

Taxation in the Digital Economy

การจัดเก็บภาษีในยุคเศรษฐกิจดิจิทัล

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Abstract

Taxation has managed for thousands of years in several forms, it has developed and adapted to new economic and social realities. The purpose of tax system is to raise the revenue needed to pay for government spending. Since digitalization has influence the entire borderless world economy, the impact of the new digital technology has been transformed traditional business models also empowered the new digital based business models that display challenges in what way economies have traditionally been taxed. There is contemporary debate over digital taxation economy which focuses more on creating new sources of taxing rights over specific industries and digital activities than on characterizing the tax disruptive aspects of digital business models that create challenges to traditional tax theory and practice. This article is employing data synthesis research method via documents from any related organizations on taxation principles, tax policy issues of taxing the digital economy, and economic and legal issues of taxing the digital economy.

Keywords: Taxation; Digitalization; Tax disruptive; Digital economy; Digital business models

บทคัดย่อ (Abstract)

การจัดเก็บภาษีมียุทธูปแบบการจัดการมานับพันปี โดยได้พัฒนาและปรับให้เข้ากับสภาพเศรษฐกิจและสังคมในยุคนี้ๆ วัตถุประสงค์ของการจัดเก็บระบบภาษีคือการเพิ่มรายได้ให้ภาครัฐที่ต้องใช้จ่ายในการพัฒนาประเทศ เนื่องจากกระบวนการใช้เทคโนโลยีดิจิทัลมีอิทธิพลต่อเศรษฐกิจโลกไร้พรมแดน ผลกระทบของเทคโนโลยีดิจิทัลในโลกยุคใหม่ทำให้เกิดการเปลี่ยนแปลงในระบบ

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โมเดลธุรกิจแบบเดิมและเพิ่มขีดความสามารถให้กับโมเดลธุรกิจดิจิทัลในโลกยุคใหม่ สิ่งที่มาทำให้เกิดคำถามและความท้าทายในการจัดเก็บภาษี ปัจจุบันมีการถกเถียงเกี่ยวกับแนวทางการจัดเก็บภาษีในยุคเศรษฐกิจดิจิทัล ซึ่งมุ่งเน้นประเด็นนโยบายสิทธิการเก็บภาษีสำหรับกิจกรรมและอุตสาหกรรมดิจิทัลมากกว่าการกำหนดลักษณะปัญหาด้านภาษีของรูปแบบธุรกิจดิจิทัล สร้างความท้าทายให้กับทฤษฎีและการปฏิบัติทางภาษีแบบดั้งเดิม บทความนี้ใช้วิธีการสังเคราะห์ข้อมูลผ่านเอกสารจากองค์กรที่เกี่ยวข้อง ในหัวข้อ หลักการจัดเก็บภาษี ประเด็นนโยบายของการเก็บภาษีในเศรษฐกิจยุคดิจิทัล และประเด็นด้านเศรษฐกิจและกฎหมายของการเก็บภาษีในเศรษฐกิจยุคดิจิทัล

คำสำคัญ (Keywords): ภาษี; เทคโนโลยีดิจิทัล; การปฏิรูปภาษี; เศรษฐกิจดิจิทัล; โมเดลธุรกิจดิจิทัล

Introduction

The development of global online services such as e-commerce has highlighted the obsolete character of many tax systems worldwide. The opportunity cost potential earnings for governments, particularly in post-pandemic economic rebuilding, has further forced the upgrading of the tax structure to handle an increased international and complicated situation. For developing countries, the position is probably even graver with the advent of the free trade regions where there is a projected significant decline in conventional trade barriers. As trade barriers continue to fall throughout the area and e-commerce progressively becomes more ubiquitous, the success of the envisaged digital market will rely on particular degrees of homogeneity in digital tax structure (World Bank Group, 2016). This makes the examination of the tax legal frameworks on the continents and harmonizing them with a global tax system vital. Technology is seen as a digital component. Consequently, tax-disruptive digital aspects such as online media, content delivery, and digital mechanization can only be found in tax-disruptive digital economies since they are interrelated (World Bank Group, 2016). Digital content, for instance, can only be given electronically through digital delivery, and online content provision and access are primarily digitally automated. Furthermore, the digital distribution uses the internet as a path from source to destination, which also functions as a component of online information. Overall, digitization has led to a new transnational international economy, which has underlined how international commerce influences country governments' aptitude to tax commercial activity to support public goals. Increased worldwide digital commerce has placed current tax standards under scrutiny. In the

vacuum of a global tax authority and an online digital tax structure, this necessitates cooperation strategies and consensus from all concerned parties.

