

# Utilization of electronic transactions to increase non-tax state revenue in the telecommunications sector

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**Abstract:** The telecommunications sector is crucial in a country's economy. The advancements in information and communication technology have had a significant impact on this sector, particularly in the electronic transactions domain. The utilization of electronic transactions in the telecommunications sector can yield substantial benefits, including increasing non-tax state revenue and economic development in Indonesia. The Covid-19 pandemic has served as a catalyst for the sharp rise in internet usage and telecommunications services, such as work-from-home, distance learning, online shopping or payments, industrial digitization, telemedicine, and others. Consequently, digital transformation has accelerated, necessitating the equitable distribution of Information and Communication Technology (ICT) in Indonesia. The utilization of electronic transactions has directly contributed to the increase in state revenue from non-tax sector, particularly in the telecommunications sector. This can be observed through the continuous growth of non-tax revenue achieved by the Ministry of Communication and Informatics, surpassing the set targets each year in terms of realized value. The objective of this research is to analyze the effectiveness, challenges, and impacts of electronic transactions in increasing non-tax state revenue, in order to generate policy recommendations in Indonesia. This study uses a normative juridical method, analyzing positive legal provisions. Data sources were obtained from three types of legal materials, and data collection was conducted both online and offline. The research results indicate that the utilization of electronic transactions can increase non-tax state revenue in the telecommunications sector through various forms such as telecommunications bill payments, e-commerce transactions, sales of prepaid credit and data packages, telecommunications devices, digital services, content delivery, and transaction monitoring and oversight.

**Keywords:** utilization; non-tax; telecommunication; electronic transaction

## 1. Introduction

The telecommunications sector is one of the vital sectors in a country's economy. According to the International Telecommunication Union (ITU), telecommunications is defined as the transmission, reception, and processing of voice, text, image, as well as video information and data using electromagnetic systems. This definition emphasizes the transfer and exchange of information through communication systems that utilize electromagnetic technology (Rec. ITU-R V.662-2., 1986–1990–1993).

ITU also recognizes that telecommunications encompass various forms of communication, including voice communication, data communication, multimedia communication, long-distance communication, and short-range communication. The

ITU's definition of telecommunications includes both communication through wired media (such as landline telephones) and wireless communication (such as communication through radio waves or satellites) (ITU, 2023).

From a technological standpoint, the telecommunications sector has undergone significant evolution in terms of connectivity speed and network capacity, ranging from the first generation (1G) to the fifth generation (5G) (Binus, 2018). This has brought advancements in information and communication technology, resulting in a significant impact on the telecommunications sector, including electronic transactions.

An electronic transaction is defined as legal actions conducted using computers, computer networks, and/or other electronic media. Electronic transactions encompass all forms of commercial or financial transactions carried out electronically through computer networks or the internet. Therefore, it can be understood that electronic transactions involve the exchange of information, data, or financial value between parties without direct physical interaction.

The Covid-19 pandemic has served as a catalyst for a sharp increase in the usage of internet and telecommunications services, including work from home, distance learning, online shopping or payment, industrial digitization, telemedicine, and others. As a result, digital transformation has accelerated, necessitating the rapid equalization of Information and Communication Technology (ICT) in Indonesia (Kominfo, 2020). Furthermore, the utilization of electronic transactions in the telecommunications sector can bring significant benefits, including increased state revenue from non-tax sector.

Electronic transactions that generate significant profits should contribute substantially to national revenue. Therefore, this analysis is expected to help identify potential lost revenue and ways to optimize it, as well as enhance transparency and accountability in the management of electronic transactions, ensuring that all parties comply with applicable regulations.

State revenue refers to the revenues received by the government's treasury. The preparation and establishment of the state budget/state budget (APBN) are based on laws, and state revenue encompasses tax revenue, non-tax revenue, and grants. Within this context, tax and non-tax revenues are binding and enforceable sources of income.

The utilization of electronic transactions is directly proportional to the increase in non-tax state revenue, particularly in the telecommunications sector. This can be observed through the revenue achievement from non-tax sector by the Ministry of Communication and Informatics, which has consistently increased year after year, with actual values consistently surpassing the set targets. More than 80% of the total PNBPN of the Ministry of Communication and Informatics (including Frequency Usage Charges, Telecommunications Charges, and Universal Service Obligation Charges) is derived from the same telecommunications companies, namely Telkomsel, Indosat, XL Axiata, and Telkom (APBN, 2020).

With regards to Telecommunications Operation Rights Fees (BHP Tel), it is normatively defined in Article 1, number 18 of the Minister of Communication and Informatics Regulation Number 5 of 2021 on Telecommunications Operations, as an obligation that must be paid by every Telecommunications Operator, which constitutes Non-Tax State Revenue (PNBP). This means that for each type of activity within the

scope of telecommunications, there are obligations that must be paid as a non-tax, which becomes the revenue for the central government.

