

2017

Chapter VIII: Protecting the Tax Base in the Digital Economy

Jinyan Li

Osgoode Hall Law School of York University

Source Publication:

Li, Jinyan, Chapter 8: Protecting the Tax Base in a Digital Economy, UN Handbook - Protecting the Tax Base of Developing Countries (2nd ed)

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Chapter VIII

Protecting the tax base in the digital economy

JINYAN LI*

1. Introduction

Protecting the tax base in the digital economy is Action 1 of the Organisation for Economic Co-operation and Development (OECD) project on Base Erosion and Profit Shifting (BEPS).¹ The reason is simple: “International tax rules, which date back to the 1920s, have not kept pace with the changing business environment, including the growing importance of intangibles and the digital economy.”² They can no longer distribute taxing rights fairly among countries and adequately define a country’s tax base.

*Osgoode Hall Law School, York University, Canada. The author acknowledges with appreciation the assistance provided by Stephen (Xiaoyi) Ji, Kevin Persaud and Jacklyn Neborak, JD students at Osgoode.

¹At the request of the G20 Finance Ministers, in February 2013, the Organisation for Economic Co-operation and Development (OECD) prepared a report outlining the BEPS issues, and in July 2013, followed up with an Action Plan, which was to address those issues in a coordinated and comprehensive manner. Specifically, it was to provide countries with domestic and international instruments that would better align rights to tax with economic activity. Draft reports for public consultation on each of the 15 actions were released in 2014 and the Final Reports were released in 2015. At their 2015 summit, the G20 leaders committed themselves to implementing the BEPS recommendations. OECD, *Addressing the Tax Challenges of the Digital Economy, Action 1—2015 Final Report* (Paris: OECD, 2015) (hereinafter “OECD Final Report on BEPS Action 1”), available at http://www.oecd-ilibrary.org/taxation/addressing-the-tax-challenges-of-the-digital-economy-action-1-2015-final-report_9789264241046-en, is largely consistent with the draft report. These reports were prepared by the Task Force on the Digital Economy, a subsidiary body of the OECD Committee on Fiscal Affairs (CFA).

²G20 Leaders’ Declaration (St. Petersburg, 6 September 2013), paragraph 20, available at https://g20.org/wp-content/uploads/2014/12/Saint_Petersburg_Declaration_ENG_0.pdf.

Existing international tax rules are based on fundamental assumptions that include the following: tax laws are creatures of sovereign States and national tax laws interact via bilateral tax agreements; transactions are physical, involving goods and services; physical locations are necessary for carrying on business activities; and international income is allocated for tax purposes between the residence country and source country. These assumptions are disrupted by the digital economy, which is inherently borderless, intangible, characterized by an unparalleled reliance on intangible assets, massive usage of data (notably personal data) and widespread adoption of multisided business models capturing value from externalities generated by free products. The digital economy threatens the tax base of the corporate income tax (CIT) and the value added tax (VAT) by facilitating BEPS and potentially causing the tax base to disappear (base cyberization). The problem of BEPS is not unique to the digital economy, but is, and will be, exacerbated by it. BEPS is the result of tax planning designed to take advantage of gaps in the interaction of different tax systems. This includes artificially reducing taxable income or shifting profits to low-tax jurisdictions in which little or no economic activity is performed. The targeted BEPS structures are “artificial” in that they are undertaken primarily for tax purposes. Digital enterprises, such as Amazon, Apple, Facebook and Google are among the top BEPS practitioners.

The problem of base cyberization is of a different nature—the income is not in a country’s tax base because the current rules are inapt to capture it. This is a more fundamental issue with much broader policy implications than BEPS. In a digital economy, multinational enterprises (MNEs) can “legitimately” separate profit and profit-generating activities through new business models made possible by technological advances. For example, base cyberization occurs when MNEs can sell goods and services to developing countries without the need for a local business presence or without falling within the jurisdictional threshold. It is the result of the collision of new business models coupled with an increasing proportion of unconventional value added activities and the existing tax rules designed to carve out the sovereign territory for taxation on some form of physical presence. The collision creates substantial challenges in taxing business transactions undertaken not only by major global technology

conglomerates, but also other businesses that are less wholly “digital” in nature.³ Addressing BEPS is unlikely to solve the problem of base cyberization.

Developing countries are part of the growing digital economy. The BRICS⁴ countries and other emerging markets are significant, if not equal, players in this economy, particularly in the sense of providing essential markets for goods and services delivered through e-commerce platforms. The reason is not only the existing size of the Internet population in these countries, but also the immense growth potential. For example, by 30 June 2016, the Internet population in Africa, Asia, Latin America and the Caribbean, and the Middle East accounted for 73 per cent of the world’s Internet users.⁵ Whereas 65 per cent of Chinese shoppers make purchases online via their mobile devices, the same is true of only 22 per cent of American shoppers, in spite of the fact that more Americans are Internet users.⁶ The disruptive nature of the Internet and digital economy enables people in less developed countries to participate in the world economy without being constrained by geographic, physical barriers. The potential for growth is tremendous. For example, Africa’s middle class has reportedly tripled over the past 30 years, and the current trajectory suggests that it will grow to 1.1 billion in 2060, making it the world’s fastest growing continent.⁷ This growth, coupled with the forecasted gross domestic product (GDP) growth of over 6 per cent, is expected to drive the growth of e-commerce as businesses seize upon opportunities arising

³International Monetary Fund, “Spillovers in International Corporate Taxation,” (2014), *IMF Policy Paper*, available at <http://www.imf.org/external/np/pp/eng/2014/050914.pdf>, at 48, (hereinafter “IMF Spillovers Report”).