This paper collected data synthesis via documents from any related organizations on taxation principles, tax policy issues of taxing the digital economy, and economic and legal issues of taxing the digital economy. The resources were include textbooks, academic papers, research, thesis, journals, digital media data, and online database. In order to collect information, researcher have been using the criteria based on trustworthy, truth, credibility, and accurate definition.

Taxation Principles Applied to Taxing the Digital Economy

Tax principles have traditionally notified and conducted the development of tax systems. Nonetheless, not all tax principles have the same effect on the taxation of the digital economy. For example, vertical equity is usually utilized to personal taxation, while the digital economy is business-centered, where progressive taxation is unavailable. Some tax principles are envisaged mostly to address tax policy considerations (equity, benefit, neutrality), while others aim to expedite tax administration (certainty, simplicity, enforceability). This paper analyzes tax principles that have a direct impact on taxing the digital economy

Horizontal Equity Principle

Per the notion of the horizontal principle, two taxpayers with identical capacity to pay should dispense the same tax rate. It also indicates that two payers with comparable economic situations should be taxed similarly. Thus, before assessing the capacity of digital economies to pay, it is vital to analyze the financial problems of taxpayers and their various business prototypes. Unless implemented in this manner, there is a possibility that they may attempt to impose the horizontal concept on taxpayers who do not hold everyday economic situations and are hence not tax analogous (Lucas-Mas & Junquera-Varela, 2021). Once it is proved that the taxpayers are only financial problems, their capacity to contribute and implement the horizontal principle is considered.

Table 1: Horizontal equity advantage and disadvantage

Advantages	Disadvantages
<ul style="list-style-type: none"> - All the taxpayers are treated equally. - All the taxpayers have a real feeling of being treated fairly and equally. - Businesses are also not at a disadvantage as they feel that they are treated equally with other businesses and taxed at the same rate. 	<ul style="list-style-type: none"> - There are many cases where the taxpayer may be paying a larger percentage but actually may pay less tax when all things are taken under consideration. - Higher savings is discouraged as it does not lead to any tax exemption.

Source: Wallstreetmojo, 2019

As a result, provided they share identical economic conditions, digital business structures should be deemed equivalent to their corresponding conventional company models: the proximity for taxation purposes does not alter, considering the requirement for physicality in the market purview. Each form of the tax-disruptive digital business plan must be evaluated independently to establish its equivalent to its corresponding conventional company model, implying that they hold common economic conditions (Cowan et al., 2021). Hence, tax-disruptive digital enterprises are distinguished by the absence of physicality in the marketplace where they function, which is made possible by the technologies and the development of all aspects. The tax-disruptive part of these business prototypes stems from the ethereal content's nature, mechanization, and dissemination, which allow for a shortage of physicality regarding a product, workforce, and distribution. Besides avoiding conventional customs procedures, the ethereal character of the material reduces the need for warehouses due to the lack of physical inventory, which influences a firm's economic situation. These savings are compensated by the increased expenditure necessary to create the product technology, which might cost much more than the corresponding actual product. For instance, building e-book technology may outweigh the cost of

publishing paper books. The digital distribution channel enables the transmission of digital material without the requirement for infrastructure facilities like transportation, rendering online media distribution to online clients in market jurisdictions untraceable by conventional surveillance. These novel digital distribution routes, like online media and digital mechanization, imply an important expense to construct the technical infrastructure required to deliver the automated content electronically, contributing to economic disparity (Gekara & Thanh Nguyen, 2018). As a result, the inclusion of digital aspects such as content, mechanization, and dissemination influences the financial situations of tax-disruptive digital economies when contrasted to their conventional counterparts.

