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Original Paper

Taxation of Digital Business Transactions: Challenges and Prospects for Developing Economies

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Abstract

The Global economy has seen a rapid growth in digital business transactions, especially in the provision and sale of goods and services through the application of information and communications technology. This rapid growth can be attributed to the fast rate of technological advancement which has changed how business transactions are conducted globally. The complexity associated with the taxation of digital business transaction has created the need to take a critical look at the challenges and prospects of digital business transactions in developing economies. The absence of physically commercial environment to a digital business environment generates thoughtful and significant issues in relation to taxation and taxation systems. This study relied on the second-best Tax Theory to establish that developing economies face the daunting task of taxing digital business transactions effectively due to the distortive nature of taxes on welfare losses. Whereas government and revenue collection authorities can impose tax on individuals, institutions and or products, they cannot tax digital business transactions efficiently and effectively and unless there are robust and effective tax systems in place. Even though these constraints appear more pronounced in developing economies, the implementation of effective tax could lead to an enhanced internal tax revenue for development.

Keywords

taxation, technology, digital business, developing economies, tax authorities

1. Introduction

Technology is transforming many aspects of how business activities are conducted, as well as the way tax authorities and governments administer various taxes imposed on business activities. The huge transformation and vast change brought about by technology is the manner business transactions are conducted these days. This brings about both opportunities as well as challenges for governments of developing economies. One positive effect of the introduction of digital business is that it has created, an opportunity for governments to raise additional revenue for development. However, the revenue generating opportunities presented by digital business demands a change in the tax system and nature of taxation policies, through the development of a universal new range of tax systems to support the development and implementation of taxation policies (Richard & Subhajit, 2002).

Also, it is generally accepted that digital businesses are connected and use smart technologies which cause significant changes in the markets and customer relationships. Digital business has not only gained dominance in developing economies, it has slowly made its way into developing economies as well. In most developed economies, digital business has become part of the foundational setup for business and society (Parminder, 2018). Though evidence shows that most customers in developing economies lack adequate knowledge on digital business, there appears to be some degree of a heavy reliance on efficient and widely accessible online networks of digital business (United Nations, 2019). In addition, the fast-growing nature of digital business in developing economies calls into question whether the current tax systems, which have been in place for many years, are fit for purpose and can stand the test of time in the modern global economy which is largely driven by digital business activities. Governments in developing economies have made some good progress in developing tax systems to tackle the loopholes in taxation of digital business. However, there are some more fundamental tax challenges posed by digital business activities that remain unaddressed (OECD, 2019).

Further evidence has it that technology has been changing the way business is done and the way money is made. It is no surprise that tax authorities from many parts of the world eventually got together to work out how these changes were affecting their tax collections; after all tax collections is serious business (Seun, 2016). Also, studies have shown that digitization of business has a wide range of implications for taxation, impacting tax policy and tax administration at both domestic and international levels, offering new tools and introducing new challenges (OECD, 2018). Further, tax policy implications of digitization have been at the center of recent global debate over whether or not international tax rules continue to be “fit for purpose” in an increasingly changing environment (OECD, 2019). In spite of the challenges confronting taxation of digital business, there is the need to take note that taxes are the principal source of government revenue, accounting on average for about 80% of total revenue in many economies (Hadzhieva et al., 2016). Domestic taxation of goods and services makes up the largest share in tax revenues (36.5%). For instance, developing countries import duties accounts for 15.8% of total government revenue compared with 2.6% for developed countries and tax revenue is 21.2% compared with 3% for developed countries (Subhajit, 2002).

Some scholars have expressed varied scientific views on taxation of digital business activities in both developed and developing economies. Mazerov and Lav (1998), have observed that exempting internet sales from taxes could act as disincentive to those who pay taxes on traditional means of shopping. Another study also showed that consumers living in high sales tax areas are significantly more likely to buy on-line than those living in low sales tax areas (Goolsbee, 1999). The Economist (2000) through a survey found that a differentiated internet taxation rules among countries could have a significant impact on consumers' purchasing behavior, shifting from domestic to foreign suppliers. The findings of these studies could make one uncomfortable discussing taxation of digital business activities. However, other scholars such as Mann have indicated that digital business and other economic activities over the internet can be the engines to improve domestic economic well-being of domestic services and could also help to achieve rapid integration of global production. In Mann's view, discussions on digital business- related issues will demand self-inspection of key domestic policies, in areas such as telecommunications, financial services, distribution and delivery (Mann, 2000). These studies have brought to the fore the complexities surrounding taxation of digital business. Therefore, it is very crucial to apply systematic and holistic approach when analyzing taxation of digital business transactions, challenges and prospects for developing economies.