⁴Brazil, Russian Federation, India, China and South Africa.

⁵Internet World Stats, “Internet Usage Statistics - The Internet Big Picture: World Internet Users and 2016 Population Stats,” available at www.internetworldstats.com/stats.htm.

⁶PwC, “Total Retail Survey 2016: Online Shoppers Around the World are Fundamentally Disrupting Retail—Again,” (2016), available at <http://www.pwc.com/gx/en/industries/retail-consumer/global-total-retail.html>.

⁷Deloitte, “The Rise and Rise of the African Middle Class,” (2013), available at <http://www2.deloitte.com/content/dam/Deloitte/au/Documents/international-specialist/deloitte-au-aas-rise-african-middle-class-12.pdf>.

from the growing number of digitally empowered consumers, who are opting to purchase goods and services online.⁸

The tax base of developing countries is presumably more at risk than that of OECD countries. The CIT usually figures more prominently in developing countries than in developed countries in terms of its share of the total tax revenues.⁹ The VAT generates the largest share of tax revenue in many developing countries.¹⁰ As a result, any erosion of the tax base of the CIT and/or the VAT could have profound consequences on the revenue capacity of developing countries. Furthermore, the loss of tax revenue is presumably more urgent and real in developing countries as they are net importers of digital goods and services.

To protect their tax base while embracing the digital economy, developing countries need to participate in the “globalization of tax policy” and work with and through international organizations to develop international tax rules that can take into account their interests as source or market jurisdictions. Interestingly, the technological advances that enable the growth of the digital economy may further help developing countries improve overall efficiency in their tax administration and transform them into more modern tax systems.

The present chapter aims at exploring the options available for developing countries to protect their tax base in the face of the growing digital economy.¹¹ It draws on the work of the OECD¹² and

⁸E-commerce news, “Potential for Retail Growth in Africa,” (2014), available at <http://www.bizcommunity.com/Article/196/394/112923.html>.

⁹IMF Spillovers Report, *supra* note 3, at 7.

¹⁰Richard M. Bird and Pierre-Pascal Gendron, *VAT in Developing and Transitional Countries* (Cambridge University Press, 2007).

¹¹Because the digital economy issue cuts across all sectors of the economy and all forms of BEPS, the scope of the present chapter can potentially be very broad and overlap with that of other chapters in this publication, particularly Chapter II, “Taxation of income from services,” by Brian Arnold, and Chapter VII, “Preventing avoidance of permanent establishment status,” by Adolfo Martín Jiménez. To the extent possible, the present chapter will defer to these other chapters on general issues and principles and focus on digital services and unique PE issues arising from the digital economy.

¹²For instance, see OECD Final Report on BEPS Action 1, *supra* note 1; OECD, “Electronic Commerce: Taxation Framework Conditions,” as pre-

reports by the European Commission Expert Group on Taxation of the Digital Economy,¹³ the French Task Force on Taxation of the Digital Economy,¹⁴ and the Davis Tax Committee,¹⁵ along with recent legislative measures introduced by selected countries and literature on the taxation of e-commerce and the sharing economy.¹⁶ After a brief overview of the current international tax rules in section 2, sections 3 and 4 examine the key features of the digital economy and the main challenges for the tax base of developing countries. Section 5 suggests some policy options for developing countries and section 6 concludes the chapter.

The present chapter offers several conclusions. First, BEPS and base cyberization affect predominantly market jurisdictions. The CIT base of these jurisdictions is eroded or lost primarily because the rules that define a country's source-based taxing rights are outdated and ineffective for the digital economy. The VAT base is eroded due to difficulties in enforcing and collecting tax. Because developing countries

sented to Ministers at the OECD Ministerial Conference on 8 October 1998; and paragraphs 42.1–42.10 of the Commentary on Article 5 of the OECD Model Tax Convention.

¹³European Commission (EC), *Commission Expert Group on Taxation of the Digital Economy Report* (2014), available at http://ec.europa.eu/taxation_customs/taxation/gen_info/good_governance_matters/digital_economy/index_en.htm.

¹⁴Pierre Collin and Nicolas Colin, "Task Force on Taxation of the Digital Economy," (2013), available at http://www.hldataprotection.com/files/2013/06/Taxation_Digital_Economy.pdf.

¹⁵Davis Tax Committee, "Addressing Base Erosion and Profit Shifting in South Africa," Davis Tax Committee Interim Report, available at http://www.taxcom.org.za/docs/New_Folder/1%20DTC%20BEPS%20Interim%20Report%20-%20The%20Introductory%20Report.pdf (see Action 1: Address the Tax Challenges of the Digital Economy).