Table 2: Type of the Digital Elements of Transaction

Digital elements	Description
Digital communication	Networking infrastructure used by the parties to an economic transaction to connect and communicate with each other.
Digital content (tax-disruptive)	Any content that exists in the form of digital data or digital object digital content relies heavily on intangibles since its support is digital instead of physical and is intrinsically linked to the existence of digital technology.
Digital automation (tax-disruptive)	Minimum or no human intervention is required on the provider side since the process is automated and controlled by consumers, who contribute data and content and customize the content.
Digital distribution (tax-disruptive)	Distribution over an online delivery channel, like the internet, thus bypassing physical distribution methods.
Digital payment	Payment methods based on binary encoding technology.

Source: World Bank Group, 2021

The tax-disruptive digital model that trades nonuser online substances does not segment the same financial position as its comparable conventional or digital business structure. Therefore, it should be differentiated when implementing the horizontal tenet to taxpayers functioning underneath the tax-disruptive online business structure. The same applies to digital content authorization, licensing, and

subscription systems (Cowan et al., 2021). The sole distinction is that, rather than ceding entire ownership of the material, these tax-disruptive methods only grant restricted powers of use with the example of rental. The content is not the same as the physical form of the commodity in the corresponding similar old economic models. For instance, one might contrast a digital video-streaming subscription service, such as Netflix, with a conventional business strategy, such as a video leasing physical store, Blockbuster Video. Both conventional and digital business practices rent tangible DVDs, which need stock, warehousing, and physical distribution (Pinto, 2017). Still, the video-streaming revenue model allows online access to digital material with no physical support structure or footprint in the consumer jurisdiction. Similarly, the tax-disruptive digital model of licensing digital material such as Microsoft Office digital access is not economically comparable to its historic business strategy of boxed software distributed via tangible storefronts or ordered online and physically shipped. As a result, taxpayers engage in the tax-disruptive digital economy related to the sale, registration, or subscription. Based usage of digital substances should be differentiated from taxpayers' marketing, licensing, or leasing of quantifiable commodities under digital and traditional economic models—the applications of the horizontal principle.

Tax Neutrality Principle

The digital economy tax may operate as a tax on company resources, for instance, advertising. Since part of an ideal tax structure, levies on business expenses should typically be eliminated as they may skew production choices by enterprises and impede production competence (Greenstein et al., 2016). Such levies may affect judgments about which resources to acquire and whether specific inputs are bought in markets or generated in-house. The rationale underpinning the value of process performance is that commercial transactions must not be taxed since any manipulation of production choices diminishes overall economic output (Lucas-Mas & Junquera-Varela, 2021). There are general discussion motivates the application of the concept of neutrality to five specific issues:

- 1) Overall Tax Reform: A broader base and lower rates
- 2) Using the Tax Code to Encourage Desired Behavior: credits instead of deductions

- 3) The Tax Treatment of Health Care: shifting to a progressive tax credit
- 4) Discouraging Undesired Activity: the role of Pigouvian taxes
- 5) Corporate and Capital Taxes

For example a 14% rate of tax rate is too high or too low in United State there is no justification for the highly variable tax rates on different forms of capital income shown in Table 3.

Table 3: Effective Tax Rates on Capital Income

Type or Form of Investment	
Overall	14%
Debt-finance corporate	-6%
Equity-financed corporate	36%
Non-corporate business	21%
Tenant-occupied housing	18%
Owner-occupied housing	-5%
Computers and perip equipment	37%
Manufacturing buildings	32%
Mining structures	10%
Petroleum and natural gas structures	9%

Source: Congressional Budget Office (CBO), 2016

The tax system is subsidizing debt-financed corporate investment likewise equity-financed corporate investment is taxed at the corporate and individually level and overlooks a combined rate of 36%. Although taxing intermediate products can be premised on the idea that the intermediate inputs cause downsides, industrial output remains the appropriate core value for pragmatic tax design. The desire for production efficiency indicates that turnover taxes are unproductive. To the degree that a turnover levy on digital economies influences the production choices of enterprises, it breaches the concept of neutrality. Assessing the prevalence of a tax or its impact on pricing is essential for economic analysis. The price change caused by implementing a tax is determined by how responsive consumer preferences and producer supply are to price changes, namely, demand's price elasticity compared to supply's price elasticity (Greenstein et al., 2016).