Electronic transactions refer to transactions conducted through electronic networks, such as the internet or other communication networks. In the context of the telecommunications sector, electronic transactions can include payment of telecommunication bills, purchase of mobile credit or data packages, purchase of telecommunication devices, and other transactions related to telecommunication services.

Previous research has discussed how the rapid growth of OTT services has made it easier for consumers to enjoy high-quality services through technological advancements. However, its presence has generated legal issues and challenges for telecommunications companies in Indonesia, particularly in terms of the regulation and the collection of non-tax revenue (PNBP) and taxation for OTT businesses. This is because these services do not have formal partnerships with telecommunications providers. Additionally, it remains uncertain how policies and regulations regarding the collection of PNBP and taxation should be applied in Indonesia

The era of digital transformation is becoming increasingly apparent, and several critical sectors must adapt to this transformation, including state revenue collection in the form of PNBP and taxes. One of these sectors is OTT services, which are considered in need of clear regulation concerning state revenue generated from online activities, particularly those carried out by foreign OTT services. Unfortunately, as OTT services continue to grow, they also create challenges for telecommunications companies in Indonesia. This is due to the fact that OTT services do not have formal collaborations with telecommunications operators. However, these services utilize the infrastructure owned by telecommunications operators, yet the greater profits are often reaped by OTT services. Therefore, an alternative solution is needed to ensure that OTT services continue to contribute to the state without harming the telecommunications sector, such as by imposing PNBP and taxes (Ramli et al., 2022).

At the international level, there has been extensive discussion on digital taxes or taxes on OTT services, including by the Organisation for Economic Co-operation and Development (OECD). Tax regulations that respond to digital activities triggering electronic transactions and giving rise to new business models based on the digital economy have been attempted by governments since the early multilateral consensus through the OECD. For example, in 1998, the Ottawa Ministerial Conference titled “A Borderless World: Realizing the Potential of Electronic Commerce” was held through the Organization of Economic Co-operation and Development (OECD). It specifically included documents with principles (Cahyadi et al., 2021) as guidance for governments in their approach to taxing electronic commerce (Lucas-Mas and Junquera-Varela, 2021). The conference marked an awareness of taxation that could be applied to electronic trade, with several conclusions drawn, including: (OECD, 2023).

The fact that innovation serves as the foundation for electronic commerce, providing new opportunities for state revenue through taxes, is acknowledged by the Committee on Fiscal Affairs (CFA), followed by the commitment of member countries wishing to optimize these opportunities..

The application of conventional tax principles is also necessary to guide the implementation of electronic commerce taxation. The CFA claims that conventional tax laws must enforce these concepts in technical and commercial regulations.

This method does not prohibit amendments to respond to measures addressing electronic trade, where the taxation of electronic commerce will not be treated differently from existing tax regulations that already have their own standards.

Any provisions adopted from this conference regarding electronic commerce concepts and any modifications to current international tax principles need to be designed to maintain the fiscal autonomy of each country, to strive for an equal share of the electronic commerce tax base among countries, and to prevent double taxation. Therefore, to promote the adaptation of concepts from the conference, tax authorities operating through the OECD must play an active role.

Intensive business collaboration and consultation will be integral to the implementation of the principles of this conference.

In previous research, a recommendation was made for the ideal policy model to address the challenges of OTT services to ensure they remain accountable for their services, including in terms of non-tax revenue (PNBP) and taxation. The imposition of taxes on OTT services should not be limited to e-commerce taxes, as the content of OTT services extends beyond such activities. To identify the ideal policy model and regulations for PNBP and taxation of OTT businesses in Indonesia, the following approaches can be taken (Safiranita et al., 2021):

- i) Collaboration Approach: Collaboration between OTT service providers and telecommunications operators to generate revenue from advertising, as demonstrated by Telkom IndiHome through Iflix.
- ii) Comparison Approach: Comparing practices with countries like Singapore, which have regulated OTT services by introducing licensing systems for content distribution and taxation regulations through the Content Code of OTT.
- iii) Normative Approach: Granting legal entity status to OTT services, whether they are individuals, legal entities, or non-legal entities, subject to relevant legal frameworks, including Civil and Commercial Codes. Collaboration with national companies and taxation adherence to relevant regulations and tax laws, such as Government Regulation on Postal, Telecommunication, and Broadcasting, is essential. These measures are aimed at maximizing state revenue from companies that can contribute to the national economy.

Then, other research discusses about collaboration Principles between Telecommunication Operators and OTT Platform Providers in the Context of the Indonesian Job Creation Regulation Telsoc Journal. The article explains that telecommunications regulations have garnered public attention due to their potential to provide various protections. Furthermore, Law Number 6 of 2023 on Job Creation (the Job Creation Law) has presented new implications for telecommunications operators in the form of government support. Based on the principles of fairness, impartiality, and non-discrimination, as well as the maintenance of service quality, it is expected that the telecommunications operator system in Indonesia will be able to evolve and provide the best facilities in accordance with the public needs. This also opens opportunities for new collaboration models with the increasingly popular OTT services.