¹⁶For instance, see Richard Doernberg, Luc Hinnekens, Walter Hellerstein and Jinyan Li, *Electronic Commerce and Multi-Jurisdictional Taxation* (The Hague: Kluwer Law International, 2001); Arthur J. Cockfield and others, "Taxing Global Digital Commerce," (2013); Jinyan Li, *International Taxation in the Age of Electronic Commerce: A Comparative Study* (Toronto: Canadian Tax Foundation, 2002); and Shu-yi Oei and Diane M. Ring, "Can Sharing Be Taxed?" (2016) Vol. 93, No. 4 *Washington University Law Review*.

are predominantly market jurisdictions, the impact of BEPS and base cyberization is presumably more severe on them.

Second, to protect their tax bases, developing countries need to develop some new tax tools for the new economy, ideally through multilateral efforts. An evolutionary approach is preferable as a radically different tax regime for the digital economy would be unlikely to receive international support and would violate one or more key policy objectives, such as neutrality and efficiency. The United Nations Model Double Taxation Convention between Developed and Developing Countries¹⁷ (United Nations Model Convention) provides more tools for source taxation than the OECD Model Tax Convention on Income and on Capital¹⁸ (OECD Model Convention). Examples are the lower threshold for physical presence or permanent establishment (PE) and withholding taxes on royalties. Extending the policy rationale of these broader source taxation rules to the context of the digital economy seems to be both consistent with the wider policy rationale of preventing BEPS and the right direction for formulating tax measures for the digital age. As regards VAT, there are some best practices for developing countries to consider, such as requiring foreign online vendors to register for VAT if the sales in a country exceed a specified threshold.

Third, while recognizing the merits of an evolutionary approach, the global and intangible nature of the digital economy also calls for some original thinking about where value is created for tax purposes and how States can share the new tax base fairly. New nexus rules or new ways of implementing existing principles are necessary to ensure a fair sharing of the tax base among countries, especially between developed and developing countries.

Fourth, it is in the best interest of developing countries to participate in multilateral efforts to tackle the tax challenges of the digital economy. Economies of developing countries are increasingly tied to the global economy, as is their tax base. The global nature of

¹⁷United Nations, Department of Economic and Social Affairs, *United Nations Model Double Taxation Convention between Developed and Developing Countries* (New York: United Nations, 2011).

¹⁸OECD, *Model Tax Convention on Income and on Capital* (Paris: OECD, 2014).

the new economy defies any unilateral nation-centric tax policies or enforcement measures.

2. Tax base of developing countries

2.1 Corporate income tax

The tax base of the CIT is the net profit earned by corporations from various activities, such as trading, manufacturing and processing, retail, extractive and services. The tax rate is generally flat. Corporations are required to file tax returns and self-assess their tax liability.

A country's right to tax international income (or its tax base) is determined by the residence of a corporation and the source of income. The rules defining corporate residence and source of income are found in domestic law and modified in some cases by tax treaties.

Resident corporations are typically required to pay tax on income derived from domestic sources as well as foreign sources. Corporate residence is generally based on the place of incorporation, the place of central management and control, or the place of effective management. Resident corporations generally receive tax relief in respect of foreign income taxes paid on its foreign income.

Non-resident corporations are generally taxable only on income derived from domestic sources. Different jurisdictional nexus (or sourcing) rules apply to business profits and investment income (and capital gains). These are the rules that are most vulnerable in the digital economy.

The foundation of the nexus rule for business income is the same under domestic law and tax treaties—a certain level of physical presence in the source jurisdiction is required, either directly or through the actions of a dependent agent. The physical presence can be manifested by the existence of a physical place or physical presence of human service providers. Many developing countries have concluded tax treaties on the basis of the United Nations Model Convention. The effect of tax treaties is to modify domestic tax laws by limiting the tax jurisdiction of the source country. For example, the nexus rule for business profits is elevated to the level of a PE, requiring a business

presence that is “permanent” or “fixed,” which is a higher threshold than the rule under domestic laws. Article 5 of the United Nations Model Convention also deems certain services activities to be equivalent to a PE if the activity satisfies a time requirement. A person acting on behalf of the non-resident corporation and habitually exercising an authority to conclude contracts in the name of the corporation is deemed to be a PE. Article 5 (4) further raises the threshold by not considering warehousing, marketing and other “preparatory or ancillary” activities to constitute a PE.¹⁹ Article 5 (8) of the United Nations Model Convention provides that a subsidiary of a foreign corporation shall not of itself constitute a PE of the parent company.

The nexus rule for investment income is generally the same under domestic laws and tax treaties—the residence of the payer or the “base-erosion rule.” The base erosion rule traces the source of tax-deductible charges, such as interest or royalties, to the place of PE where the interest or royalty charge is deducted in computing profit attributable to the PE.

In the case of services, the nexus rule depends on the characterization of the service fees as giving rise to business profits, employment income, professional or independent services, or technical services. Typically, the nexus rule requires services be performed in the country.

When a resident corporation and a non-resident corporation are related to each other, such as being members of the same corporate group, their transactions are subject to the transfer pricing rules. These rules require related-party transactions to be priced in accordance with the arm’s length principle for purposes of determining the profit of each corporation.

¹⁹Article 5 (4) of the United Nations Model Convention refers to: “(a) The use of facilities solely for the purpose of storage or display of goods or merchandise belonging to the enterprise; (b) The maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of storage or display; (c) The maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of processing by another enterprise; (d) The maintenance of a fixed place of business solely for the purpose of purchasing goods or merchandise or of collecting information, for the enterprise.”