Table 4: Taxable digital business models based on the neutrality principle

Companies operating digital business models that are taxable based on the neutrality principle	Resident	Nonresident Permanent establishment	Nonresident No permanent establishment
Online e-commerce market place	/	/	X
Sale of user related data and digital content	/	/	X
Online user targeted advertising	/	/	X
Sale of user-related goodwill	/	/	X

Source: World Bank Group, 2021

To focus on the economic prevalence of a tax, the market structure is more important than whether the tax is direct, including a corporate income tax, or oblique, like a taxable income or the legal incidence. Correspondingly placed taxpayers must be equally applied in which they should face comparable tax liabilities. It may not always be easy to assess whether taxpayers are similar in non-tax characteristics. However, it is seen as beneficial in the formulation of tax policy to have the goal of treating comparable taxpayers similarly, regardless of how that resemblance is established. Taxes should not be used to persuade taxpayers to choose (or deny) one kind of e-commerce over another or desire (or repudiate) e-commerce over traditional trade. Non-tax reasons should drive business production choices and consumer consumption decisions, rather than uneven tax treatment of different activities (Li, 2015). The Ottawa Taxation Framework Conditions, for example, regard identical handling of equally qualified taxpayers to be within the ambit of its neutrality principle. It may be necessary to use a different therapy to remedy a current lack of impartiality.

Benefits Principle

According to Dahlman et al. (2016), not all taxes are imposed based on one's capacity to pay. Governments, for example, may levy taxes on domestic and expatriate businesses that profit from the offerings they supply. The benefit principle of taxes says that tax responsibilities should be imposed based on the advantages that taxpayers obtain from government offerings, which might be particular or generic. In contrast, this concept is more evident for individual taxpayers who rely on government services like health care, professional training, law enforcement agencies, fire, or defensive system safeguards. It is also pertinent for financial institutions that stand to gain from practical and functional legal frameworks for the appropriate course of the business, for instance, in the pattern of a sustainable regulatory regime, ownership of intellectual property, and the firm's expertise investment.

However, the spectrum of advantages varies greatly across firms based on their residency status. Tax-resident corporations benefit from their authorities more than expatriate enterprises operating in a particular region. Even if governments give the same advantages to all firms regardless of their tax affairs, exercising the associated rights is much more cumbersome and expensive for expatriate corporations, to the extent that the actual benefits gained by noncitizens may go unrecognized. As a result, a new divergence in the analysis is required: domestic against foreign tax-disruptive digital enterprises (Olbert & Spengel, 2017). Simple digital enterprises must have an actual location in their market states, which generates a nexus for tax reasons in a fixed place of business. In contrast, tax-disruptive digital businesses can function during their lifecycle without physical visibility in the region, even if the online vendor is domiciled. Thus, as with transfer pricing, it is vital to differentiate between the international and domestic digital economies since electronic payments might originate inside or outside frontiers, based on whether the digital provider is domiciled in the market area or somewhere else.

Most enterprises that use tax-disruptive digital techniques get no dividend from the foreign entities of the market countries (Olbert & Spengel, 2017). Thus, since they are intangible, they do not profit from fundamental infrastructure. Digital material, for example, does not need any transit system, security services, firefighting, defense enforcement, or amenities such as water supply. Foreign tax disrupting digital

enterprises, on the other hand, gain from infrastructure facilities in the market area like power grid. Nevertheless, such supporting infrastructure is often privately held, which implies that such advantages are negotiated and compensated for by the tax-disruptive digital firm and its users acting as consumers, rather than by the government (Goldfarb et al., 2015). This is a critical factor. Since governments do not control such companies or persons, the benefits section concentrates on advantages gained by organizations from governments rather than corporations or individuals based in the market domain. This is significant because users offer data and material in return for free access to online content and platforms that the provider must compensate for under a tax-disruptive digital economy.

