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Regulations and Compliance in Electronic Commerce Taxation Policies: Addressing Cybersecurity Challenges in the Digital Economy

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Abstract

Tax policies across countries reveal disparities that cybercriminals can exploit, taking advantage of the development of the e-commerce sector. There is a dearth of studies that could show how to strengthen cybersecurity measures within tax systems to safeguard against data breaches and fraud and ensure the integrity of tax revenue to protect consumers from the indirect costs of cybercrime-driven tax evasion. This research employed normative juridical and comparative approaches and a qualitative research design to gain a comprehensive understanding of e-commerce taxation issues. It examined current regulations and compliance challenges in electronic commerce taxation policies and focused on addressing security challenges in Indonesia's digital economy. The study revealed that electronic transactions are already defined under various laws of Indonesia namely Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law) which regulated all kinds of acts using computers, computer networks, and/or other electronic media; Law Number 7 of 2014 concerning Trade defines which was a law to regulate a;; types of trading through Electronic Systems; and the Directorate General of Taxes Number SE-62/PJ/2013, regarding Affirmation of Tax Provisions on E-commerce Transactions for taxation purposes. The study enriches readers' understanding of legislative regulations and the effectiveness of e-commerce taxation in Indonesia. The study implies that Indonesia has a well-structured tax framework that has the potential to enhance both the capacity and adherence of e-commerce businesses to taxation standards.

Keywords: E-commerce; Digital economy; Cybercrime, Tax compliance; Destination-based taxation; Tax policy challenges

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1. Introduction

In recent years, e-commerce has evolved and given several opportunities for business actors, especially SMEs, to explore a wider market, while simplifying their business processes (Ariansyah et al., 2021). The utilization of the internet in production activities has further paved the way for technological developments, which has significantly increased the efficiency and competitiveness of a country's economy. It has also played an important role in improving the overall operational efficiency of online businesses, online sellers and e-commerce store owners. While e-commerce businesses evolve, taxation becomes an obligation that must be fulfilled. This tax obligation applies because income earned from e-commerce transactions is considered a source of income and must be reported to the tax authorities.

The taxation of e-commerce is a complex and ever-evolving field, and it intersects significantly with the world of cybercrime (Kamilah & Khan, 2021). E-commerce offers cybercriminals ample opportunities for tax evasion. They exploit loopholes, manipulate digital records, and engage in fraudulent activities to evade taxes on online transactions. This not only harms government tax revenue collection but also constitutes a form of financial cybercrime. The impact of e-commerce on tax collection has been observed in various countries, including Malaysia and India, where special tax allocations have been considered to address tax evasion and the impact on traditional businesses (Agrawal & Fox, 2017; Kalia, Kaur, & Singh, 2018; Khamis & Mastor, 2021; Palil, Amin, & Turmin, 2020; Sumanjeet, 2010).

The development of e-commerce has also led to discussions about the principles of taxation. The choice between destination-based taxation and origin-based taxation for goods purchased online has been examined (Aiura & Ogawa, 2023). It has been found that tax competition under destination-based taxation on e-commerce is more intense than under origin-based taxation, and the development of e-commerce raises tax revenues under origin-based taxation but lowers them under destination-based taxation (Agrawal & Wildasin, 2020; Aiura & Ogawa, 2023).

Within the realm of cybercrime, various subfields can be applicable to e-commerce. Payment fraud, for instance, constitutes different forms of fraudulent activities such as credit card fraud, identity theft, and account takeovers. It is pertinent to examine how e-commerce companies can detect and prevent such illicit transactions (Chawla & Kumar, 2022; Lutfiyana, 2021; Mittal & Tyagi, 2020; Tantimin, 2021). Another area of focus is phishing and social engineering, where researchers analyse the deceptive tactics used by cybercriminals to trick individuals into divulging sensitive information, emphasizing strategies for consumer education and protection (Ali & Mohd Zaharon, 2022; Erbschloe, 2019; Ivaturi & Janczewski, 2013). Furthermore, e-commerce businesses often operate across multiple legal jurisdictions, adding complexity to tax enforcement (Agrawal & Fox, 2017; Scarcella, 2020; Yanto, 2020). This complexity allows cybercriminals to exploit jurisdictional ambiguities, concealing their income and assets and making it challenging for authorities to trace and prosecute them effectively (Biswas, 2011; Kamran, Arafeen, & Shaikh, 2019).