2.2 VAT

VAT is a broad-based tax on the consumption of goods and services. Although taxes are collected by businesses at different stages of production, distribution and sale of goods and services, the ultimate burden of VAT is intended to fall on the eventual consumers. Domestic businesses and certain foreign businesses conducting commercial activities in a given country are required to register for VAT purposes, collect VAT on their sales and claim a credit or refund for VAT paid on their business inputs. For various policy reasons, the supply of certain goods or services is exempt from VAT. Examples are necessities, financial services, basic health and education services, and importation of small-value items.

A country's right to collect VAT on cross-border supplies is based on the destination principle.²⁰ Under this principle, VAT is levied in the jurisdiction of the final consumer. This means that exports are not subject to VAT (and the associated input tax is refunded to the exporter) and imports are taxed on the same basis as domestic supplies. In the case of imported tangible goods, VAT is generally collected from the importer at the same time as customs duties. To ease compliance, many countries allow an exemption for relatively low-value goods.

In the case of imported services and intangibles, however, applying the destination principle is more difficult. The nature of services and intangibles is such that there are no customs controls that can effectively confirm their exportation and impose the VAT at importation. Currently, there are two approaches in dealing with the imposition of VAT to imported services: (a) self-assessment by the importer

²⁰OECD, *International VAT/GST Guidelines* (Paris: OECD, 2014). Some developing countries have not adopted the destination principle. China is one such country. The Chinese VAT system does not differentiate the place of taxation for business-to-business (B2B) and business-to-consumer (B2C) cross-border supplies of services and intangibles. VAT is payable on supplies of intellectual property rights and certain services if either the supplier or the recipient is inside China. China does not have specific tax rules dealing with cross-border supplies of digital content. For importation of intangible supplies, the Chinese VAT requires the importers to withhold VAT and settle tax payments with local tax authorities. In practice, the withholding rules are not strictly enforced against individual importers who do not maintain VAT registration in China.

under a so-called reverse-charge mechanism; or (b) a requirement for non-resident suppliers to register for VAT purposes and to collect and remit the VAT.

Under the reverse-charge mechanism, registered VAT businesses which import services from non-resident suppliers (that is to say, business-to-business or B2B) would have the onus of self-assessing the VAT (or charging themselves the VAT) and claiming an input credit for a tax refund. There is no net tax cost to the importer in such cases. However, if the importer is the final consumer and cannot claim any input credit, there is a risk that the importer would be motivated to abstain from its duty, and not self-assess and remit the tax to the government. It would be very difficult for the authorities to enforce the reverse-charge mechanism in such cases.

Alternatively, under the registration mechanism, non-resident suppliers of selected services must register for VAT purposes once the amount of supply exceeds a defined threshold (see section 5.8 below).

2.3 Fundamental concepts and assumptions

International tax rules are designed to allocate the taxing rights among countries over an international tax base. In the case of CIT, the allocation of taxing rights over income from cross-border transactions is guided by the economic allegiance theory and the benefit theory of taxation. In the case of VAT, the allocation of the tax base on cross-border supplies is guided by the destination principle. Avoidance of double taxation has been a main objective of international income tax.

The residence of taxpayers and source of income are concepts or instruments designed to achieve a fair allocation of taxing rights under the CIT. Both concepts emphasize the territorial connection between a corporation and the taxing jurisdiction. As a fictional entity, a corporation's residence is based on the place of incorporation (a choice of constituting law) or the place of management and control (a choice of situs of management). The source of income is generally based on the place of transaction (such as a sale), the use of property (such as rent) or the residence of the payer (such as a dividend).

When the rules were initially devised, it was safe to assume the following: (a) each country had the sovereign power to set its own tax

policy and international tax relations were regulated by tax agreements; (b) a corporation was liable to tax in a country only if it had a taxable presence in that country; (c) corporate residence and source of income were reasonable proxies for the locations where economic activities and value creation took place;²¹ (d) businesses were conducted through a physical place or human agents; (e) corporate income could be characterized as income from business, dividends, interest, rent and royalties, or capital gains; and (f) “each country in which an MNE group did business had its own subsidiary with full functionality, carrying out a broad range of activities reflecting the group’s business as a whole.”²²

Similarly, the international VAT rules assume that cross-border supplies of goods and services generally require a physical presence (such as a PE) in the market jurisdiction and there are intermediaries between the original producer and the final consumer. Furthermore, even though VAT is eventually paid by consumers, it is collected by the supplier of goods and services.

The way business transactions are done defies some of the fundamental assumptions and challenges the effectiveness or even relevance of existing tax rules. As a result, the tax base of some countries, especially market jurisdictions, is at risk.

3. Business transactions in the digital economy

3.1 Digital economy

The “digital economy” can be described as “the global network of economic and social activities that are enabled by platforms such as the

²¹For example, in *De Beers Consolidated Mines, Ltd. v. Howe*, [1906] A.C. 455 (H.L.), Lord Loreburn stated, at 458:

In applying the conception of residence to a company, we ought, I think, to proceed as nearly as we can upon the analogy of an individual. A company cannot eat or sleep, but it can keep house and do business. We ought, therefore, to see where it really keeps house and does business ... [A] company resides for purposes of income tax where its real business is carried on ... I regard that as the true rule, and the real business is carried on where the central management and control actually abides.