In summary, the strategic provisions regarding telecommunications in the Job Creation Law encompass facilities provided by the central and regional governments to facilitate the development of telecommunications infrastructure, collaboration between telecommunications service providers, mutual collaboration with the broadcasting sector, and ease of business licensing that can provide same-day services through online media. Additionally, as an effort to support the acceleration of digitalization with the use of the internet in all sectors of life, it has become easier for broadcasters to integrate and utilize the Information and Communication Technology (ICT) sector for flexible and sustainable business development. The Job Creation Law also accommodates high-quality internet services by improving the even distribution of signals across Indonesia and emphasizing greater reliance on supervision in the field of telecommunications for service quality and user experience (Ramli et al., 2022).

Regulations related to OTT are governed by Article 15 of Government Regulation Number 46 of 2021 on Postal, Telecommunications, and Broadcasting, which governs the collaboration between OTT operators and telecommunications operators. Furthermore, it is explained that OTT falls within the domain of Regulations on Postal, Telecommunications, and Broadcasting because it represents a business activity conducted over the internet. This includes services that act as substitutes for telecommunications services, content service platforms in the form of audio and visual content, and other services designated by the Minister (Minister of Communication and Information Technology) (Ramli et al., 2022).

In this research, the discussion on the implementation of telecommunications cooperation principles requires concrete fulfillment. This starts with the provision of OTT services, which previously relied on unwritten agreements between telecommunications operators. Now, collaborative cooperation must take the form of written agreements. Through formal agreements, it is expected that the rights and obligations of the parties will become clear and certain. Consequently, with the emergence of regulations related to the implementation of telecommunications cooperation with OTT services, it is expected that these services will be easier to control and more reliable, making it easier for the government to select OTT services that can enter Indonesia.

The Job Creation Law and the Government Regulation on Postal, Telecommunications, and Broadcasting reflect a spirit of ease of investment. The potential for job creation is also reflected in the telecommunications sector, which is facing a new paradigm with the presence of OTT services. Global cooperation is being pursued to safeguard Indonesia's digital sovereignty through more comprehensive regulation for global platforms entering the domestic market. Therefore, cooperation between network operators and OTT platform providers undoubtedly requires incentives to create mutual respect and mutual benefits, based on a symbiotic relationship that benefits the country and ensures fairness for domestic telecommunication operators (Ramli et al., 2022).

The results of previous research correlate with this study because they both discuss the need for an enhancement of OTT services in electronic transactions, where the investment value of these transactions will increase, and their implementation complies with Indonesia's positive law. This is because OTT platforms collaborate

with telecommunications operators to boost the telecommunications service industry in Indonesia.

The main reason to study this topic lies with the fact that the current era of technology has seen some magnanimous shifts in terms of the daily lives of the people so to understand the contribution of ecommerce to this new economy. Digital Economy can be defined as the usage of technology in the current economy, encompassing the internet and the ever-evolving processes of digitalization. (Mishra, 2023) The digital economy and e-commerce theory explore the transformation of traditional economic activities into digital formats. This theory highlights how digital platforms and electronic transactions streamline business operations, reduce costs, and open new revenue streams. For the telecommunications sector, leveraging these digital advancements can enhance efficiency in service delivery and broaden the revenue base through various electronic transaction mechanisms.

The utilization of electronic transactions in the telecommunications sector to increase non-tax state revenue can provide financial benefits to the state. This aligns with several theories that support the increase in state revenue, as follows:

a. Theory of State Revenue Based on Classical Economic Approach (Adam Smith).

Adam Smith: Smith is known as the father of classical economics and the author of “The Wealth of Nations.” He promoted the idea that free markets and competition can generate strong economic growth. From the perspective of classical economics, state revenue can be increased through moderate fiscal policies and low tax barriers (Ismail, 2012).

b. Theory of Digital Economy (Richard Thaler).

One of the theories on non-tax state revenue from electronic transactions is the theory of digital economy. This theory states that the government should impose fair and effective taxes or non-tax state revenues on electronic transactions to ensure tax fairness and generate sufficient revenues from the digital sector. In an era where e-commerce is increasingly dominating the global economy, this theory emerges as a response to the taxation challenges faced by countries in dealing with technological and digital trade advancements.

One prominent figure associated with this theory is Richard Thaler, an economist known for his contributions to the field of behavioral economics. Thaler has advocated for the need to adjust the tax system to accommodate electronic transactions and align tax rules with technological advancements (Thaler, 2021). Therefore, the government should impose fair and effective taxes on electronic transactions to ensure that the digital sector also makes adequate contributions to state revenue.

c. Optimal Taxation (James Mirrlees).

