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# A Study on Taxation of Cross-Border E-Commerce Transactions: The Case of Value-Added Tax

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#### Abstract

This paper examines the taxation of cross-border e-commerce (CBEC) in Taiwan with a focus on the Value-Added Tax (VAT) regime. It analyzes Taiwan's legal reforms requiring foreign digital service providers to register and remit VAT, and evaluates the effectiveness of these measures through comparative analysis and case studies, including Uber and LINE. The study highlights administrative gaps such as limited audit capabilities and lack of international cooperation, and compares Taiwan's system with those in the EU, South Korea, and Australia. Based on recent global practices, the paper proposes policy recommendations to enhance tax neutrality, enforcement efficiency, and digital infrastructure. The findings contribute to ongoing efforts to align national tax systems with the digital economy's borderless nature.

#### JEL classification numbers: H25, H26.

**Keywords:** Cross-border e-commerce, Value-Added Tax, Digital Economy, Tax Compliance.

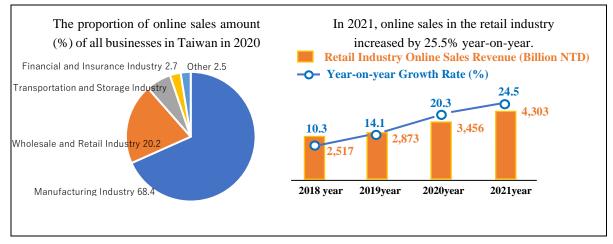
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## 1. Introduction

The non-face-to-face consumption trend triggered by the COVID-19 pandemic in 2020 spread explosively due to the prolonged impact of the fourth wave of the pandemic and lockdowns. As a result, outdoor activities continued to shrink, while e-commerce and non-face-to-face consumption through electronic payments saw significant growth. Consequently, physical stores were severely impacted, and even as the domestic pandemic situation greatly improved, e-commerce continued to thrive and prosper, gradually forming a competitive market.



#### Figure 1: Current Status of Taiwan's Internet Industry

Source: Ministry of Economic Affairs, Department of Statistics, compiled by authors.

In the age of digital globalization, cross-border e-commerce (CBEC) has emerged as a transformative force reshaping international trade. Consumers and businesses now routinely engage in transactions that transcend national boundaries, enabled by digital platforms and automated payment systems. This transformation has not only generated economic opportunities but also posed significant challenges to the global tax order. In particular, the application and collection of Value-Added Tax (VAT) in digital transactions have become increasingly complex, as traditional tax frameworks often fall short in addressing the intangible and decentralized nature of online commerce.

Taiwan, as a highly connected economy with a growing digital market, has actively sought to adapt its tax policies to this evolving landscape. The government introduced key reforms to the Value-Added and Non-Value-Added Business Tax Act, most notably by requiring foreign providers of digital goods and services to register for VAT if their services are consumed by Taiwanese residents. This policy shift aims to create a level playing field between domestic and offshore suppliers while securing tax revenues that might otherwise be lost in the digital economy. The urgency of such reforms is underscored by the growing scale of CBEC. According to recent estimates, global CBEC sales are projected to surpass USD 6 trillion by 2025, driven primarily by mobile commerce and cross-border consumer demand. In Taiwan alone, cross-border individual purchases have steadily increased, particularly in fashion, electronics, and digital services. These developments place significant pressure on tax administrations to design efficient, fair, and enforceable VAT systems that respond to the realities of digital trade.

This study is motivated by the need to assess how Taiwan's VAT regime interacts with the challenges posed by CBEC, both from a legal and administrative perspective. It explores whether Taiwan's policies are in line with international practices, such as the OECD's Guidelines on the VAT/GST treatment of crossborder services and intangibles, and whether these measures are sufficient to address issues of tax neutrality and compliance burden. The rapid expansion of CBEC raises concerns not only about lost revenues but also about market distortion, especially if foreign entities enjoy tax advantages over domestic enterprises.

The purpose of this paper is to analyze Taiwan's evolving VAT framework in the context of cross-border digital transactions. It investigates how the current system reflects international standards and identifies areas where further legal and administrative improvements may be warranted. In doing so, the study provides insights that may assist policymakers, tax professionals, and business stakeholders in navigating the complex interface between taxation and digital commerce.

To support this analysis, the paper is structured into several sections. It begins with a review of relevant literature, including recent studies from the past three years, to contextualize global and regional developments in CBEC taxation. It then outlines the legal framework governing VAT in Taiwan, followed by a discussion of implementation practices such as registration, declaration, and enforcement mechanisms. A comparative section evaluates similar systems in other jurisdictions to highlight best practices. The final chapter synthesizes the findings and proposes policy recommendations to enhance the efficiency and fairness of Taiwan's VAT system in the digital age.