²²OECD Final Report on BEPS Action 1, supra note 1, paragraph 231.

Internet, mobile and sensor networks.”²³ The spread of information and communication technologies (ICT) across business sectors leads to the growth of the digital economy in both developed and developing countries. The current spread of ICT or broadband connectivity is high in OECD countries (for example, universal for large enterprises and 90 per cent or more for smaller enterprises)²⁴ and is expanding rapidly in developing countries.²⁵

The digital economy is inherently global. The Internet virtually connects everybody who has access to it using a computer or mobile device.

3.2 E-commerce

E-commerce is the better known element of the digital economy. It refers to “the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders.”²⁶ E-commerce includes offline transactions that involve online ordering of goods and services and delivery through traditional channels, as well as purely online transactions involving digital goods and services. Depending on the parties, the activities can be classified as business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer (C2C),²⁷ or business-to-government (B2G).

²³ Australian Government, Department of Broadband, Communications and the Digital Economy, “What is the digital economy?” The term “digital economy” was coined by Don Tapscott in *The Digital Economy: Promise and Peril in the Age of Networked Intelligence* (New York: McGraw-Hill, 1995).

²⁴ OECD Final Report on BEPS Action 1, *supra* note 1, paragraph 109.

²⁵ World Economic Forum, Silja Baller, Soumitra Dutta and Bruno Lanvin, eds. “The Global Information Technology Report 2016: Innovating in the Digital Economy,” available at <https://www.weforum.org/reports/the-global-information-technology-report-2016/>.

²⁶ OECD, *Guide to Measuring the Information Society 2011* (Paris: OECD, 2011). See also World Trade Organization, *E-Commerce in Developing Countries: Opportunities and challenges for small and medium-sized enterprises* (Geneva: WTO, 2013), available at https://www.wto.org/english/res_e/publications_e/ecom_devel_countries_e.htm.

²⁷ C2C transactions are becoming more and more common. Businesses involved in this model play the role of intermediaries, helping individual

B2B commerce accounts for the vast majority of global e-commerce,²⁸ although it accounts for less in developing countries.

In terms of e-commerce involving digital goods, services and intangibles, developing countries are net importers, especially as regards B2C transactions.²⁹ Cross-border B2C e-commerce has been growing in BRICS countries with the growth of the middle class and connectivity to the global networks in these countries.³⁰ China led all other countries in B2C and C2C purchases by the end of 2013.³¹ Specific reasons for cross-border online shopping include: greater selection of products online—popular categories of goods bought online include computer hardware, personal electronics, apparel and accessories as well as automobile parts (particularly in the Russian Federation); higher level of consumer trust in quality, and time-saving; and perhaps most importantly, cost-saving.³² One of the reasons for

consumers to sell or rent their assets by publishing their information on the website and facilitating transactions. An example of this would be eBay.

²⁸OECD Final Report on BEPS Action 1, *supra* note 1, paragraph 118.

²⁹The major exporters are developed countries such as France, Germany, the Netherlands, the United Kingdom of Great Britain and Northern Ireland and the United States of America. Brazil, China and the Russian Federation are among the top online retail importers. China was ranked number 1 in the Global Retail e-Commerce Index in 2013, Brazil was ranked number 8, and the Russian Federation number 13. See yStats.com, *Global Cross-Border B2C E-Commerce* (2014), available at <http://www.ystats.com/product/global-cross-border-b2c-e-commerce-2014/>; *AT&Kearney 2013 Global Retail Development Index*, available at <http://www.atkearney.com/consumer-products-retail/global-retail-development-index>.

³⁰In 2014, the Internet penetration rate (number of Internet users per 100 population) was 57.6 per cent in Brazil, 49.3 per cent in China, 18.0 per cent in India and 70.5 per cent in the Russian Federation. World Bank (2016), "Internet users (per 100 people)," available at <http://data.worldbank.org/indicator/IT.NET.USER.P2>.

³¹See KPMG, "E-commerce in China: Driving a New Consumer Culture," (2014) No. 15 *China 360*, available at <http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Newsletters/China-360/Documents/China-360-Issue15-201401-E-commerce-in-China.pdf>.

³²For further information, see Research on International Markets, "Russia B2C E-Commerce Report," (2012), *Market Report*; Market Watch, "East-

the price advantage is tax.³³ The popular international websites for B2C transactions are those hosted by companies in the United States of America, such as Amazon, and other developed countries.³⁴

Similar growth trends exist in other developing countries. In 2014, for example, the Asia-Pacific region was expected to claim more than 46 per cent of global digital buyers and to spend more on e-commerce purchases than North America, and the potential to grow remains huge as Internet users currently account for only 16.9 per cent of the Asia-Pacific region's population.³⁵ Similarly, Africa's e-commerce has been defined and accelerated by mobile networks. To promote e-commerce, entrepreneurs are reportedly contemplating circumventing the barriers of road transportation by opting for air transportation, even drones.³⁶ In Latin America, social networks are propelling the boom in e-commerce in the region. Moreover, 74 per cent of Internet users in Latin America regularly use social media sites such as Facebook or LinkedIn.

Companies in developing countries take advantage of e-commerce in cross-border trade, especially B2B trade in goods. For

ern Europe B2C E-Commerce Report 2013" ; Deloitte, "Doing Business in Russia 2014," available at http://www2.deloitte.com/content/dam/Deloitte/ru/Documents/tax/doing_business_in_russia_2014.pdf.