2. The Problem Statement

It is generally believed that digital business transactions could lead to the loss of the consumption tax base (Trandel, 1992). A notable feature of consumption taxes is that they are borne by the consumer and collected by the seller. However, different tax rules may apply depending on the type of service rendered or product sold. Also, the location of consumer and seller, and the consumer type impacts tax rules. Additionally, the number of external on-line suppliers who mostly have to deal with different taxation rules also adds up to the challenges of digital business taxation (Kanbur & Michael, 1993). Also, consumer sensitivity to tax rates among people living along geographic borders or in an open economy, where the costs of arbitraging tax rates across locations are low can have important implications for the setting of tax policy (Mintz & Tulkens, 1986). According to Goolsbee (1999), the key issue which Internet poses for tax policy is that it creates a world in which everyone is as responsive to local taxation as people who live on geographic borders. However, Sheppard (1998) and other scholars believe in a universal tax system on all internet and mail-order sales, believing that this would protect the revenue base and protect offline businesses (Fox & Matthew, 1997).

On the other hand, the WTO, is concerned about the possibility that negative tariff revenue implications could result from a ban on customs duties on electronic transmissions in developing countries. Also, developing countries are believed to lack resources to provide evidence, which could support these concerns. Additionally, many developing counties are still struggling to keep up with the rapid developments in the area of digital business, recognizing that digital business has the potential for substantial beneficial effects on their economies (ITU, 1999; and Kerrigan, 1999). Further, the digital business taxation debate appears to be highly dominated by OECD countries, which some concerns have been raised about their lack of interest in the affairs of developing countries. Also, developing countries could be much more affected by fiscal losses resulting from digital business due to their greater dependence on tariffs and tax revenues as main sources for funding national budgets (Susanne, 2000).

The issue of digital business taxation is increasingly becoming a major issue of concern in both developing economies and developed economies. Authors such as RKG Consulting (2017), Omri (2015) and Adam (2018) have written extensively on this topic. One of such authors is Monica (2019) who believes that the existing international tax rules and standards are not adequate to fairly allocate taxing rights and income among countries, and cannot prevent tax base-eroding transactions carried by multinationals and fight harmful tax competition among countries (Monica, 2019). According to Stephanie and Patricia (2019) these challenges do affect both developed and developing economies in terms of taxation of digital businesses, prompting the need for this study to explore the challenges and prospects of dealing with digital business transactions for developing economies.

3. Justification of the Study

Taxation is commonly accepted apparatus for financing government expenditure, whether in peace or in war and depression of prosperity (Abiola, 2012). Again, it is considered as a device used to provide government with regular and reliable source of revenue (David-Akoro). However, in spite of the contributions of taxes for national development, taxation of digital business activities has been identified as one major problem confronting tax authorities in developing economies (OECD/G20, 2019). Importantly, the views of the authors of this study are not profoundly different from well-known tax scholars: that digital business activities could lead to tax base erosion and profit shifting (Terada-Hagiwara et al., 2019).

3.1 The Research Question

This study attempted to find answers to the following questions: what are the prime factors that constitute barriers to taxation of digital business activities in developing economies? Do these factors create enabling environment for tax base erosion in taxation of digital business activities? What is the relationship between the prime factors (barriers) and taxation of digital business activities in developing economies? What constitutes the “Best” (most effective) tax system of taxation of digital business activities in developing economies? And lastly, what challenges confront the Economic Community of West African States (ECOWAS) region in digital business taxation?

3.2 Purpose of the Study

This study is conducted to bring to the fore the prime factors creates challenges to taxation of digital business activities in developing economies; establish whether those factors truly create enabling environment for tax erosion; show the relationship between the prime factors and taxation of digital business; test what constitute “Best” (most effective) tax system, and finally, to develop a holistic approach and a model to support effective taxation of digital business activities in developing economies.

