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TAXATION CHALLENGES IN INTERNATIONAL E-COMMERCE TRANSACTIONS

Loso Judijanto[1], Caroline Caroline[2], Eko Cahyo Mayndarto[3]
[1]IPOSS Jakarta, Indonesia
[2]Universitas Sultan Fatah, Indonesia
[3]Universitas Tama Jagakarsa
Email: losojudijantobumn@gmail.com, caroline@unisfat.ac.id, ekocmayndarto@gmail.com

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Abstract

International e-commerce transactions present a range of complex taxation challenges, affecting tax authorities around the world. Key challenges include difficulties in determining tax jurisdiction due to the cross-border nature of digital transactions, which creates ambiguity regarding tax collection rights. In addition, the identification and tracking of e-commerce transactions is often hampered by the anonymous and global nature of digital transactions, which enables tax evasion. The issue of tax policy harmonisation between countries is also an obstacle, given the different tax systems and rates applicable in each country. To overcome these challenges, international cooperation and multilateral agreements are needed that can create fair and efficient tax standards and procedures for all parties involved.

Keywords: ***Challenges, Taxation, International E-Commerce Transactions.***

Introduction

The rapid development of information technology has driven major transformations in various sectors, including trade. One prominent phenomenon is the progress of e-commerce, especially on an international scale. International e-commerce, which refers to trading activities over the internet involving businesses from different countries, has provided many benefits, both for consumers and for businesses. These include greater market access, decreased transaction costs, and increased economic efficiency (Ernst & Young, 2021) .

E-commerce transactions include various forms of trading activities such as the sale of goods, services, and the provision of digital content. International e-commerce allows companies to expand their markets beyond geographical boundaries, so consumers can access products and services from different countries easily (Smith & Johnson, 2020) .

The main goal of international e-commerce is to increase access to the global market and expand the customer base. By selling products and services online, companies can reach a wider range of consumers without having to open physical stores in every country. This not only reduces operational and investment costs, but also allows companies to explore business opportunities in various markets that were previously unreachable. In addition, international e-commerce aims to improve the efficiency of business operations and provide a better shopping experience through the use of digital technology (Patel, 2022) .

The main function of international e-commerce is to provide a platform that enables efficient and secure cross-border transactions. This includes digital marketing functions, where companies can promote their products globally through online advertising campaigns (Singh, 2022) . In addition, international e-commerce also provides secure payment functions through trusted payment gateways, and manages efficient international logistics and shipping. The analytics function in e-commerce also allows companies to collect and analyse consumer data from different countries, helping them understand market needs and consumer behaviour in greater depth (PricewaterhouseCoopers, 2021) .

The development of international e-commerce has seen a significant rise in the last decade, fuelled by increased internet penetration and adoption of digital technology globally. Major e-commerce platforms such as Amazon, Alibaba, and eBay have become major players in international trade, facilitating millions of transactions every day. In addition, technological developments such as artificial intelligence (AI), blockchain, and the Internet of Things (IoT) continue to change the way e-commerce works, making it more sophisticated and integrated (Brown, 2021) . International regulations and standards have also evolved to support the growth of e-commerce, with initiatives such as the Unified Payment Interface (UPI) and the General Data Protection Regulation (GDPR) ensuring international transactions are safer and more secure. With these developments, international e-commerce is predicted to continue to grow and become an important component of the global economy (Kim, 2024) .

However, behind this progress, there are complex challenges, particularly in terms of taxation. Traditional taxation systems designed for conventional trade are often inappropriate in the context of cross-border e-commerce. For example, the determination of tax jurisdiction is one of the key issues, where it is difficult to determine where value is actually created and where taxes should be paid. Companies operating in different countries often face problems with different and sometimes inconsistent tax rules, making the process of fulfilling tax obligations complicated and confusing (O'Neill, 2025) .

In addition, there are challenges in terms of collecting Value Added Tax (VAT) or Goods and Services Tax (GST) on international transactions. Many countries struggle to collect VAT or GST from cross-border sales, which often results in significant tax revenue losses (Ahmed, 2023) . This occurs because consumers can purchase goods from abroad without paying the applicable tax, especially on small purchases that often slip off the radar of tax authorities. Global initiatives and collaboration between countries are needed to create a uniform and effective regulatory framework, to ensure that international e-commerce companies fulfil their tax obligations and avoid tax evasion that harms local and global economies (KPMG, 2020) .