### 2. Literature Review

The taxation of digital activities poses unique conceptual and administrative challenges. Traditional tax principles were built around tangible business operations, where value creation occurred through production and distribution within defined borders. In contrast, digital businesses often create value through user participation, data generation, and platform-mediated transactions without establishing any physical footprint in the consuming jurisdiction (OECD, 2015).

The foundational legal concept in international taxation is the "permanent establishment" (PE), which allows a jurisdiction to tax business profits if an enterprise maintains a fixed place of business within its territory. This concept, enshrined in Article 5 of the OECD Model Tax Convention, fails to capture modern digital business models that operate virtually and generate significant revenue in markets where they are not formally established. In the case of e-commerce platforms.

In response to this growing mismatch, the OECD initiated the Base Erosion and Profit Shifting (BEPS) Project in 2013. The BEPS Action 1 Final Report (2015) addressed tax challenges arising from digitalization and introduced the concept of "significant economic presence" (SEP). Under SEP, user engagement, digital interaction, and data monetization are considered alternative indicators of taxable nexus.

The European Union has similarly pursued its Digital Services Tax (DST) proposal, aimed at taxing revenues from online advertising, intermediation platforms, and sales of user data. Although a unified EU-wide DST has not yet materialized, individual member states such as France, Italy, and Spain have enacted national DST regimes targeting large digital firms.

Japan revised its Consumption Tax Law in 2015 to impose VAT obligations on foreign digital service providers. Initially, the reverse-charge mechanism was used for B2B services. In subsequent revisions, B2C services were included, requiring foreign providers to register and report taxable sales. Similar rules exist in Australia, New Zealand, and South Korea, reflecting a broader shift toward the "destination principle" in VAT law.

Recent academic contributions reinforce these policy movements. García Antón (2022) highlights the need to reconcile neutrality and fairness by allocating tax rights based on digital user value. Jarm and Kuusela (2023) critique unilateral DSTs for raising risks of double taxation and trade friction, arguing for coordinated multilateral solutions. In Taiwan's context, Liu and Wang (2021) observe persistent enforcement gaps due to limited cross-border cooperation and opaque platform operations.

These global and academic trends underscore a growing consensus that the legacy tax system is ill-equipped for the digital age. The literature reveals that while countries have adopted diverse strategies, common themes include: moving beyond physical presence, enhancing platform compliance responsibility, and leveraging user interaction as a tax nexus trigger.

This paper builds on those foundations to assess how Taiwan has responded to these challenges, especially in light of high-profile cases such as Uber and LINE. By examining legal structures, administrative interpretations, and international best practices, we aim to determine whether Taiwan's current reforms are sufficient—or whether deeper structural changes are necessary to align with global norms and achieve fair taxation.

Recent studies (2022-2025) have emphasized the evolving complexities of VAT implementation in cross-border e-commerce. Chen and Liu (2023) analyzed the VAT compliance challenges faced by multinational digital service providers, noting significant jurisdictional disparities. Similarly, Adams et al. (2024) explored the effectiveness of international cooperation frameworks in improving VAT enforcement across borders, concluding that increased transparency and unified reporting standards substantially mitigate tax evasion. Furthermore,

#### 3. Methodology

This study adopts a qualitative legal research approach combining doctrinal analysis with comparative case study methodology. The goal is to examine the adequacy of Taiwan's tax framework in addressing the challenges of cross-border digital commerce, while situating this inquiry within the global policy landscape.

The doctrinal component focuses on interpreting existing statutory and administrative sources, including Taiwan's Business Tax Act, Ministry of Finance rulings, and related administrative guidelines. These materials are analyzed to identify key legal definitions—particularly "fixed place of business" and "business entity"—and their applicability to modern digital platforms. Particular attention is paid to the evolution of tax treatment as it relates to cross-border e-services following the 2017 legislative amendments.

Complementing this legal analysis is a comparative policy review. By evaluating the digital tax frameworks of the OECD, EU, Japan, and South Korea, the study explores global trends in adapting tax systems to virtual business models. The comparison identifies commonalities (e.g., the use of destination-based VAT) and divergences (e.g., unilateral digital service taxes versus multilateral approaches).

A case study method is employed to illustrate practical enforcement challenges. Two high-profile platforms—Uber and LINE Corporation—serve as illustrative examples. These cases were selected because they highlight contrasting issues of physical presence, user base monetization, and government response. Publicly available legal rulings, press releases, and official statements from Taiwan's Ministry of Finance provide the evidence for case analysis.

This study acknowledges certain limitations. First, access to proprietary tax audit data is restricted; thus, the case studies rely on publicly disclosed information. Second, the comparative analysis focuses on selected jurisdictions most relevant to Taiwan's legal system and trade profile and may not capture all global variations. Third, the absence of multilateral consensus on digital taxation (as of early 2025) constrains definitive policy prescriptions.