Taxation in the context of e-commerce is a complex and evolving area of research. The growth of e-commerce has raised concerns about the enforcement of taxation policies across multiple legal jurisdictions and the potential for tax evasion (Argilés-Bosch et al., 2020; Wareham, Zheng, & Straub, 2005; Yapar, Bayrakdar, & Yapar, 2015). Researchers have highlighted the need for greater integration of taxation compliance into e-commerce applications and operations to address the challenges of enforcing taxation policies (Hussein et al., 2011; Scarcella, 2020). Studies have shown that early internet adopters were motivated to avoid sales tax, leading to a reduction in the tax base and tax revenues (Hanrahan, 2021).

Moreover, research in the field of e-commerce security and cybercrime encompasses a wide range of topics and areas of focus. One critical aspect highly researched is e-commerce security, which involves the implementation of measures and technologies to safeguard customer data and transactions. This includes the study of encryption techniques, authentication methods, and secure payment systems to ensure the confidentiality and integrity of online interactions (Al-Zubaidie & Shyaa, 2023; Apau & Koranteng, 2019; Broadhurst, 2006; P, Babu, & Vijayalakshmi, 2020). There is also extensive research on e-commerce fraud detection, utilizing machine learning and data analytics to identify and respond to fraudulent activities in real-time (Patil, Nemade, & Soni, 2018; Rodrigues et al., 2022). Legal and regulatory aspects are also explored, examining the impact of laws and regulations on the prosecution of cybercriminals and the responsibilities of e-commerce platforms. Overall, the taxation of e-commerce is a challenging and evolving area of research. It requires addressing issues such as tax evasion, enforcement across legal jurisdictions, and the choice of taxation principles.

Previous research has explored potential solutions and ensure effective taxation policies in the e-commerce industry (Agrawal & Fox, 2017; Giuffrida et al., 2020; Yapar et al., 2015). However, these studies have also found that taxation in the e-commerce industry has not been implemented in a good manner, and there is a need for more structured and comprehensive socialization to e-commerce taxpayers (Luthfan & Pasha, 2019; Tofan & Bostan, 2022). The purpose of this study was to find comprehensive arrangements for e-commerce taxation to improve economic development and find out how, through taxation, e-commerce can increase revenue for economic development. Taxes paid by e-commerce businesses contribute to state revenues that can be used for economic development.

A need was felt for this research as it seeks to establish a comprehensive e-commerce taxation framework, addressing crucial aspects of economic development and fairness in the digital economy. By optimizing tax collection mechanisms, it aims to boost government revenues through e-commerce taxation, which can then be allocated to various economic development initiatives. Additionally, the study emphasized the importance of creating a level playing field within the business environment, rectifying potential tax advantages enjoyed by e-commerce businesses over traditional counterparts. The anticipated results of this research included providing a robust foundation for refining current e-commerce tax regulations, ultimately supporting the sustainable growth of the digital economy in Indonesia. This study plays a pivotal role in advancing equitable and effective taxation policies within the digital realm, thereby fostering economic development and enhancing the nation's competitiveness in the global e-commerce landscape.

2. Theoretical Framework and literature review

2.1 The Current Tax Regulations for E-commerce Businesses

The rapid development of information and communication technology has opened up new business opportunities, one of which is e-commerce. E-commerce, or electronic commerce, is becoming an integral part of modern lifestyles that allow buying and selling transactions to be carried out online, eliminating geographical and time restrictions. In this context, e-commerce can be considered as a business process that relies on electronic technology to connect companies with society or consumers directly, facilitating the exchange of goods and services. Tax regulations for E-commerce businesses are complex and vary by state. Nguyen, DeCenzo, and Drucker (2012) notes that only ten states have passed laws requiring online retailers to collect sales tax, and that without a uniform e-commerce sales tax system, firms like Amazon will continue to take advantage of loopholes in the current system. Goolsbee and Zittrain (1999) argue that enforcing sales taxes on most Internet commerce would generate only modest revenue gains, and that a moratorium on such taxes may be a natural compromise. Muscovitch (1997) discusses how domestic tax laws are unable to adequately control the emergence of a "new international trade route" and analyzes how commerce and banking will be affected by the Internet. Raisinghani and Petty (2005) present several viewpoints on the issues surrounding the current discussions related to state and local taxation of Internet access fees and sales transactions. Overall, these studies suggest that tax regulations for e-commerce businesses are still evolving and require serious attention and consideration by governments and tax professionals.