4. Review of Related Literature

The global economy is currently experiencing a rapid rise in sale of goods and services over the internet and this has caught the attention of policymakers and tax experts on how such transactions should be taxed, since in most cases both the seller and buyer usually pay no tax. According to Susanne (2000), cross-border electronic commerce is currently operating in a tax- and tariff-free environment. However, several predictions of sharp increases in e-commerce during the next five years have been made and this has prompted governments and tax authorities to discuss modifications to existing legislations to take account of these developments. A major concern is the potential loss in tax and cost revenues resulting from e-commerce (Susanne, 2000). The issue of whether to put taxes on digital business transactions started sometime in 1998 by the World Trade Organization (WTO), where all the member States agreed to a two-year customs' duties moratorium on digital business transmissions (WTO, 1999). Unfortunately, developing countries seem to be left out of these discussions, citing possible tariff revenue drop and lack of resources to keep up with the rapid developments in the area of ecommerce. However, there is the need to recognize that digital business taxation has the potential for substantial beneficial effects on developing economies (ITU, 1999; and Geneva, 1999).

The challenges in taxation of digital business activities in developing economies further appear to have originated from the world supper authorities in charge of cross-border trade and commerce. The first identified challenge has to do with "*Double Taxation*" – when goods are imported into a country, there is the imposition of customs duties on them. However, WTO believes that digital business transmissions are not to be considered as importations by countries. Contrary to that, The General Agreement on Tariffs and Trade (GATT) Article II suggests and implies indirectly that electronic transmissions could supposedly be considered as importations and subject to tax (WTO, 1998). The implications of the above could mean that goods imported into a country and sold on a digital platform within the same country could be taxed twice, in the form of customs duties and sales tax. Some scholars also suggest that there is *"Lack of Clarity"* regarding the stance of WTO and GATT. That is, whether digital business transactions fall under importation of goods or not and thus coming under the remit of GAAT; whether or using the term customs duties for taxes paid on goods bought online and brought into a country could also mean that an importation has actually taken place (WTO, 2004). Another challenge faced in the taxation of digital business has to do with "*location and Classification*" – in digital business contract the location of both parties cannot determine a fixed location, because in most cases all transactions are carried out through online servers in different locations. Typically, most business transaction contracts carried out via electronic means do not require the physical presence of the parties involved and it is regarded as a distance contract (Nadeem & Saxena, 2018). Further, Jones and Subhajit (2002), found that digital business could also result in an erosion of the consumption tax base. Ideally, consumption taxes are borne by the consumer and collected by the seller, however, different tax rules may be applied for the product or service sold, depending on the location of consumer and seller.

Additionally, many scholars have also found that identification of taxpayers is one of the biggest challenges in taxation of digital business. These scholars further pointed out that digital business leads to the elimination of intermediaries or middlemen who are critical for identifying taxpayers in business transactions, and complication of tax administration as well as weakening of tax declaration (Frost, 1999; and Qin, 2009). Also, attempts by some scholars to identify taxation of digital business challenges revealed that there are no proper means of tax collection. That is, tax authorities lack the capacity to ensure effective collection of taxes in the digital business environment. In most cases, digital business transactions have resulted in an increase in the number of low-value shipments of physical goods which are exempted from customs duties and taxes in many countries. It is also believed that digital business creates discrepancies in cases where foreign businesses may be tax-exempt, whereas local business would be required to put taxes such as value added tax (VAT) or sales taxes on goods and services (Peter, 2019; Jones & Subhajit, 2002). Furthermore, record-keeping has been identified by Jones and Basu (2002) as another challenge in digital business taxation, given that digital business transactions are by nature hard to trace. The fact is that the tax authorities in developing economies face the daunting task of how to: establish audit trails, identify the parties to transactions, obtain documentation, and fix suitable tax rates for the taxation of digital business activities (Qin et al., 2014; Richard, 2008; and Kaldor, 1963).

Available literature reviewed have shown that both developed and developing economies face a lot of challenges in the taxation of digital business transactions. According to Mohamed et al. (2011), the ECOWAS has a standard on tax revenue under the convergence criteria of the ECOWAS Monetary Cooperation Program (EMCP). These standard states that tax ratio as a percentage of GDP should be 20% or more. However, many scholars believe that in spite of the different tax reforms in various member states, the satisfaction of this criterion remains a challenging one (Mohamed Ben & Robert, 2011; IMF, 2006; Hughes, 1987; Michael, 2015; and Dohrmann & Pinshaw, 2009). It must be noted that digital business taxation challenges faced by developing economies are much greater, given the fact that they are confronted with numerous development and other socio-economic challenges.

