenges and barriers, as identified across the reviewed studies. While regulatory frameworks have evolved to address the digital economy, several technical, institutional, and behavioral obstacles continue to hinder effective enforcement and voluntary compliance. One of the foremost challenges is regulatory complexity. As highlighted by [Howard et al. \(2019\)](#) and [Morini et al. \(2024\)](#), overly complicated tax forms, unclear guidelines, and fragmented regulations, particularly in cross-border transactions, create confusion among e-commerce taxpayers. These complexities often discourage compliance, especially among small and medium-sized enterprises (SMEs) that lack the resources to interpret and comply with intricate tax codes. Furthermore, when regulations do not align with the operational realities of digital businesses such as platform-based sales, peer-to-peer models, and cross-border services, taxpayers may either unknowingly or intentionally evade taxes.

Another significant barrier is low tax knowledge and awareness. Several studies, including [Hamid et al. \(2019\)](#) and [Lusala et al. \(2025\)](#), emphasized that many e-commerce participants, particularly in developing countries, have insufficient understanding of their tax obligations. Without comprehensive educational initiatives or accessible information dissemination, taxpayers may either misreport, underreport, or entirely neglect their e-commerce incomes. The lack of user-friendly tax systems further compounds this barrier, leaving many taxpayers intimidated or indifferent towards formal compliance processes. Trust in tax authorities also plays a critical role. According to [Khamis & Mastor \(2021, 2023\)](#) and [Trang \(2022\)](#), low levels of trust can erode voluntary compliance, even if regulatory structures are well-developed. If taxpayers perceive the tax system as unfair, corrupt, or poorly managed, they are more likely to resist compliance efforts. This is particularly true in countries where enforcement is perceived as selective or punitive rather than supportive and equitable.

Technological and infrastructural limitations form another challenge, especially in emerging economies such as Tanzania, Kenya, and parts of Southeast Asia. Studies like those by [Tongora \(2023\)](#) reveal that weak digital infrastructure, limited access to reliable online tax filing systems, and inconsistent government technology platforms make it difficult for e-commerce businesses to comply efficiently. Inadequate integration between online platforms and tax authorities' systems also limits real-time transaction monitoring and enforcement.

Cross-border jurisdictional issues significantly complicate e-commerce tax enforcement. As pointed out by [Abramova et al. \(2021\)](#) and [Tofan & Bostan \(2022\)](#), the global nature of e-commerce allows businesses to sell across borders without a physical presence, making it difficult for tax authorities to determine nexus, impose VAT, or enforce income taxes. Efforts such as the European Union's One-Stop Shop (OSS) for VAT reporting attempt to address this issue, but many countries still struggle with effective international coordination and data sharing. Behavioral resistance poses a subtler yet critical barrier. Even where regulations are

clear and enforcement mechanisms are in place, taxpayers may exhibit strategic behavior, including deliberate underreporting or shifting operations to jurisdictions with lighter regulations. [Zhang et al. \(2020\)](#) noted that without moral obligation reinforcement and strong institutional frameworks, taxpayer behavior often defaults to evasion if perceived benefits outweigh perceived risks. The challenges and barriers in implementing e-commerce tax regulations are multifaceted, involving regulatory design, taxpayer behavior, institutional trust, technological capacity, and international cooperation. Addressing these challenges requires an integrated approach that simplifies regulations, strengthens taxpayer education, builds trust through transparency and fairness, invests in digital infrastructure, and fosters international collaboration to manage cross-border transactions effectively.

5. Conclusions

This literature review has comprehensively examined the effectiveness of tax regulations on e-commerce transactions and their impact on taxpayer compliance across 20 previous articles. The findings offer a multifaceted understanding of how the forms and implementations of tax regulations on e-commerce transactions in Indonesia and other countries, the factors influence taxpayer compliance in the context of e-commerce taxation, and the challenges and barriers in implementing e-commerce tax regulations that impact taxpayer compliance. The findings indicate that a combination of regulatory clarity, taxpayer knowledge, institutional trust, service quality, and enforcement mechanisms shapes effective e-commerce tax compliance. Indonesia, Malaysia, and several other countries have made notable progress in adapting legal frameworks to accommodate the complexities of digital transactions, although challenges persist that particularly in emerging economies. Most factors influencing compliance were found to be positive, including VAT enforcement, taxpayer education, and system integration. However, challenges such as low digital literacy, regulatory complexity, weak infrastructure, and cross-border enforcement remain significant barriers. A key conclusion drawn from the analysis is that fostering voluntary compliance requires not only strong regulation but also fairness, simplicity, institutional support, and technological readiness.

The results of this research offer valuable implications for both policymakers and tax administrators. Governments must prioritize not only enforcement but also education, transparency, and user-friendly tax systems to build long-term compliance. Countries like Indonesia can benefit by further simplifying tax procedures and intensifying digital literacy campaigns targeting SMEs and e-commerce entrepreneurs. The study highlights the need for collaborative international frameworks especially for cross-border VAT enforcement, to close the digital tax gap and improve global regulatory cohesion. The literature also suggests that trust-building efforts such as improving tax service quality and enhancing perceptions of fairness, are equally important as legal sanctions in influencing taxpayer behavior. This study has several limitations. It relies entirely on secondary data through literature review, which means it does not include original fieldwork or empirical testing. Although the study covers a broad international scope, the literature is still dominated by research from Southeast Asia, particularly Indonesia and Malaysia, which may limit generalizability to other regional contexts. In addition, many of the reviewed articles vary in methodological rigor, theoretical orientation, and scope, which could affect the uniformity of findings. Future research could benefit from expanding beyond literature reviews to include empirical studies, such as surveys or interviews with digital business owners, tax officers, and policymakers. Comparative case studies between countries with different digital tax maturity levels could offer deeper insights into best practices and transferable strategies.

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