On December 1, 2020, Value Added Value (VAT) collection was imposed on e-commerce transactions. In this case, e-commerce players are required to collect Value Added Tax of 10% of the product price before tax when the product is sold to consumers in Indonesia. In addition, e-commerce players are also required to include the amount of VAT that has been collected in the invoices they issue to consumers. The approach used in e-commerce taxation is both domestic and international approaches. The domestic approach taken by Indonesia in terms of e-commerce taxation includes several measures that recognize the importance of regulating electronic commerce transactions fairly and efficiently.

Some of these steps include determination of VAT and Finance Collector, such as by issuing PMK Number 48/PMK.03/2020 and PMK Number 73/PMK.03/2019, Indonesia recognizes the important role of electronic commerce providers (PMSE) and electronic commerce application service providers (PJAP) in tax collection and payment. This helps ensure that taxes owed on e-commerce transactions can be managed efficiently. Moreover, there is an Income Tax Rate for Foreign Taxpayers. With PMK Number 210/PMK.010/2018, Indonesia sets an income tax rate of 0.5% of gross amount of income for foreign taxpayers who receive or obtain income from the use of intellectual property rights or certain services in Indonesia. It is an attempt to collect taxes from international transactions involving the utilization of intellectual assets in Indonesia (Budiharseno & Tiranda, 2020).

For registration criteria, Indonesia has set certain criteria that must be met by all PMSEs, PJAPs, or foreign taxpayers to register as VAT collectors or treasurers. It aims to ensure that only qualified entities must meet tax obligations. Moreover, for improved tax compliance, these measures also aim to improve tax compliance, especially in the context of electronic commerce which often involves cross-border transactions. With clear rules, the government can ensure that the taxes that should be paid are actually paid. The international approach by cooperating with other countries reflects Indonesia's efforts to keep up with technological developments and the digital economy while ensuring that taxation aspects are not overlooked. It can also help create a fairer and more balanced business environment for all stakeholders in the e-commerce ecosystem. E-commerce taxation contributes to the country to improve economic development by issuing e-commerce tax regulations, but the application of value-added tax (VAT) on every e-commerce transaction can potentially disrupt the growth of the national digital economy. This is because the rule might encourage some merchants to exit e-commerce and switch back to offline businesses, which could reduce the volume of e-commerce transactions. This can happen because merchants may face additional burdens in terms of tax administration, collection, and reporting, which can disrupt the balance of operational costs. Moreover, harmonized international tax regulations can facilitate cross-border e-commerce. In this context, it is vital to recognize that cross-border transactions involve the transfer of data across borders. Ensuring data security and privacy in compliance with international standards, such as GDPR in Europe, is crucial.

2.2 E-commerce Businesses Compliance with Tax Regulations

Several studies suggest that tax compliance among e-commerce businesses is influenced by several factors. Abd Hamid et al. (2019) found that tax knowledge plays a vital role in influencing tax compliance among online companies in Malaysia, and that the Malaysian tax rules and regulations are too complex to understand. Rendy and Irawati (2019) found that taxpayer awareness affects e-commerce users' taxpayer compliance. Yeo, Lim, and Azhar (2019) found that there is a lack of awareness among students concerning the compliance of e-commerce taxation, and that factors leading to non-compliance include the perceived low chance of getting caught and the insignificant amount of income being generated. Nguyen et al. (2012) discussed the challenges faced by taxing authorities in implementing a uniform e-commerce sales tax system, and the need for proposed initiatives to promote equity for all parties.

In Indonesia, e-commerce platforms, such as Shopee, Lazada, Tokopedia, and others, are the main places for buying and selling transactions in the era of the industrial revolution 4.0 and 5.0. These platforms make transactions easier without the need for a physical store, making virtual stores an attractive alternative for businesses. The main advantages of e-commerce platforms are efficiency in transactions, transparency of price competition, and convenience of shopping online. The Indonesian Directorate General of Taxes stated that the government does not apply new tax types or rates specifically for e-commerce players. However, business actors who trade goods and services through online and social media are required to comply with applicable tax regulations, including VAT, Sales Tax on Luxury Goods, and Income Tax in accordance with applicable regulations.