One relevant theory in exploring the potential of state revenue is the theory of “optimal taxation.” (Wilson, 2010). This theory deals with how a government can design an efficient and fair tax system to maximize state revenue without undermining economic incentives and social justice. One prominent figure in this field is James Mirrlees, a British economist who was awarded the Nobel Prize in Economics in 1996. Mirrlees studied how a government can design a tax system that optimizes resource allocation in the economy and minimizes economic distortions. He emphasized the

importance of imposing efficient and fair taxes to enhance state revenue without hindering economic activities (Peter, 1971).

The utilization of electronic transactions in the telecommunications sector brings benefits to both the public and telecommunications service providers. The public can enjoy the convenience and speed of conducting transactions, while telecommunications service providers can enhance their operational efficiency. However, to effectively implement electronic transactions utilization in the telecommunications sector, cooperation among the government, telecommunications service providers, and other relevant parties is necessary. Supportive regulations, ensured transaction security, and public education on the benefits and safe usage of electronic transactions are also required.

With proper and integrated utilization of electronic transactions in the telecommunications sector, it is expected that non-tax revenues can significantly increase. This will have a positive impact on the development of telecommunications infrastructure, the improvement of telecommunications services, and the overall economic development of the country. Therefore, based on the aforementioned background, the followings are the problems identified in this research.

- 1) What are forms of electronic transactions used in the telecommunications sector?
- 2) What steps can be taken to increase non-tax state revenue potential from electronic transactions?

## **2. Methodology**

The normative juridical research methodology with a descriptive-analytical nature is an approach used in legal studies to analyze and describe the applicable laws within a specific legal system. This method is normative in nature because it focuses on the analysis of existing laws and how they should be applied. It is also descriptive because the research aims to describe, analyze, and explain the existing legal phenomena (Ibrahim, 2006). The data sources used in this method consist of primary, secondary, and tertiary legal materials, and data collection can be conducted through online or offline means.

The following are the general stages involved in normative juridical research with a descriptive-analytical nature (Purwati, 2020):

- a. Identification and Data Collection: This stage involves identifying and collecting relevant legal materials. These may include laws, regulations, court decisions, policy documents, legal literature, and other legal sources.
- b. Analysis of Legal Documents: In this stage, the researcher reads and analyzes the legal documents related to the research topic. The analysis involves a detailed examination of the legal text to understand its content, the interrelationship between regulations, and the important aspects relevant to the researched issue.
- c. Development of Theoretical Framework: After analyzing the legal documents, the researcher formulates a theoretical framework that will serve as a guide for further analysis. This theoretical framework includes relevant concepts, principles, and theories related to the research topic.

- d. **Data Analysis:** This step involves critically analyzing the content of the legal documents and identifying patterns, relationships, or differences found in the laws. It entails legal interpretation, classification of legal rules, and identification of relevant legal arguments.
- e. **Formulation of Findings and Conclusions:** Based on the analysis, the researcher formulates findings that systematically describe what was discovered during the study. Subsequently, conclusions are drawn from these findings, including the theoretical and practical implications of the research.

The normative juridical research method with a descriptive-analytical nature, provides a comprehensive understanding of the applicable law and facilitates critical thinking regarding legal problem-solving.

### **3. Results**

Digital technology adoption is clearly visible throughout Southeast Asia. In major cities, the widespread use of mobile phones for messaging and social media is ubiquitous. Ride-sharing services and delivery apps are revolutionizing urban transportation and service delivery processes. As consumers increasingly turn to online platforms for purchasing goods, traditional retail businesses are facing transformative challenges. The impacts of the digital revolution extend beyond popular social networks, online businesses, and mobile applications. Digital platforms, characterized by technological innovation, new business models, and diverse value propositions, are reshaping both private and, in some cases, public sectors by offering a wide array of products and services through digital channels. The integration of digital technology is fundamentally altering—indeed, disrupting—all sectors, particularly services like logistics and finance, as well as industrial production and agriculture. These developments represent clear indications of the expanding digital economy (Digital Development Partnership, 2019).

In Indonesia, the government issued Regulation No. 1 in 2020, which includes provisions for the tax treatment of e-commerce activities. This regulation mandates that overseas sellers and e-commerce platform providers must appoint a representative in Indonesia to handle the payment and reporting of taxes related to their transactions. Specifically, e-commerce trade activities will be subject to the following taxes (KPMG, 2024):

- a. **Corporate Income Tax** payable by deeming “PE” of overseas ecommerce companies which have a significant economic presence in Indonesia. The significant economic presence will be determined further by the Minister of Finance and would cover consolidated gross revenue; sales amounts in Indonesia; and/or the size of active members in Indonesia;
- b. **Electronic Transaction Tax** will be imposed on sales to Indonesian buyers/users if the above PE concept cannot be applied based on specific provisions of a Tax Treaty. However, further implementing measures are required for the new tax to go into effect.