³³For example, in the Russian Federation, parcels are not subject to customs duties and import VAT if they do not exceed 31 kg in weight and 1,000 euros in value each month per recipient. In the case of intangibles (such as computer programs, e-books, music or video content), there is no concept of electronic import in the Russian Federation, allowing the content to be delivered to Russian users tax-free.

³⁴Some of the websites are also hosted by Chinese companies, such as Alibaba.

³⁵See "India, China to help APAC become largest e-commerce market in 2014," *The Economic Times* (online), 18 February 2014, available at http://articles.economictimes.indiatimes.com/2014-02-18/news/47451222_1_e-commerce-emarketer-emerging-markets.

³⁶See Monty Munford, "The African Version of Amazon Will Emerge from Nigeria," (2014) *Mashable*, available at <http://mashable.com/2014/03/18/nigeria-ecommerce-drones/>. For further information, see "Africa B2C E-Commerce Report 2013," *Market Reports*, available at <http://www.ystats.com/product/africa-b2c-e-commerce-report-2013/>.

example, Chinese companies sell into other countries.³⁷ Alibaba's top foreign markets are Australia, the United Kingdom of Great Britain and Northern Ireland, the United States and, more recently, Brazil, the Russian Federation and the Middle East.³⁸ Exports by small and medium-size enterprises (SMEs) in developing countries are aided by B2B e-commerce. For example, 15,000 SMEs in India export a variety of Indian handcrafted products to 190 countries. That is "just the tip of the iceberg,"³⁹ as many small businesses still do not have their own website and are looking to the third-party B2B exchanges/marketplace platforms to gain access to new markets.⁴⁰

The potential benefits of e-commerce can be illustrated by the Dell business model.⁴¹ Dell relied on e-commerce to support a virtual company. Orders for computers are placed with Dell by telephone or through the Internet. Through the process of just-in-time (or lean) manufacturing, items ordered by customers are produced by contract manufacturers and shipped as soon as they are manufactured. This approach enables Dell to forgo having brick-and-mortar store fronts with inventory that must be kept on the books or that might become obsolete, thereby significantly reducing the costs of production and sales. This process allows Dell to custom design systems for its

³⁷In 2015, it was reported that five of the top fifteen websites on the worldwide web were Chinese: Baidu, Hao123.com, Sina Corp., Taobao and Tencent QQ. See <http://www.alexa.com/topsites>. Other top 15 websites were: Amazon, Facebook, Google, Google India, LinkedIn, Twitter, Wikipedia, Windows Live, YouTube and Yahoo.

³⁸Alibaba launched the world's largest initial public offering (IPO), raising over US\$ 21 billion in September 2014. See *The Wall Street Journal*, "What is Alibaba?" available at <http://projects.wsj.com/alibaba/>. Transactions on Alibaba's online sites totalled US\$ 248 billion in 2013, more than those of Amazon and e-Bay combined, and the majority of Alibaba's transactions take place inside China.

³⁹Ibid.

⁴⁰On India's Internet industry, see "India: Already Booming E-commerce Market Continues to Grow," (2014).

⁴¹See Kenneth Kraemer and Jason Dedrick, "Dell Computer: Using E-commerce to Support the Virtual Company" (2001), Center for Research on Information Technology and Organizations, University of California, Irvine, available at <http://escholarship.org/uc/item/7r55529z>.

customer within certain parameters as well as to offer a range of items rather than a single system.

3.3 New business models

In addition to e-commerce, the digital economy has given rise to a number of innovative business models, products and services, such as online app stores, online advertising, cloud computing, payment services, high frequency trading and participative networked platforms. Participants of the digital economy include Internet giants such as Facebook and Google as well as, more importantly, traditional businesses whose activities are linked and enhanced through the use of ICT.

There is a variety of revenue models in the digital economy, including: (a) the advertising-based model, under which the company offers content, services and/or products and provides a forum for advertisements and receives fees from advertisers (for example, Facebook and Google); (b) the subscription model, under which the website that offers users content or services charges a subscription fee for access to some or all of its offerings (for example, Consumer Reports Online, *The New York Times*, and so on); (c) the sales model, under which a company derives revenue by selling goods, information or services to customers (for example, Amazon.com and Gap.com); (d) the licensing content and technology model, under which a company provides access to specialist online content (for example, publications and journals), algorithms, software, cloud-based operating systems, and so on, or a specialist technology such as artificial intelligence systems; and (e) sale of user data and customized market research models, used by Internet service providers (ISPs), data brokers, data analytics firms, and enterprises requiring telemetrics and data gained from non-personal sources. In addition, some companies may charge a fee for enabling or executing a transaction: examples are eBay, E*Trade and Airbnb.⁴²

⁴²For example, Airbnb provides a platform for people who have space to rent (hosts) to travellers. Hosts and travellers create a free Airbnb account so they can list their space and book accommodations anywhere in the world. Airbnb charges a fee for their services.