The government has set a limit on the turnover of Taxable Entrepreneurs (PKP) of IDR 4,800,000,000.00. Thus, all business actors, including online businesses that achieve this turnover, are required to collect VAT on each transaction. However, the constraint in ensuring tax compliance in e-commerce transactions is a challenge that still has to be overcome, considering that e-commerce transactions have different characteristics from conventional transactions. From the perspective of tax laws and regulations, online commerce (e-commerce) has the potential to be subject to Value Added Tax (VAT) on traded goods and Income Tax on income earned through such online commerce. In addition, there are requirements related to status as a Taxpayer (WP) that must be met by entrepreneurs or e-commerce businesses. Rapidly growing e-commerce platforms have also been targeted for taxation, where the Government has issued Minister of Finance Regulation (PMK) Number 210/PMK.010/2018. This PMK stipulates that VAT of 10% will be imposed on products traded to customers through various e-commerce platforms, and this policy comes into effect from December 1, 2020. This tax is imposed on various products sold to consumers through e-commerce platforms operating in Indonesia.

According to a report by the Indonesian Ministry of Finance, value-added tax revenue from trading through electronic systems (PPN PMSE) or digital tax has reached IDR 9.17 trillion until October 2022. This number reflects significant growth in digital tax collection. In addition, in accordance with PMK-60/PMK.03/2022, PMSE business actors who have been appointed as collectors are required to collect VAT at a rate of 11% on foreign products sold in Indonesia. Director of Counseling, Services, and Public Relations of the Directorate General of Taxes of the Ministry of Finance, Neilmaldrin Noor, also said that business actors who have been appointed as PMSE VAT collectors are required to produce proof of VAT collection as a sign that VAT has been collected. This proof of collection can be in the form of a commercial invoice, billing, order receipt, or other similar documents that include VAT collection and payment has been made. This shows the government's commitment to increasing tax collection in the e-commerce sector and ensuring business actors' compliance with applicable tax regulations (Mutia, 2022).

3. Method

This research used a normative juridical study design employing conceptual and comparative approaches to develop comprehensive e-commerce taxation arrangements aimed at promoting economic development. A comparison with e-commerce taxation regulations of other countries was made in the context of the Indonesian laws and regulations concerning e-commerce taxation. Secondary data sources, such as existing literature and research articles on e-commerce taxation were extensively reviewed, along with the analysis of relevant legislations and studies from other countries with established e-commerce tax regulations. The qualitative analysis method was utilized to synthesize research findings and align them with pertinent concepts and theories, enabling a deeper understanding of e-commerce taxation.

The analysis method employed in this research is qualitative analysis. In this analysis, the researchers evaluate and present relevant research findings from the literature and correlate them with relevant concepts and theories. Through this approach, the researchers aim to gain a deeper understanding of the e-commerce taxation issue and achieve the expected outcomes based on the conducted research. Consequently, this research is anticipated to make a significant contribution to the comprehension and development of legislative regulations concerning e-commerce taxation in Indonesia. The research findings are expected to serve as a foundation for improving or refining existing tax regulations, thereby enhancing the effectiveness of e-commerce taxation and supporting the sustainable growth of this sector.

4. Result and Discussion

4.1 Taxation of e-commerce businesses: A Comparative Analysis

It is evident that countries have different approaches to taxing E-commerce businesses. Noronha and Vinten (2003) compare the taxation of e-commerce profits in Hong Kong to the UK and US, and highlight issues with formulating tax law and accounting for intangible assets (Cockfield, 1999). Cockfield (2000) proposes a framework for the taxation of e-commerce profits that balances the interests of countries that are net exporters or net importers of e-commerce goods and services. Muscovitch (1997) discusses the challenges of taxing E-commerce including tax avoidance and evasion, and the transfer of technology. Cockfield (2005) assesses national and international responses to tax challenges presented by cross-border electronic commerce, and suggests that the OECD has taken on an informal role as a "world tax organization" through its development of guiding principles and tax rules to confront E-commerce tax challenges.

In Indonesia, the imposition of taxes on e-commerce businesses is seen from the state of compliance of e-commerce businesses in Indonesia with tax regulations and other regulations may vary depending on a number of factors, including their understanding of tax rules, commitment to comply with regulations, and ability to meet tax obligations. The first is that the level of understanding of e-commerce businesses about tax and other regulations can have a major effect on their level of compliance. The government and related institutions often provide tax-related guidelines and education to business actors, but lack of understanding can lead to unintentional non-compliance. The second is that awareness of tax obligations, including the collection and deposit of VAT, Sales Tax on Luxury Goods, and Income Tax, is an important factor in compliance. E-commerce businesses need to realize that they have the same tax responsibilities as offline businesses. The third is that compliance also depends on the ability of businesses to properly record transactions, calculate taxes owed, and report their income to tax authorities (Irianto, 2020). The use of proper accounting software or e-commerce management systems can help in this.