Although the law was enacted, the implementing regulations are still pending, so the measures are not yet fully implemented. On June 8, 2020, the Indonesian Directorate General of Taxation released FAQs addressing: i) The expansion of



criteria and significant economic presence (SEP) for Pes for income earned from Indonesia by foreign digital entities without a physical presence in Indonesia; ii) The application of the SEP principle in Indonesia; iii) Future plans to impose income taxes on electronic transactions conducted by foreign entities.

The Finance Ministry stated that Indonesia is awaiting a global consensus on digital taxation rather than implementing its own digital services tax. Therefore, in seeking a solution to the unachieved global agreement, quoting Adam Smith as the father of classical economics and author of *The Wealth of Nations*. From the perspective of classical economics, state revenue can be increased through moderate fiscal policies and low tax barriers.

Based on the analysis conducted by identifying and collecting data, and by developing a theoretical framework that includes the theory of state revenue based on the classical economic approach, digital economy theory, and optimal taxation, the following analysis is produced (KPMG, 2024).

### **3.1. Forms of using electronic transactions in the telecommunication sector**

In electronic transactions, platforms are often used as means to connect businesses with their customers in a single framework (Ramadayanti et al., 2022). Digital platforms are part of the utilization of the ICT industry that provides a space for various parties to interact and conduct transactions using telecommunications infrastructure (Ramadayanti et al., 2022). The utilization of electronic transactions refers to the effective use of electronic transactions for the benefit of businesses, governments, or individuals.

The utilization of electronic transactions does not only provide global access for users but also brings convenience to daily life. For instance, in the context of shopping, consumers can leverage electronic transactions to purchase products or services online, explore various options, compare prices, and make quick and easy purchases through e-commerce platforms. Therefore, the utilization of electronic transactions plays a crucial role in the development of the digital economy. With the increasing prevalence of electronic transactions, opportunities arise for the growth of online businesses, startups, and technological innovations. The utilization of electronic transactions can create new job opportunities, enhance economic competitiveness, and drive overall economic growth.

Furthermore, electronic transactions can be utilized for online-based public services, where the government can leverage electronic transactions to deliver public services through online channels. For example, citizens can pay taxes or fees, handle official documents, or access government information through electronic portals. The utilization of electronic transactions in public services can improve accessibility, efficiency, and transparency in the relationship between the government and the public.

One of the theories regarding non-tax state revenue from electronic transactions is the digital economy theory. According to this theory, the government should impose fair and effective taxes or non-tax revenues on electronic transactions to ensure tax fairness and generate adequate revenue from the digital sector. As e-commerce

increasingly dominates the global economy, this theory addresses the taxation challenges countries face in managing technological and digital trade advancements.

The utilization of electronic transactions in the telecommunications sector encompasses various forms that involve the use of information and communication technology. The followings are several forms of utilizing electronic transactions in the telecommunications sector.

#### Telecommunication bill payment.

Telecommunication bill payment services enable customers to utilize electronic transactions to pay their telecommunication bills online through digital payment platforms. This includes the use of credit cards, bank transfers, digital wallets, or other electronic payment methods. Therefore, individuals can make payments more easily and quickly. This can encourage people to be more disciplined in making payments not exceeding the due date, thereby increasing the non-tax state revenue from the telecommunications sector.

#### E-commerce transactions.

Electronic transactions are used to facilitate the purchase and sale of telecommunication products or services through online platforms. Customers can order telecommunication data packages, telecommunication devices, or access customer services through websites or applications.

#### Sales of credit (top up) and data packages.

Electronic transactions also enable the online sale of telecommunication credits (top-up balance) and internet data packages. Through e-commerce platforms or mobile applications, everyone can easily purchase credits or data packages without having to visit physical stores. The purchase of credits can be made through banking applications, mobile operator applications, or digital payment platforms. The increased sales of credits and data packages can significantly contribute to non-tax state revenue.

#### Telecommunication devices.

The utilization of electronic transactions can also be applied to the sale of telecommunication devices, such as smartphones, modems, or other telecommunication accessories. Telecommunication operators provide mobile applications that allow customers to access and manage their telecommunication services, monitor usage, update packages, or contact customer support through electronic transactions. With the presence of e-commerce platforms facilitating such transactions, the sales of telecommunication devices can increase, thereby impacting the growth of non-tax state revenue.

#### Digital services.

Along with technological advancements, telecommunication operators also provide additional digital services such as music streaming, video streaming, or cloud services through electronic transactions. Customers can subscribe to and access these services through online platforms.

#### Content delivery.

Electronic transactions are used to distribute digital content such as music, movies, or e-books through online platforms. Customers can purchase and download such content through relevant application stores or websites.

#### Supervision and monitoring of transactions.

The utilization of technology in electronic transactions also enables more effective supervision and monitoring of transactions in the telecommunication sector. With an integrated system in place, the government can easily monitor the transactions taking place, mitigate potential deviations, and optimize the collection of non-tax state revenue.