Despite these constraints, the chosen methodology allows for a rigorous examination of the intersection between evolving digital commerce models and legacy tax structures. It also provides a basis for evaluating Taiwan's current direction and the feasibility of adopting alternative models based on international experience.

### 4. Practical Implementation of Cross-Border VAT in Taiwan

While Taiwan's legal framework for VAT on cross-border digital services has made significant progress, its practical implementation presents both opportunities and constraints. This chapter examines the operational aspects of VAT collection, including registration procedures, filing cycles, tax rates, audit mechanisms, and enforcement challenges faced by tax authorities and businesses.

#### 4.1 Registration and Filing Process

Foreign digital service providers who meet the VAT registration threshold must enroll via the Ministry of Finance's online portal. This simplified system enables quarterly filing and tax remittance without requiring a permanent establishment in Taiwan.

Registrants must submit:

- 1) Essential corporate identification (in English or Chinese);
- 2) Quarterly turnover figures derived from taxable sales in Taiwan;
- 3) Supporting documents for deductions or exemptions (if applicable).

While the system offers procedural clarity, some foreign vendors -especially SMEshave expressed difficulties in interpreting local tax rules and navigating currency conversion or banking limitations.

Step	Deadline	Notes	
Online Registration	Upon crossing TWD	Initial VAT ID issuance	
	480,000		
Quarterly Return Filing	15 days after each	Manual or XML	
	quarter	submission	
Tax Payment	Same deadline as filing	Payment via	
		international remittance	

Table 1: Timeline and Process for Offshore E-Service VAT Filing

#### 4.2 Tax Rate and Exemptions

Taiwan imposes a standard VAT rate of **5%** on most electronic services delivered to individual consumers. The VAT is calculated as a percentage of the gross transaction value. Certain educational, medical, and cultural services may qualify for exemptions under Articles 8 and 10 of the Business Tax Act.

However, exemption eligibility depends heavily on the nature of the transaction and the documentation provided by the foreign supplier. Disputes over taxability can arise, particularly in bundled digital offerings (e.g., mixed packages of taxable and exempt services).

### 4.3 Challenges in Tax Collection

One of the primary obstacles in enforcing VAT compliance is the identification of foreign suppliers who are not registered. Unlike domestic firms, offshore companies may lack visibility in Taiwan's jurisdiction, and their business operations may be hosted in multiple regions.

Additionally, some service providers deliberately remain under the VAT threshold to avoid compliance. Others utilize digital intermediaries (e.g., app stores and payment processors) that complicate the tracing of taxable activities. This phenomenon - sometimes called "platform opacity" - is common in streaming, gaming, and SaaS industries.

Taiwan has not yet adopted real-time transaction reporting, a mechanism used in

countries like South Korea and Hungary to detect non-compliance instantly. Such systems, while technologically demanding, are increasingly considered essential for effective CBEC tax administration.

#### 4.4 Audit and Enforcement Mechanisms

Enforcement is primarily conducted through desk audits and cross-referencing financial data with information from local credit card acquirers and payment gateways.

The Ministry of Finance retains the authority to impose:

- 1) Late filing penalties;
- 2) Interest on unpaid VAT;
- 3) Suspension of online payment capabilities via local banks.

In 2022, Taiwan issued over 300 administrative notices to non-compliant offshore vendors, resulting in TWD 230 million in recovered tax revenues.

Despite these efforts, cross-border audit cooperation remains limited due to the absence of bilateral tax treaties covering indirect taxes. Taiwan may consider engaging with international initiatives such as the OECD's CESOP (Central Electronic System of Payment Information), which improves VAT traceability across jurisdictions.

## 5. Comparative Analysis of International CBEC VAT Models

As cross-border e-commerce (CBEC) continues to expand, jurisdictions worldwide have implemented varying Value-Added Tax (VAT) models to ensure fair taxation of digital services. This chapter presents a comparative analysis of VAT frameworks in Taiwan, the European Union (EU), South Korea, and Australia, each representing distinct legal traditions, administrative capacities, and policy approaches. By analyzing their similarities and divergences, we identify potential lessons for Taiwan's ongoing tax reforms.

#### 5.1 VAT Thresholds and Registration Rules

Most jurisdictions apply a registration threshold for non-resident service providers to avoid overburdening small enterprises. Taiwan currently enforces a threshold of **TWD 480,000**, though a proposed amendment aims to raise it to **TWD 600,000**. In comparison, the EU requires all non-EU providers of digital services to register regardless of revenue, effectively imposing a **zero threshold**. South Korea and Australia each apply a threshold of approximately **USD 75,000** annually.