Moreover, the fourth is that e-commerce businesses subject to audits by tax authorities have an additional incentive to comply with regulations. This compliance may be monitored more closely, and violations may result in sanctions and fines. Major e-commerce platforms like Shopee, Lazada, Tokopedia, and so on also play an important role in ensuring tax compliance. Some platforms have teamed up with governments to collect VAT on behalf of sellers, which can improve compliance rates. The efforts of the government and related institutions in socialization and education on tax regulations in e-commerce can also improve compliance. Business actors who understand their obligations tend to be more compliant. The use of technology, including accounting software and tax automation systems, can help e-commerce businesses to more easily meet tax obligations. Furthermore, taxation of e-commerce provides governments with revenue streams. A portion of this revenue can be allocated to enhance cybersecurity infrastructure and capabilities. Governments can invest in cybersecurity initiatives to protect businesses and consumers engaged in digital transactions. Strengthened cybersecurity measures contribute to a safer e-commerce environment, fostering trust and confidence among users.

4.2 The challenges of collecting taxes from E-commerce businesses

Prior research collectively suggests that there are significant challenges in collecting taxes from e-commerce businesses. Nguyen et al. (2012) notes that the current tax system was not designed for the complex business models of e-commerce and that there is no uniform e-commerce sales tax system in place. Jain (2022) highlights the difficulty in assigning tax liability for e-commerce transactions, particularly for goods that do not have a physical presence (Jain, 2022). Yarong et al. (2012) identify several problems in Chinese e-commerce tax collection and administration, including an undeveloped legal system and difficulty in measuring the tax base. Nadeem and Saxena (2018) emphasize the need for a clear and better understanding of the industry, challenges faced by taxing authorities, and peculiarities of the internet to develop a comprehensive and rational tax policy. Wardani, Ali, and Barkhuizen (2022) suggest that tax authorities need to adapt to the unique challenges posed by e-commerce to effectively collect taxes from these businesses.

Tax collection in the e-commerce industry has a number of specific challenges that need to be overcome by governments and tax authorities. One of the biggest challenges is the non-compliance of e-commerce businesses in collecting and depositing appropriate taxes. Many businesses, especially those operating at a small level, may not understand tax regulations or do not have adequate systems in place to collect taxes. Moreover, the challenge includes the characteristics of Difficult-to-Track transactions as e-commerce transactions often involve buyers and sellers located in different regions, even in different countries (Astuti, 2016). This makes tracking transactions and collecting taxes difficult due to variations in tax regulations in different jurisdictions.

In term of price transparency, e-commerce tends to have a high level of price transparency, which makes customers able to compare prices easily. This affects the ability of businesses to raise prices to cover the tax burden they pay. Furthermore, it also needs business actor identification. Identifying e-commerce businesses that have to pay taxes can also be a challenge. Many online businesses can operate relatively anonymously, which makes it difficult for tax authorities to track and identify them. In term of technology and data security, tax authorities must ensure that customer data and transactions collected for tax purposes are properly safeguarded and not misused. Data security is an important factor in e-commerce tax collection. If e-commerce businesses operate across borders, then international cooperation in tax collection is important. Countries need to work together to ensure that taxes owed can be collected effectively. E-commerce is a very dynamic industry, and rapidly changing tax regulations can confuse businesses. Changes to the rules need to be followed properly by business actors. Thus, some countries may enact special policies that affect e-commerce taxation, such as tax exemptions for small businesses or foreign customers. This can create inequality in tax collection.

To overcome these challenges, the government needs to develop appropriate policies, increase understanding of taxation of e-commerce businesses, utilize technology to facilitate tax collection, and collaborate with e-commerce platforms and other countries in cross-border cooperation. With these measures, e-commerce tax collection can become more efficient and fairer. Thus, clear and transparent e-commerce tax regulations not only enhance consumer confidence in online transactions but also underscore the importance of data security. Consumers are more likely to engage in e-commerce when they trust that their financial information is secure. This trust can be bolstered by emphasizing the implementation of robust cybersecurity practices by e-commerce businesses.