As the majority of human activities have shifted to the digital era that prioritizes electronic transactions, security is one of the crucial aspects that need to be safeguarded. This is to ensure that data is not compromised by third parties and that intruders/hackers cannot gain access to sensitive information and misuse it for personal purposes (charade, 2017). The utilization of electronic transactions brings many benefits to various sectors. However, it is also important to consider the aspects of security, privacy, and consumer protection in conducting electronic transactions to ensure trust and the sustainable use of this technology.

### **3.2. Initiative to enhance non-tax state revenue potential from electronic transaction**

If we revisit the theory of digital economics proposed by Richard Thaler, the challenges of the digital economy should be anticipated and addressed by the government proactively. This is aimed at creating fairness in electronic transactions to ensure tax equity and generate sufficient revenue from the digital sector. Therefore, the government should impose taxes or non-tax state revenues. One approach is to respond to the digital situation with policies that accommodate digital businesses to increase state revenue in the form of non-tax state revenue (Safiranita et.al., 2021). This theory aligns with the ideas presented by Adam Smith in the Theory of State Revenue Based on the Classical Economic Approach, stating that revenue can be increased through moderate fiscal policies and low tax barriers. Thus, if the government pays attention to enhancing the non-tax revenue potential from electronic transactions by designing an efficient and fair taxation system that maximizes state revenue without undermining economic incentives and social justice, the implementation of Optimal Taxation proposed by James Mirrlees can be realized.

This aligns with the theory of “optimal taxation,” which is relevant in exploring the potential of state revenue. This theory, discussed by D. W. in 2010, addresses how a government can design an efficient and fair tax system to maximize state revenue without compromising economic incentives and social justice. A notable figure in this field is James Mirrlees, a British economist who won the Nobel Prize in Economics in 1996. Mirrlees examined how a government can create a tax system that optimizes resource allocation in the economy while minimizing economic distortions. He highlighted the importance of implementing efficient and fair taxes to boost state revenue without hindering economic activities.

Normatively, non-tax state revenue regulation is governed according to the respective Ministry/Agency responsible for the relevant sector. Specifically, the regulation on non-tax revenue in the Ministry of Communication and Informatics is governed by Government Regulation Number 80 of 2015 on the Types and Tariffs of Non-Tax State Revenues Applicable to the Ministry of Communication and Informatics. Article 1, paragraph (1) of the Government Regulation stipulates the types

of non-tax imposed in the Ministry of Communication and Informatics, including telecommunications services. Therefore, telecommunications service is essential both in terms of facilitating communication flows and increasing state revenue. Telecommunications services play an inherent role in supporting the functioning of electronic transactions in the national market.

Article 1, number 7 of Government Regulation Number 46 of 2021 on Postal, Telecommunications, and Broadcasting states that “telecommunications service provision is the activity of providing and serving telecommunications to enable Telecommunications to take place.” The provision of telecommunications services is subject to the Telecommunications Service Provision Fee, which is intended as an obligation imposed on network and telecommunications service providers as compensation for the licenses obtained in the provision of network and/or telecommunications services.

When comparing with other countries, there is currently no regulation specifically addressing Non-Tax State Revenue (PNBP) concerning electronic transactions, but there is a focus on regulations related to taxation in electronic transactions, particularly in this digital economic era. Therefore, the absence of regulations regarding PNBP in electronic transactions is a limitation in this research as it is based on normative grounds and linked to the existing status quo in Indonesia.

In Indonesia, the issue of digital taxation started to gain prominence, especially with the emergence of the COVID-19 pandemic. The ongoing Covid-19 situation accelerated digital transformation, referring to changes influenced by digital technology. These changes need to be anticipated from various perspectives to prevent legal issues, such as in tax policies. Tax policies consist of a series of regulations issued by the government regarding taxes and their management. In tax policies, taxpayer compliance is essential, so these policies need to be supportive of taxpayers (Malau, 2023).

Due to the strengthening of social and physical practices that support the trend of conducting trade through electronic systems and ensuring equality, a direct tax policy (income tax) for trade conducted using electronic systems was introduced in Law Number 2 of 2020. Since direct taxation is already regulated in Indonesian laws, this research adopts a normative legal approach without neglecting empirical facts in the development of the digital economy. The implementation of this regulation is evaluated based on Tax Law in Indonesia, with a focus on aspects such as legal certainty and tax jurisdiction. Based on the philosophy of taxation in Indonesia, Law Number 2 of 2020 is considered to lack legal certainty and policies related to income tax for trade conducted using electronic systems. It is seen as a unilateral action. Research on income tax in the context of the rapidly evolving digital economy, especially concerning the establishment of a permanent physical residence/establishment, is relatively new, particularly in relation to the taxation of foreign businesses operating in OTT services in response to the developments in the digital economy. However, there is still ongoing discourse regarding its implementation, as it depends on the policies of other countries or multilateral agreements (Cahyadi et al., 2021).