3.4 Key features

3.4.1 Remote connectivity

Connectivity of the Internet and other platforms enhances the ability of companies to carry out activities remotely and to expand the number of potential customers that can be targeted and reached. It enables companies to generate revenue from customers located in foreign jurisdictions without having any old-fashioned business presence in those jurisdictions. Such connectivity also increases “the flexibility of businesses to choose where substantial business activities take place,” and as a result, “it is increasingly possible for a business’s personnel, IT infrastructure (for example, servers), and customers each to be spread among multiple jurisdictions, away from the market jurisdiction.”⁴³ Digital businesses are, thus, intrinsically global; the “where” issue is neither here nor there.⁴⁴

3.4.2 Dematerialization

Dematerialization⁴⁵ in the context of the digital economy refers to the transformation of any material object into something of virtual or digital quality. Anything that can be digitized can be delivered online or dematerialized. A common example is the online sale and delivery of information or entertainment products which used to be delivered in physical forms, such as books, newspapers, movies or television shows. Furthermore, advances in 3D printing technologies have the potential to transform manufactured goods (for instance, machines and spare parts) into intangibles (such as licence plans and specifications) that allow customers to manufacture the physical items whenever customers actually need them.⁴⁶

⁴³OECD Final Report on BEPS Action 1, supra note 1, paragraph 254.

⁴⁴Borrowing from Bill Bryson, *Neither Here nor There: Travels in Europe* (New York: William Morrow—Harper Collins Publishers Inc., 1993).

⁴⁵The dematerialization of a product literally means less or no physical material is used to deliver the same level of functionality to the user. See Iddo K. Wernick and others, “Materialization and Dematerialization: Measures and Trends,” (1996) Vol. 125, No. 3 *Dædalus, Journal of the American Academy of Arts and Sciences*, 171–198.

⁴⁶3D printing is defined as “additive manufacturing techniques to create

Dematerialization is also manifested by the increasing value attributable to “intangibles.” Even when a product remains tangible in form, such as a car or telephone, much of its functionality and value is driven by artificial intelligence. More pervasively, dematerialization occurs in the expansion of the scope of services. Services can be delivered digitally as opposed to face to face. Goods can be transformed into services, deliverable online. For example, in the early days, computer software had to be installed onto a computer locally by means of a physical disc. Today, many software applications assume the virtual form of a website (for example, Dropbox) that provide a service accessible over the Internet without the need for any local medium of delivery. The service can be about providing access to content (as a portal) or about providing access to executable code performing certain features. Conventional services can now be identified by the prefix “e” and can be delivered online. Examples are advertising, auction services, banking and finance, broadcasting and publication, education, entertainment, health care, insurance, logistics services (such as transportation, warehousing and distribution) and travel.

New services arising from the digital economy are largely virtual or digital. Examples are the services of information technology (IT), ISPs, application service providers (ASPs), network operators and telecommunications, web-hosting and cloud computing. For example, through cloud computing, software, data and other resources are transformed into services, known as “X-as-a-Service” (XaaS). Customers are granted access to resources that are not stored on a single computer, but instead on many networked computers that are available to everyone who has access to that “cloud” of computing resources. Cloud computing often provides customers with a cost-effective alternative to purchasing and maintaining their own IT infrastructure because the cost of the consumer resources is generally shared among a wider user base.⁴⁷

objects by printing layers of material based on digital models,” James Manyika and others, *Disruptive Technologies: Advances that Will Transform Life, Business, and the Global Economy* (McKinsey Global Institute: 2013). See also OECD Final Report on BEPS Action 1, *supra* note 1, at paragraph 93.

⁴⁷ OECD Final Report on BEPS Action 1, *supra* note 1, paragraphs 140 – 146.

Dematerialization in the digital economy does not, however, mean that everything is virtual. Human beings remain important as producers and consumers. Physical delivery of tangible goods remains a significant part of e-commerce. Also, some people may still want to test products before ordering online. However, the proportion of e-commerce involving “intangibles” or “digitized goods and services” is rising.

3.4.3 *Multiple roles of the consumer in value creation*

In a digital economy, consumers are empowered and turned into “free workers” for digital companies. “Consumers are more empowered than ever before”⁴⁸ as they have more choices, more convenience, more bargains and more say in how they want to be “served.”⁴⁹ Unbeknown to them, they are also contributors to the value-creation process. They seem to create value in at least two ways: as part of an “ecosystem enabling a continuous, symbiotic and reciprocal relationship of value exchange” and as a source of big data.⁵⁰

⁴⁸The Insider White Paper, “Rise of the Empowered Consumer: How to Reach Audiences in 2012,” (2012) MediaCom, available at http://www.mediacomusa.com/media/2088012/mediacom%20the%20insider_the%20empowered%20consumer_whitepaper.pdf.

⁴⁹Internet users who shop online tend to be middle class, more educated, younger and more autonomous. The rise of social media has also offered an instant global platform for sharing ideas. There has been a recent shift in the balance of power “from developed markets to the developing world and from institutions such as governments to individuals, who exercise their new power as consumers to gain information to their advantage.” See Gregory Carpenter, “Power Shift: The Rise of the Consumer-focused Enterprise in the Digital Age,” (2013), available at <http://www.reviewtrackers.com/wp-content/uploads/Rise-of-the-Consumer-Focused-Enterprise-1.pdf>. A 2012 survey found that 70 per cent of customers use their smartphones to read reviews, 61 per cent to compare prices and products and 42 per cent to contact the retailer. More and more, these individuals are doing these activities while they are shopping. See also Stephanie Clifford and Claire Cain Miller, “The shrewd shopper carries a smartphone,” *The New York Times*, 22 November 2012.