4.3 What are the implications of e-commerce taxation for consumer prices?

Previous studies reveal that e-commerce taxation can have a significant impact on consumer prices. Ahmed and Wirjanto (2008) found that applying sales tax to all Internet sales in Canada could reduce the number of online buyers by up to 44%. Einav et al. (2014) estimated that every one percentage point increase in a state's sales tax increases online purchases by state residents by almost 2 percent, while decreasing their online purchases from state retailers by 3-4 percent. However, Goolsbee (2001) argues that the potential revenue losses from sales tax on E-commerce are actually modest over the next several years. Chou (1999) examines the pros and cons of taxing Internet commerce and analyzes the main issues on electronic commerce taxation, including the roles of government, state tax issues, and software taxation. However, taxation policies and compliance requirements can influence the cost structure of e-commerce businesses. To manage tax-related matters effectively, online retailers often collect and store extensive customer data. In the cybersecurity context, this highlights the critical importance of protecting customer information. A data breach due to inadequate cybersecurity measures not only threatens customer privacy but can also result in financial losses. Therefore, businesses must invest in robust cybersecurity to safeguard customer data and maintain trust.

The implications of taxation in the context of e-commerce have the potential to directly or indirectly influence consumer prices. These implications are contingent on various factors, including the tax structure itself, the policies adopted by e-commerce businesses, and the dynamics of the markets in which they operate. The impact of taxation on consumer prices can manifest in several ways. Firstly, taxation can lead to a direct increase in product prices. If e-commerce companies choose to incorporate taxes, such as value-added tax (VAT), into the prices of their products, consumers may find themselves paying more for these goods and services. This effectively translates to higher costs when making purchases. Secondly, businesses may adjust their discount offerings and promotional strategies to offset tax expenses. This could mean reduced discounts or fewer promotional offers, resulting in consumers no longer enjoying the same level of cost-saving opportunities as before.

Thirdly, consumers' choices regarding shipping options may be influenced by tax charges. Higher shipping taxes might prompt consumers to opt for more cost-effective shipping methods, such as regular shipping, over pricier express options. The competitive nature of the e-commerce market also plays a role, as businesses may choose to absorb some or all of the tax costs to maintain competitive pricing, potentially impacting their profit margins. Consumer purchasing decisions may be affected by price increases due to taxes, leading them to be more selective in their choices or seek out more budget-friendly alternatives. Company policies play a pivotal role, as some businesses may absorb tax costs as part of their marketing strategy, while others may pass these costs on to consumers.

Lastly, government regulations, including adjustments in tax rates, can directly impact the overall cost of products and services in the e-commerce landscape. In summary, e-commerce taxation can indeed have a tangible effect on consumer prices, potentially making the products and services consumers desire more expensive. These implications underscore the intricate relationship between taxation policies and the cost of living for online shoppers, reflecting the need for careful consideration and management of tax-related matters in the e-commerce industry.

5. Conclusion

In conclusion, tax policies wield significant influence over taxpayer compliance, a realm encompassing the e-commerce industry. Effective tax frameworks hold the potential to elevate both the capacity and adherence of e-commerce businesses to taxation standards. In essence, well-structured tax regulations can enhance the likelihood of e-commerce companies complying with their tax obligations. The juridical definition of electronic transactions is defined by Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law) as legal acts carried out using computers, computer networks, and/or other electronic media. Furthermore, Law Number 7 of 2014 concerning Trade defines Trading through Electronic Systems as trading whose transactions are carried out through a series of electronic devices and procedures. As for taxation purposes, the Directorate General of Taxes Number SE-62/PJ/2013 concerning Affirmation of Tax Provisions on E-commerce Transactions defines e-commerce as trade in goods and/or services carried out by business actors and consumers through electronic systems.

To harness its full potential, governments and businesses must collaborate in establishing clear and equitable taxation regulations that promote compliance, level the playing field, and encourage innovation in the rapidly expanding digital economy. Taxation complexities can impede cross-border e-commerce, and harmonized international tax regulations could facilitate global e-commerce, fostering economic development. Indonesia lacks harmonization of regulations with other supervisory sectors concerned with e-commerce transactions, such as the trade sector, information technology, and financial services supervision. Taxation of e-commerce offers governments a source of revenue, which can be allocated towards funding public services, infrastructure development, and social programs, ultimately contributing to economic development. Clear and transparent e-commerce tax regulations can boost consumer confidence in online transactions. When consumers feel secure about their purchases, they are more likely to engage in e-commerce activities, thereby bolstering the overall digital economy. E-commerce holds the potential to drive international trade and stimulate economic growth. Lastly, governments and businesses collaborating to establish clear taxation regulations in the digital economy can also work together to implement robust cybersecurity measures. These measures are crucial for safeguarding sensitive financial and tax-related data from cyberattacks. As e-commerce transactions involve the exchange of financial information, strong cybersecurity practices are essential to protect against data breaches and fraudulent activities.

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