Discussion of income tax in the context of the rapidly evolving digital economy, especially regarding the establishment of a permanent physical residence, is relatively

new. The Indonesian government has made efforts to impose income tax that can cover foreign business entities, including those operating in the digital era, through the Income Tax Law. However, the provisions in Law Number 2 of 2020 are considered inappropriate for application in the digital economy era, especially in relation to the requirement for digital platforms and digital businesses to establish a permanent physical residence. Law Number 2 of 2020 reflects the government's efforts to effectively impose income tax on digital platform operators by establishing a significant economic presence as the basis for taxation. In the digital economy era, the success of policy utilization highly depends on the policies of other foreign countries. Therefore, tax policies in the digital economy era should have a multilateral character, not just bilateral or unilateral (Cahyadi et al., 2021).

These guidelines are essential for ensuring that OTT services contribute fairly to national revenues while maintaining regulatory clarity and effectiveness in enforcement.

Therefore, the regulated non-tax imposition on the provision of telecommunications, is important and becomes the obligation of telecommunications service providers and the government to jointly implement and enhance its revenue potential. Non-tax state revenue regulation in the telecommunications sector is governed by the Minister of Communication and Informatics Regulation and the Government Regulation of Postal, Telecommunications, and Broadcasting. The imposition of Non-Tax State Revenue on telecommunication services—guided by these regulations—is essential for its implementation and the enhancement of its revenue potential. To enhance the non-tax revenue potential for electronic transactions in the telecommunications sector, several steps that can be taken include:

1) Establishment of appropriate state revenue policies.

The government needs to formulate state revenue policies, particularly relevant and appropriate non-tax policies, in line with the development of electronic transactions in the telecommunications sector. These policies should consider the specific characteristics of electronic transactions and ensure that the taxes/non-taxes imposed are fair and effective.

2) Expansion of the state revenue base.

The government can expand the state revenue base by identifying types of electronic transactions that are not yet subject to taxes/non-taxes state revenue. For example, by introducing taxes/non-taxes state revenue on digital product purchases, online sales, or the use of specific digital platforms.

3) Raising awareness and advancing education.

Educating the public and businesses about the obligation to impose taxes/non-taxes state revenue on electronic transactions is crucial. The government can conduct educational campaigns and seminars to raise public awareness of applicable taxes/non-tax and promote an understanding of the benefits of proper tax payment.

4) Development of digital infrastructure.

It is crucial to ensure the availability and wide access to reliable digital infrastructure. Investments in robust telecommunications networks and adequate information technology infrastructure will facilitate the growth of electronic transactions, which in turn can enhance the potential for tax/non-tax state revenues.

5) Collaboration with telecommunication operators.

The government can collaborate with telecommunication operators to strengthen the implementation of tax/non-tax policies in electronic transactions. For instance, telecommunication operators can assist in facilitating tax/non-tax payments through their platforms, making it easier for customers to fulfil their tax obligations.

6) Collaboration with E-commerce Platforms and Payment Service Providers

The government can collaborate with e-commerce platforms and payment service providers to enhance compliance with tax/non-tax payment obligations. This can be achieved by ensuring that platforms and payment service providers provide accurate transaction reports and implement appropriate mechanisms for the deduction and collection of taxes/non-taxes state revenue.

7) Strengthening supervision and law enforcement.

The government needs to enhance supervision and law enforcement regarding electronic transactions in the telecommunication sector. Firm actions should be taken against tax avoidance practices or other illegal activities that may undermine the potential taxes/non-taxes state revenue.

8) Stimulating innovation.

The government should encourage innovation in the telecommunication sector, including the development of new services or business models based on electronic transactions, which can contribute to increasing the potential of taxes/non-taxes state revenue. The government can provide incentives and support to industry players to develop innovative solutions that enhance electronic transactions and their contribution to state revenue.

To accommodate taxation and PNB for OTT services, the following guidelines should be included in national tax policy:

- a. Policy Objectives: This section should outline the urgency of regulating taxation and PNB for OTT services. Objectives could include increasing state revenue, regulating income distribution, or reducing economic inequality.
- b. Nature and Scope of Taxation: Define the types of OTT service transactions subject to taxation. This includes both direct taxes (such as income tax) and indirect taxes (like sales tax or PNB).
- c. Tax Rates: Establish the tax rates or parameters used to calculate the amount of tax owed. This could be based on gross revenue, transaction value, or net wealth, depending on the specifics of OTT service operations.
- d. Law Enforcement: Describe the mechanisms for enforcing tax compliance, including audit procedures, inspections, and legal penalties for non-compliance.

The oversight regulation of electronic transactions is inadequate due to the lack of a sui generis law governing the taxation and PNB of OTT services.