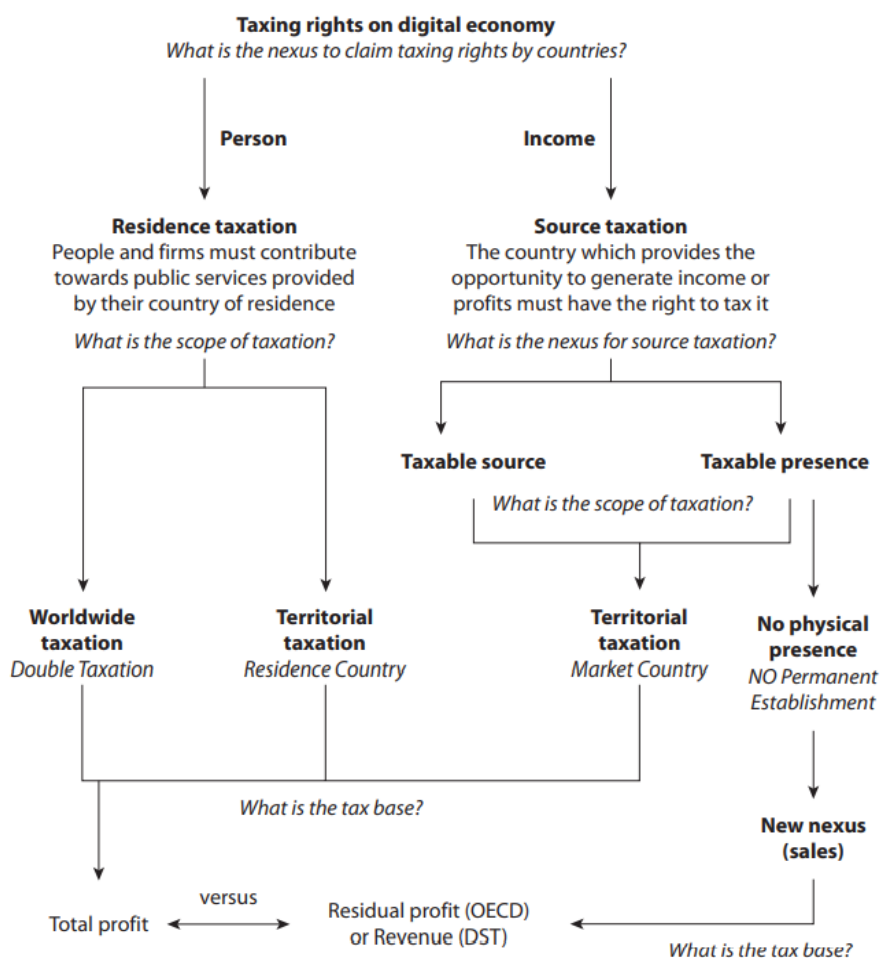
Tax Policy Issues of Taxing the Digital Economy

Taxation of the tax-disruptive digital economy that is not similar to their corresponding conventional company models of horizontal equity should be decided using alternative tax principles such as the benefit principle. As a result, tax concepts are interrelated and complement one another (Lucas-Mas & Junquera-Varela, 2021). Digital payments, for instance, might be used to trace digital transactions. Although certain digital charges like crypto-currencies do not need the involvement of conventional financial institutions, the vast majority of electronic payments are routed via banks and credit card firms (Van Deursen & Helsper, 2015). Only users whose economy is entirely based on digital forms of income outside the conventional financial sector are immune to such finance industry control. Regrettably, the financial industry is not keen to cooperate in corporate tax responsibilities like implementing withholding to their clients because they are concerned about losing clientele to banking firms in foreign jurisdictions that do not adhere to the same domestic statutory provisions or are essentially not subordinate to them (Van Deursen & Helsper, 2015). Therefore, any effort made in this regard should be global, transcending national borders and local regulations.

As shown on figure 1, when the resident country use a global taxation system, conflicting taxing rights overlay, and double taxation rise. Therefore double taxation can be evaded neither by allocating taxing rights under a tax treaty or by distributing unilateral relief as a tax credit. Double taxation also rise when the resident country implements territorial taxation and both jurisdictions claim that the digital activity

takes place in their territories. However, simulating the source of income from digital businesses differs based on the physical or intangible nature of the object of the economic transaction.