Jurisdiction	Registration Threshold (Annual)	Local Tax Agent Required	Filing Frequency
Taiwan	TWD 480,000 (≈ USD 15,000)	No	Quarterly
EU	None	No	Quarterly
South Korea	KRW 100 million (≈ USD 75,000)	No	Quarterly
Australia	AUD 75,000 (≈ USD 50,000)	Yes	Quarterly

Table 2: CBEC VAT Thresholds and Registration Rules

\*The trend toward **low or zero thresholds** reflects a growing recognition that large digital platforms, even with minimal local operations, can generate significant economic presence and should be subject to VAT obligations.

#### 5.2 Tax Collection and Enforcement Tools

In terms of enforcement, the EU has introduced the CESOP platform, requiring payment service providers to report cross-border transactions exceeding certain thresholds. South Korea has implemented real-time invoice issuance and digital verification. Australia mandates the appointment of a local tax agent for foreign vendors, enabling direct communication and legal accountability.

Taiwan relies primarily on self-reporting and indirect monitoring through payment processors. While this system has proven functional, it lacks the technological depth seen in the EU and South Korea and may face difficulty detecting non-registered suppliers.

A scatter plot showing Taiwan in the mid-range, with EU and South Korea in the high-enforcement quadrant.

#### 5.3 Lessons for Taiwan

Several insights emerge from this international comparison:

- 1) **Centralized Reporting Systems:** Taiwan could consider developing real-time or semi-automated reporting platforms to enhance audit capability and reduce enforcement lag.
- 2) Local Representative Mechanism: While Taiwan does not require a local agent, such a system could increase compliance and resolve disputes.
- 3) Threshold Policy Reassessment: Moving toward a lower threshold despite the proposed increase may be worth reconsidering if tax leakage proves significant.

Furthermore, enhanced international cooperation through tax information exchange and digital invoicing standards may improve Taiwan's long-term enforcement efficiency without imposing undue burdens on businesses.

#### 6. Conclusion and Policy Recommendations

The rise of cross-border e-commerce (CBEC) has fundamentally altered the landscape of global trade and taxation. As consumers increasingly purchase digital goods and services from foreign vendors, governments are pressured to modernize their tax systems to preserve revenue integrity, ensure fair competition, and minimize compliance burdens. Taiwan has responded with a series of targeted VAT reforms, including introducing a simplified tax regime for offshore digital service providers. These reforms, while forward-looking, face significant implementation challenges that warrant further attention.

This study has analyzed Taiwan's VAT regime in the context of CBEC from a legal and practical perspective. It has also examined recent international developments and provided comparative insights from jurisdictions like the European Union, South Korea, and Australia. Several key findings have emerged:

- 1) Legal Adaptation: Taiwan has made substantial progress by imposing VAT obligations on foreign e-service suppliers. The legal definition of taxable services has been broadened, and simplified registration systems have been introduced to encourage compliance.
- 2) Administrative Gaps: Despite legal clarity, enforcement tools remain limited compared to global leaders. Taiwan lacks real-time transaction monitoring, centralized reporting systems, and international cooperation mechanisms essential for effective oversight in a digital economy.
- 3) **Comparative Lag:** Countries such as the EU and South Korea have taken proactive steps to implement advanced audit frameworks, transparency platforms, and electronic invoicing systems. These measures have significantly improved tax compliance and narrowed the VAT gap.

Based on the findings of this study, several policy recommendations are proposed to enhance Taiwan's VAT regime for CBEC:

- 1) **Invest in Digital Infrastructure:** Taiwan should consider developing or adopting centralized reporting platforms for digital payments, similar to CESOP in the EU. Such systems can provide real-time insights and help detect underreporting or tax evasion.
- 2) **Re-evaluate the VAT Threshold:** While the government has proposed raising the VAT threshold for foreign providers, maintaining a lower threshold may better serve equity and revenue goals, particularly given the scale of digital commerce.
- 3) **Introduce Optional Local Representation:** A hybrid compliance model allowing foreign suppliers to appoint local agents either voluntarily or above a revenue threshold could streamline communication and facilitate dispute resolution.
- 4) **Enhance International Cooperation:** Taiwan should align its VAT practices more closely with OECD standards and consider participating in global tax transparency frameworks that promote consistency and information exchange.

5) **Expand Public Guidance:** Additional multilingual resources and training programs for foreign vendors would lower compliance barriers and increase voluntary participation.

In conclusion, the digitalization of commerce demands a corresponding transformation in tax policy. Taiwan's experience reflects the broader global challenge of taxing an economy that increasingly transcends physical borders. By learning from international best practices and investing in strategic reforms, Taiwan can strengthen its VAT framework, support tax equity, and maintain its competitiveness in the global digital economy.

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