Collaboration between the government, telecommunication providers, and digital service providers is indeed essential. It is the answer to the challenges that arise in order to ensure fair rights and obligations for both parties, enabling them to benefit rather than suffer losses. This collaboration should consider principles that minimize disparate treatment, creating a conducive atmosphere for cooperation and maintaining service quality, with a focus on improving the quality of services provided to the public (Ramli et al., 2022). By doing so, the implementation of taxes/non-taxes payment obligations can be optimized.

Regarding the research, updates to PNBP regulations are necessary to address the digital economy phenomenon. The government should enhance state revenue potential by implementing policies that impose Non-Tax State Revenue (PNBP) on e-commerce transactions, OTT services, online advertising, and similar activities. This process should start with a study to determine appropriate rates for various types of PNBPs applied to electronic transactions, ensuring they align with industry developments. Following this, adjustments to PNBPs rates should be formalized through regulations at the level of government regulations and presidential/ministerial regulations.

#### **4. Conclusion**

After conducting an analysis on the Utilization of Electronic Transactions to Increase Non-Tax State Revenue in the Telecommunications Sector, the following conclusions can be drawn:

The utilization of electronic transactions in the telecommunications sector encompasses various forms involving the use of information and communication technology. Forms of electronic transaction utilization that can enhance non-tax state revenue in the telecommunications sector include telecommunication bill payments, e-commerce transactions, sales of credits (top-up mobile balance) and data packages, telecommunication devices, digital services, content delivery, and transaction monitoring. The utilization of electronic transactions provides numerous benefits across various sectors. However, it is also crucial to consider aspects of security, privacy, and consumer protection when engaging in electronic transactions to ensure trust and the sustained use of this technology.

Non-tax state revenue regulation in the telecommunications sector is governed by the Minister of Communication and Informatics Regulation and the Government Regulation of Postal, Telecommunications, and Broadcasting. The imposition of Non-Tax State Revenue on telecommunication services—guided by these regulations—is essential for its implementation and the enhancement of its revenue potential. The steps to increase the potential of Non-Tax State Revenue from electronic transactions, based on Indonesia's positive law, are as follows: i) establishing appropriate state revenue policies; ii) expanding the state revenue base; iii) increasing awareness and education; iv) developing digital infrastructure; v) collaborating with telecommunication operators; vi) partnering with e-commerce platforms and payment service providers; vii) enhancing supervision and law enforcement; and viii) stimulating innovation.

Therefore, the consequences of employing electronic transactions within the telecommunications industry can be outlined as follows:

- 1) Utilization of Electronic Transactions in the Telecommunications Sector has the most significant impact on Non-Tax State Revenue (PNBP) due to the sale of credit (top up) and data packages, digital services, content delivery, electronic transactions, and others. These revenues can support various government programs.
- 2) Escalation of Accessibility, where telecommunication services will enhance their accessibility through the widespread use of electronic transactions, especially in remote areas, thereby expanding the reach of telecommunication services.

- 3) Convenience and Efficiency of Electronic Transactions, where users are provided with various conveniences in conducting transactions quickly, comfortably, and efficiently.
- 4) Supporting Business Creativity, offering opportunities for businesses in the telecommunications sector to develop new business models and provide various services to their customers.

Nevertheless, it is crucial to maintain a focus on compliance with security, privacy, and consumer protection when engaging in electronic transactions. The level of trust and the sustainability of technology adoption heavily depend on the effectiveness of regulations and management related to these aspects (Smedinghoff, 2008).

As for the research recommendations, updates to the regulation of PNBP to address the digital economy phenomenon. The government needs to expand the potential state revenue through the policy of imposing Non-Tax State Revenue (PNBP) on e-commerce transactions, OTT services, online advertising, and others. This begins with the preparation of a study on the determination of rates for types of PNBP applied to electronic transactions with the aim of aligning with industry developments. Subsequently, adjustments to PNBP rates are regulated in implementing regulations at the level of government regulations up to presidential/ministerial regulations. To realize the increase in PNBP revenue and its extension to electronic transactions, transparency and socialization of PNBP obligations on digital economy business players are essential. This includes notifications regarding the types of transactions subject to PNBP and the procedures for reporting and payment. To facilitate operationalization, electronic payment platforms can be utilized for reporting and paying PNBP. Furthermore, to accommodate transactions security and PNBP payments, principles of consumer protection and data security are required, including provisions to protect consumer rights in digital economic transactions. Since digital economy transactions often involve foreign companies, it is essential to develop international cooperation in terms of PNBP, including information exchange with partner countries and bilateral or multilateral tax agreements.

Therefore, a review of the regulations on Non-Tax State Revenue (PNBP) needs to align with the advancements in technology and the current trends in the digital economy. Through these considerations, the government has the opportunity to establish a fair framework that effectively addresses the challenges posed by the digital economy.

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