Also, a common debate on digital business taxation is the lack of physical presence in the market country, thereby aiding market participants to avoid payment of any tax in that jurisdiction (OECD, 2014). It is important to mention also that the division of the world into developed countries and developing countries happened not long than most people thought. Some scholars believe it may be deceptive to consider developing countries as collective, because there are significant differences between different regions of the developing world (Trandel, 1992). Also, the United Nations seems not to have a common agreement concerning the terms “developed” and “developing”, when referring to the stage of development reached by any given country or area and its corresponding classification in one or the other groupings (Kanbur, and Michael, 1993). To help address these challenges, this study on: “*Taxation of Digital Business Transactions: Challenges and Prospects for Developing Economies*” is being conducted using a holistic approach to identify, analyze and bring to the fore the most current and pressing challenges in the taxation of digital businesses, as well as the prospects and offer pragmatic solutions to these challenges.

5. Research Methodology

This study employed an investigative research technique based on literature of relevant books, articles, newspapers, journals, magazines and reports that capture broad academic and professional literatures on digital business taxation. Also, available secondary data were expansively used for the study. It is worth mentioning that this is a social research which seeks to find explanations of unexplained phenomena, to clarify the doubtful and correct the misconceived fact of social life (Mahesh et al., 2011; and Young, 1953). Also, the study involves detailed analysis of Second-Best Tax Theory for understanding, discovering new facts and analyzing of social life to correct and verify the existing knowledge as a system (Tresch, 2015; and Thibault, 2018).

6. Findings

The data of this study as indicated earlier was gathered through the application of investigative research techniques, literature review and thorough analysis of the Second-Best Tax Theory. The results of this study after systematic and thorough analysis indicate that the primary factors causing digital business taxation challenges in developing economies are: narrow tax base; poor tax administration system; non availability of digital business transactions data across countries; lack of transparency of taxpayers obligations and liabilities; poor tax registration and tax assessment system; difficulty in dealing with capacity, compliance and changes in tax administration caused by technology; limited basic tax options; adverse impact of globalization on revenue system; socio-economic issues; politicization of tax policies; and inadequate knowledge on digital business.

The study further showed that the major challenge in the taxation of digital business in developing economy is "***Effects of Digital Business Taxes on Consumers***" this study revealed that any attempt to tax digital business will lead to distortion in taxes and the accompanying result will be the ultimate welfare losses. Through the use of the Second-Best Theory, this study showed that taxation of digital business transactions could result in tax distortions which could lead to welfare losses. The process was guided by the following questions on digital business taxation: Should we tax producers / suppliers or consumers? And should we tax the online marketing company, producer or consumer? The study also found that the party most affected by taxation of digital business does not depend on who directly pays for it but depends on relative elasticity of demand and supply. The study then applied the downward-slopping demand D(p) and upward-slopping supply S(p) to assess the impact of taxation of digital business on participants. At an equilibrium with a tax "t" on consumers paying taxes on digital business purchase: $D(p + t) = S(p)$ market price would be "p", but consumers would have to pay "p+ t". Also, at an equilibrium with a tax "t" on suppliers paying taxes on digital business supplies: $D(p) = S(p - t)$ and market price will be "p", however the study over served that suppliers will only perceive "p − t" in taxation of digital business. This also resulted in the same yield of equilibrium with “p” = p + t. The figure 1 below shows the equilibrium with and without taxes on digital business transactions for both customers and suppliers/producers.