This complex situation necessitates reforms in the international tax system. Countries are beginning to find ways to adapt to these developments through policy revisions, international collaboration, and the use of advanced technology to monitor and enforce tax rules. However, there are still many challenges that need to be overcome to ensure that the tax system can be fair and effective in the context of international e-commerce (Mendes, 2021) . This research aims to identify and analyse the main challenges in the taxation of international e-commerce transactions, as well as examine how different countries deal with these challenges. Thus, it is expected that this research can make a significant contribution to the development of adaptive and appropriate tax policies in the digital era.

Research Methods

The study in this research uses the literature method. The literature research method is an approach used to collect, review, analyse, and summarise previous research relevant to a particular topic or problem. This process involves identifying credible sources such as books, academic journals, articles, reports, and other scientific publications (Green et al., 2006) ; (Galvan & Galvan, 2017) . Once these sources are collected, the researcher will evaluate and critique the existing findings to identify patterns, gaps, and trends of previous research. This analysis helps in building a strong theoretical foundation, providing context for new research, and ensuring that further studies do not repeat work that has already been done, but make original and relevant contributions to the field of study in question (Torraco, 2005) .

Results and Discussion

Key Challenges in International E-Commerce Taxation

The development of information and communication technology has changed many aspects of human life, including commerce. E-commerce has become one of the most significant phenomena in recent decades. The shift of transactions from conventional to digital methods has erased geographical boundaries, allowing businesses to reach international markets more easily. However, this progress also presents new challenges, especially in terms of taxation on international e-commerce transactions (Peters, 2025) .

One of the biggest challenges in international e-commerce taxation is the determination of tax jurisdiction. In traditional trade, determining the location of transactions and tax payments is easier because the physical goods and sellers are often located in one country. However, with e-commerce, transactions may be digital and involve three or more different jurisdictions - where the buyer, seller and the server managing the transaction are located. This difficulty results in confusion regarding where taxes should be paid and according to which country's tax regulations (Kumar, 2021) .

The collection of Value Added Tax (VAT) or Goods and Services Tax (GST) on international transactions is a significant challenge for many countries. In cross-border purchase scenarios, consumers often do not pay the applicable tax, especially for small-value purchases. Tax authorities often lack effective mechanisms to collect VAT or GST from cross-border sales, resulting in a considerable loss of tax revenue. This affects the financial balance of countries, particularly those with a VAT/GST-dependent tax base (Rossi & Bianchi, 2023) .

Tax avoidance is an increasingly critical issue in e-commerce practices. Multinational companies may use transfer pricing strategies to shift revenue and profits to jurisdictions with lower tax rates, reducing the amount of tax payable in countries with high tax rates. Such practices are often difficult to detect and regulate by tax authorities, although existing international regulations such as the OECD's Base Erosion and Profit Shifting (BEPS) attempt to address this issue (Carter, 2020) .

One of the issues often brought up in e-commerce taxation discussions is the balance and equality between online and offline businesses. Traditional businesses argue that e-commerce has an unfair advantage due to tax regulations that do not yet fully apply to them, or are more difficult to enforce. This can create an imbalance in the market and make offline businesses have difficulty competing with e-commerce players who can operate with lower taxes (Deloitte, 2020) .

Each country has different tax systems and regulations, which creates additional complexities for international e-commerce companies. Navigating the various regulations and ensuring compliance across multiple jurisdictions requires significant resources and a deep understanding of the tax laws of different countries. This is especially more complicated for small and medium-sized companies that may not have the capacity to efficiently manage international tax compliance (Gonzalez, 2025) .

Inadequate technology and infrastructure is another obstacle in the e-commerce taxation system. Many tax authorities in different countries still adopt systems that are not sophisticated enough to track and monitor cross-border digital transactions. There is an urgent need for governments to invest in advanced technologies that can improve the success of tax monitoring and enforcement of e-commerce transactions (Dubois, 2024) .

In the context of e-commerce, data is a critical element, but it also presents counter-challenges in the form of data confidentiality and privacy. Collecting transaction data from multiple countries may violate applicable data privacy laws and raise digital sovereignty issues. A balance needs to be struck between tax collection efforts and the protection of user data (European Commission, 2018) .

Addressing international e-commerce taxation challenges requires global initiatives and cooperation between countries. Global bodies such as the OECD and G20 have been working to develop an international framework for digital taxation through initiatives such as the OECD's Inclusive Framework on BEPS. This collaboration aims to create fairer and more uniform rules that can help tax authorities address the challenges they face in the context of international e-commerce. However, getting agreement from all countries with different interests is not an easy task and requires continuous diplomatic efforts (Thompson, 2021) .