Figure 1: Allocation of taxing rights as applied to digital business models



Source: Organization for Economic Co-operation and Development (OECD), 2020

Cross-border commerce in commodities, services, and intangible assets, including digital downloads for Tax purposes, causes issues for VAT networks, especially when individual consumers purchase such items from providers overseas (Hadzhieva, 2016). The digital economy exacerbates these difficulties since technological advancements have drastically enhanced the capacity of individual consumers to purchase online and the ability of firms to sell to customers worldwide

without the requirement to be geographically or otherwise accessible in the user's jurisdiction. This often leads to no VAT being charged on these transactions, which has a detrimental effect on jurisdictions' VAT collections and the fair competition between local and non-resident merchants. The principal VAT issues in the digital world are connected to imports of low-value packages from online transactions, which are VAT-exempt in several countries (Cockfield et al., 2019). Another factor is the rapid rise in the trade of commodities and intangible attributes, especially sales to individual customers. No or a disproportionately small concentration of VAT is often applied owing to the difficulty of implementing VAT payment on such supply.

Due to digitalization, businesses may now collect information about their customers on a phenomenal rate. Users submit information about their preferences via online searches, purchases of products and services, and interactions with others on social media websites. But, user engagement is not considered a source of tax value under the current international tax system (Sayyad et al., 2018). As an effect of the indistinct boundary between their roles in market forces, a significant discussion concerning the ideas of basis, direction, tax presence, and profit apportionment has emerged. With the most comprehensive digitalized companies reimbursing low tax rates in the territories where they offer facilities, policymakers question the existing tax system's ability to generate an adequate taxation level from such digitalized enterprises and distribute that taxation appropriately across countries. Addressing these difficulties is becoming more crucial as practically all firms' approaches are characterized as the digital ending point.

Economic and Legal Issues of Taxing the Digital Economy

Because offshore digital enterprises do not have a tangible form in market areas, upfront taxation is not the best solution. Without taxpayer compliance, the alternatives for tax collection once revenue is sent out abroad are restricted, and the efficacy of tax execution tools is constrained. As a result, tax withholding is the most promising method for collecting taxes from overseas digital enterprises; nevertheless, the breadth of electronic transfers due to deferral and the identification of the tax administrators must be established (Mitchell & Mishra, 2017). It is prejudicial to violate neutrality when taxing enterprises with comparable economic situations as it is to impose the same taxes on businesses that are drastically diverse from a horizontal

equity standpoint. A progressive tax system is based on treating those who are equal similarly and those who are unlike differently. The economic conditions of company models must be evaluated to assess if horizontal equity is fulfilled. To comply with the neutrality concept, the capacity to pay those similar must be judged against a single baseline, namely the tax system applicable to the conventional company model (Mitchell & Mishra, 2017). Nevertheless, digital technology has profoundly influenced how these activities are conducted, for instance, by improving the capacity to implement operations remotely (Olbert & Spengel, 2019). In conformity with the horizontal equality concept, once the capacity to pay is determined, the same taxes should be levied on enterprises with comparable ability to afford, regardless of digital components.

Economic jurisdictions may claim over-taxation rights based on the value produced by users based on digital assets. Nonetheless, such user donations do not come cheap. Conversely, companies compensate consumers in-kind by offering free access to online material, and platforms users would have to pay (Singh, 2017). As a result, tax-disruptive digital enterprises receive no due benefit from consumers and much less from market area authorities (Lucas-Mas & Junquera-Varela, 2021). Subsequently, notwithstanding any market asymmetries, such assertions of market dominion over-taxation rights cannot be sustained on the premise of the benefit principle. The development of economic models in code and the expansion of the digital market, in general, led to expatriate corporations functioning in a market territory in fundamentally different ways than when global tax regulations were devised. While it is possible for a non-resident corporation to sell into a region without having an actual footprint there, improvements in digitalization have substantially widened the scope at which such conduct is now feasible (Hill, 2016). Besides, a local physicality in production, advertising, and dissemination was often necessary for a company to extend its potential in a market area. Developments in business practices and advances in technology and trade policy liberalization have enabled enterprises to centrally administer numerous services that formerly needed local presence. This trend effectively makes the conventional paradigm of conducting business in markets obsolete.