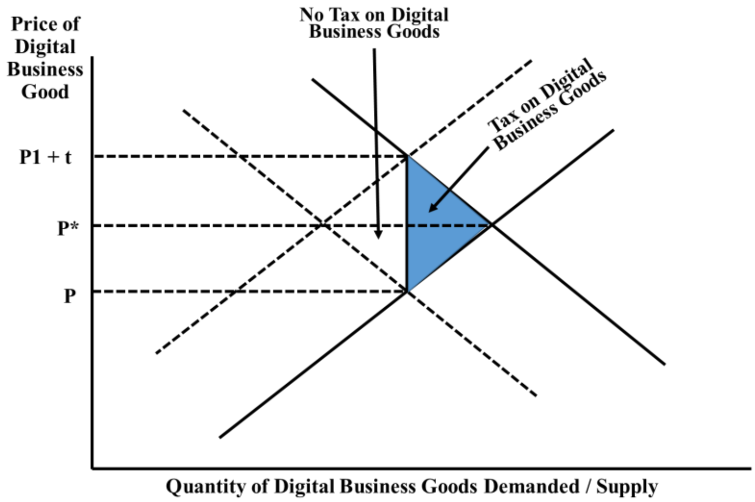

Figure 1. Equilibrium With and Without Taxes

Figure 1 above showed that irrespective of steps taken by tax authorities, the introduction of digital business taxation will lead to distortions in taxes and ultimately welfare losses. That is suppliers will experience a price reduction: $dp / dt = -(\eta / (\eta + \sigma)$. Whereas consumers on the other hand will experience a price upsurge: $d(p + t) / dt = \sigma / (\eta + \sigma)$. The study further revealed that natural tension could arise between tax policy and the goal of imposing taxes on digital business. This is true because from Figure 1 above, there is evidence that the imposition of taxes on digital business will generate distortions in the digital market by forcing suppliers and consumers to face different prices. These distortions will also misdirect resources, thereby causing resource inefficiencies. The issue of resource inefficiencies is not appropriate; however, this is also an unavoidable cost of having taxes imposed on digital business.

7. Discussions

The study found that the negative effects of digital business taxation on consumers and suppliers are unavoidable to the extent that governments of developing economies have unwavering desires to improve upon domestic revenue collection efforts. The introduction of digital business taxes could reduce taxpayers’ purchasing power so that they automatically become part of the government’s redistribution mechanism. The study further revealed that the governments of developing economies would ordinarily want their taxes to contribute to economic development goals. However, there many challenges to deal with: First, the negative effects digital business taxes have on consumers – ultimately, taxing digital business will create a distortion in taxes and welfare losses. Second, lack of clarity of participants' obligations and charges – this study observed that the parties involved in digital business transactions in most cases are unaware of their tax obligations and charges. Third, access to data /information on tax rates applicable and procedures for digital business taxation in most developing countries appear not to exist. Fourth, lobbying does shape tax policies in most developing economies and this has the tendency of impacting negatively on the implementation of effective and efficient tax systems aimed at addressing challenges associated with taxing digital business transactions. The traditional tax authorities have limited power to widening the tax bracket and also do face political pressure in the implementation of changes to the tax systems. Situations of these nature the study observed discourage the governments of most developing economies to implement digital business taxation system reforms. Another critical challenge that needs attention is insufficient knowledge of digital business taxation - tax knowledge is considered as the public understanding of tax and certain matters relating to the tax system or the level of awareness or sensitivity of the taxpayers to tax legislation (Mukhlis et al., 2015; Oladipupo & Obazee, 2016).

Lack of public understanding of digital business taxation and certain matters relating to taxation systems can lead to low level of awareness and insensitivity on the part of taxpayers regarding digital business tax legislation. Also, technology advancement, capacity and changes in the tax systems also affect many aspects of tax administration in terms of compliance, and the capacity of tax authorities to deal with complex tax issues which requires tax systems upgrades. More so, economic and social issues also affect governments' ability to tax digital business transactions. In as much as developing economies can increase tax revenue through digital business taxation, they also have to consider the implications of the general economic and social changes they will cause. Empirical studies have shown that all taxes unavoidably produce social and economic changes (Clarence, 1937). Additionally, tax collection and payment difficulty - digital business has a wider reach with its customers widely spread across the universe. Also, goods and services are offered at very low cost, and this provides opportunity for many small businesses and individuals to enter with small start-up capital. This makes identification of both the business owners and customers very difficult. Also, monitoring online business transactions for tax purpose is one difficult thing to do given the number and value of transactions per period. Furthermore, there is also registration and tax assessment issues – most digital businesses operating in developing economies are not registered legally (Parminder, 2018). Again, a reasonable number of persons in developing economies do not have tax identification numbers (EPS-PEAKS, 2013). The study also established that this challenge above has compounded the difficulty in taxing digital business transactions.

8. Conclusions

Technology has become a vital part of business operations in both developed and developing economies. The effects of technology and rapid development of digital businesses are experienced in all developing economies across the globe. Doing digital business provides businesses the opportunity to sell their goods and services with a different method around the world and also attracts customers to access goods and services easily. Although, digital businesses create jobs and present opportunities for developing economies to increase their tax revenues, there are however several issues which are of much concern as found in this study. Taxation of digital business is an important issue for developing economies because of its rapid growth potential. However, aside the digital business taxation challenges outlined in this study, there are also other potential issues such as tax loss and tax evasion, uncertainty and double taxation which, if not well managed by tax authorities, could affect economic growth in developing economies. The authors believe that further studies could be conducted to find the causes of these challenges.

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