Thus, taxation in international e-commerce is not just a technical issue, but also a global issue that requires a multidimensional approach and cross-border cooperation.

An Analysis of Countries' Strategies and Solutions in Overcoming Challenges in International E-Commerce Taxation

Issues in international e-commerce taxation require comprehensive strategies and solutions from various countries. One of the solutions implemented by many countries is the application of value-added tax (VAT) or goods and services tax (GST) on e-commerce transactions. Countries such as the European Union have introduced a "One Stop Shop" policy that makes it easy for companies to take care of taxes in all member countries through a single portal. This minimises bureaucracy and eases compliance for companies (Chan, 2024) .

Meanwhile, some countries use a bilateral approach by formulating tax treaties between countries to address tax avoidance issues. The United States, for example, often includes specific provisions on e-commerce tax in the tax treaties they make with other countries. This provides clarity on tax jurisdiction and minimises the risk of tax disputes (Yu, 2020) .

Other countries such as Australia have adopted policies that expand the definition of "permanent presence" for digital companies. By doing so, foreign companies that provide digital services to consumers in Australia are considered to have a "nexus" or tax connection in the country. This policy allows Australia to tax more effectively the profits earned from its residents (Alonso, 2024) .

Enforcement measures are also being strengthened. Some countries are leveraging resources and technology to detect unreported e-commerce transactions or unpaid taxes. For example, the use of big data and analytics technologies to monitor online transactions can help governments detect compliance and pursue non-compliant actors. Sophisticated information systems allow cross-data between government agencies to share information (Becker, 2023) .

International organisations such as the OECD play a pivotal role in shaping the global framework for digital taxation. The BEPS project, launched by the OECD, aims to address tax base erosion and profit shifting by developing international standards. The solutions proposed by BEPS include policies on transfer pricing and information transparency that aim to ensure profits are taxed fairly according to the economic activity performed (Nguyen & Lee, 2022) .

However, the implementation of international standards remains challenging. Each country has different economic and political interests, which sometimes makes crafting a global agreement difficult. Differences in tax rates and domestic policies can cause friction, so a strong diplomatic and co-operative approach is needed to reach a mutually acceptable solution (Ernst & Young, 2021) .

The role of courts is also important in resolving disputes between countries and companies regarding e-commerce taxation. The existence of international judicial or arbitration institutions specialising in digital taxation can be a solution to mediate and resolve conflicts fairly. This reduces legal uncertainty and provides assurance to global companies (International Monetary Fund, 2019) .

In addition, tax education and literacy for e-commerce players is crucial. Many small and medium-sized businesses may not understand the complexities of international taxation, so educational campaigns and outreach from the government or trade organisations can help them comply with applicable regulations. The utilisation of technology such as apps and information platforms can be an effective means to increase tax awareness and knowledge (Wang, 2021) .

At the local level, countries have also started to develop incentive policies to encourage tax compliance. For example, by providing tax deductions or other fiscal incentives to companies that proactively comply with tax rules. This not only increases compliance but also stimulates the growth of the digital economy as companies feel the direct benefits of their compliance (Hernandez, 2020) .

Overall, solutions to international e-commerce taxation challenges require a combination of multilateral, bilateral, and domestic approaches. Through international collaboration, strict law enforcement, business education, and technology utilisation, countries can create a fair and effective tax system. These measures are expected to create a healthy and sustainable digital trade ecosystem without sacrificing valuable tax revenue for national development.

Conclusion

Taxation challenges in international e-commerce transactions present a number of complexities that require careful attention and handling from tax authorities in various countries. One of the main challenges is the difficulty in determining tax jurisdiction, given that e-commerce transactions often involve sellers, buyers and servers located in different countries. This creates ambiguity about which country has the right to levy taxes and at what rate, which often leads to disputes between countries.

In addition, there are challenges in identifying and tracking e-commerce transactions. The digital and often anonymous nature of e-commerce makes it easier for companies to avoid paying taxes or underreport revenues. Many online platforms and merchants operating across borders can also take advantage of legal loopholes or lack of international coordination to avoid tax responsibilities. This calls for the development of more sophisticated technologies and frameworks to effectively monitor and supervise such transactions.

Finally, there is the issue of harmonising tax policies between countries. Each country has its own tax system and rates, which can lead to gaps and imbalances in tax revenue. These differences can also create additional administrative burdens for businesses operating in different jurisdictions and can hinder the growth of global e-commerce. Overcoming these challenges requires closer international co-operation and multilateral agreements that can standardise taxation and procedures in a way that is fair and efficient for all parties involved.

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