Russo's (2019) findings indicate that indirect taxes like turnover taxes, value-added taxes, sales duties, and taxes are borne by consumers in terms of increased

prices. However, Vogel's (2018) study found that price levels may ascend by more and less than the comprehensive tax amount subject to market conditions. In the United States, sale prices have fluctuated in response to changes in sales taxes. According to Abel et al. (2017), prices increase by the marginal revenue for half of the commodities investigated and more than the tax amount for the other goods. As a result, excise taxes are more than moved to consumers, albeit there is less displacement if the tax change is more significant than the commodity's price and if the tax decrease is more than the tax increase. To determine if the indirect taxation stimulates firms about it analogous to firms about domestic income taxes, the precise proportion of the onus incurred by consumers is less significant than knowing that the incidence differs from that of the corporate tax, which domestic producers of online services are subordinate to.

The potential of corporations to purposefully organize their operations to leverage a country's minor value criteria and offer items to customers without paying VAT creates challenges. A local firm, for instance, selling low-value items online to people in its area would be obligated to gather and pay VAT on such sales (Arnold, 2019). The company might arrange its operations such that low-value items are sent to its customers from foreign territories and thus qualify for that VAT jurisdiction's exclusion for low-value imports. Conversely, a new firm might design its activities to benefit from lower value exemption and operate overseas instead of the jurisdiction where its customers are situated. The waiver for low-value imports reduces VAT collections and creates undue competitive forces on local shops that must charge VAT on transactions to domestic customers (Brauner & Baez Moreno, 2015). As a result, the issue is not just about the instant loss of income and possible competitive pressures on local suppliers but also about the inducement generated for domestic producers to move or migrate to an overseas territory to sell their low-value items VAT-free. It is also highlighted that such domestic firm relocations would further negatively impact domestic labor and domestic tax receipts.

Conclusion

The underlying nature of the critical operations that firms execute as an element of a business concept to produce profits has not altered due to advancements in digital innovation. Businesses must still acquire and procure inputs,

develop, and distribute to consumers to make revenue. Companies have always required market research, advertising, and customer service to support their sales efforts. But, digital technology has profoundly influenced how these activities are conducted, for instance, by improving the capacity to implement operations remotely (Olbert & Spengel, 2019). Hence, expanding a country's client base does not necessarily need the degree of local facilities and staffing required in the "pre-digital" era. Although the innovative nature of most digital economies and their beneficial role in the economy, digital enterprises often focus on intense legal and professional discussion about their tax evasion practices. The reliance on physicality to develop a taxable convergence, a core aspect of the present international tax regime, provides a substantial issue for taxing cross-border electronic commerce transactions. However, the consequences of proposed corporation tax changes are limited. Because of the indirect correlation between profitability and practical tax burden, the benefit of a sales tax-exempt status on digital assets on cash flow may potentially outweigh the cost of a taxable income. This might have severe ramifications for physical enterprises with poor profitability concerning the competition, causing them to increase prices or close business.

References

- Arnold, B. J. (2019). *International tax primer*. Kluwer Law International BV.
- Brauner, Y., & Baez Moreno, A. (2015). Withholding taxes in the service of BEPS action 1: address the tax challenges of the digital economy. *WU International Taxation Research Paper Series*, 2015–14.
- Cowan, M. J., Cutler, J., & Baxter, R. J. (2021). Strategic surrogates or sad sinners: US taxation of bartering in digital services. *American Business Law Journal*. 58(4), 849–890.
- Gekara, V. O., & Thanh Nguyen, V. (2018). New technologies and the transformation of work and skills: a study of computerisation and automation of Australian container terminals. *New Technology, Work and Employment*. 33(3), 219–233.
- Goldfarb, A., Greenstein, S. M., & Tucker, C. E. (2015). *Economic analysis of the digital economy*. University of Chicago Press.

- Greenstein, S., Peitz, M., & Valletti, T. (2016). Net neutrality: A fast lane to understanding the trade-offs. *Journal of Economic Perspectives*. 30(2), 127–150.
- Hill, S. (2016). *The California Challenge. How (Not) to Regulate Disruptive Business Models*. Berlin: Friedrich-Ebert-Stiftung, Division for International Dialogue.
- Olbert, M., & Spengel, C. (2017). International taxation in the digital economy: challenge accepted. *World Tax Journal*. 9(1), 3–46.
- Russo, K. (2019). Superiority of the VAT to turnover tax as an indirect tax on digital services. *National Tax Journal*. 72(4), 857–880.
- Vogel, S. K. (2018). *Freer markets, more rules. In Freer Markets. More Rules*: Cornell University Press.