⁵⁰Comments of the BEPS Monitoring Group on the OECD Public Discussion Draft on BEPS Action 1, “Address the Tax Challenges of the Digital Economy,” published on the OECD Website and available at <https://beps-monitoringgroup.files.wordpress.com/2014/04/bmg-digital-economy-submission-2014.pdf>.

Unlike the relationship between suppliers and consumers in the traditional economy, the relationship is no longer one of a passive, discrete nature, but rather symbiotic and continuous, and creates real economic value. Such a relationship may be cultivated through the supply of a bundle of hardware, a stream of services, and new products or enhancements. An example of this is Apple, who has bundled the sale of hardware (for example, the iPhone) and software or services (for example, the App Store). These symbiotic relationships can also be the product of participative networked platforms, such as Wikipedia and YouTube. These platforms allow users to generate user-created content, such as product reviews, creative or how-to videos, and social media sharing, which add value by attracting an audience and provoking interactions between users and businesses. Frequent updating of content increases a website's visibility in search results, which drives the value of advertisement.

Consumers play a more important role in multisided business models or platforms, which are the modern versions of the ancient village market and matchmakers.⁵¹ Prominent platforms include Alibaba, Amazon, eBay, Facebook and Google, each of which carries a global reputation and is virtually a mini-kingdom on its own. This business model is based on a market in which “multiple distinct groups of persons interact through an intermediary or platform, and the decisions of each group of persons affects the outcome for the other groups of persons through a positive or negative externality.”⁵² “In a multisided business model, the prices charged to the members of each group reflect the effects of these externalities. If the activities of one side create a positive externality for another side (for example more clicks by users on links sponsored by advertisers), then the prices to that other side can be increased.”⁵³

⁵¹ Andrei Hagiu, “Multi-Sided Platforms: From Microfoundations to Design and Expansion Strategies,” (2006), available at www.hbs.edu/faculty/Publication%20Files/07-094.pdf; and Andrei Hagiu and Julian Wright, “Multisided Platforms,” (2011), Harvard Business School Working Paper 12-024, available at <http://faculty.chicagobooth.edu/workshops/marketing/past/pdf/MultiSidedPlatformsHagiu.pdf>.

⁵² OECD Final Report on BEPS Action 1, *supra* note 1, paragraph 173.

⁵³ *Ibid.*, paragraph 174.

Customers are an irreplaceable source of data generation. Data is intrinsically valuable. Big data means big value.⁵⁴ It is an important factor of production, alongside labour and capital.⁵⁵ Companies use the data collected to gather insights for product development, marketing and customer service. “Big data—large pools of data that can be captured, communicated, aggregated, stored, and analyzed—is now part of every sector and function of the global economy.”⁵⁶ Big data creates value by, among other things, creating transparency, improving performance management, developing more precisely tailored products or services, improving decision-making, and improving the development process of new business models, products and services.⁵⁷ More potential value lies in the use of social media to enhance communications, knowledge sharing, and collaboration within and across enterprises.⁵⁸

⁵⁴See David Dean, Carl Kalapesi and John Rose, “Unleashing the Value of Consumer Data,” (2013), The Boston Consulting Group, which states: “Every second of the day, a wealth of data stream from a global maze of social networks, smartphones, point-of-sale devices, medical records, financial transactions, automobiles, energy meters, and other digital sources. Such big data, fuelled largely by personal data about all of us, represent an asset class every bit as valuable as gold or oil.” available at www.bcgteleviv.com/documents/file124851.pdf.

⁵⁵James Manyika and others, “Big Data: The Next Frontier for Innovation, Competition, and Productivity,” (2011), McKinsey Global Institute, available at <http://www.mckinsey.com/business-functions/business-technology/our-insights/big-data-the-next-frontier-for-innovation>; and World Economic Forum, “Unlocking the Value of Personal Data: From Collection to Usage,” (2013), available at http://www3.weforum.org/docs/WEF_IT_UnlockingValuePersonalData_CollectionUsage_Report_2013.pdf.

⁵⁶James Manyika and others, “Big Data: The Next Frontier for Innovation, Competition, and Productivity,” supra note 55.

⁵⁷Ibid.

⁵⁸It was estimated by the McKinsey Global Institute that by fully implementing social technologies, companies have an opportunity to raise the productivity of interaction workers—high-skill knowledge workers, including managers and professionals—by 20 to 25 per cent. See Michael Chui and others, “The Social Economy: Unlocking Value and Productivity through Social Technologies,” (2012), *McKinsey Global Institute Report*, available at <http://www.mckinsey.com/industries/high-tech/our-insights/the-social->

4. Tax challenges for developing countries

The above business models and features of the digital economy raise important questions about where and how much profit is earned for tax purposes. The dematerialization and mobility features of the digital economy are, fundamentally, at odds with the existing tax policymaking process and tax principles which were developed for the traditional economy.

The digital economy challenges the tax base of market jurisdictions because it has features that render the existing tax rules inapplicable. In a digital economy, knowledge and information (data) is considered a main production factor, in addition to the three major production factors of an industrial, capitalist society—labour, capital and land. Digitization of core economic activities, such as production, distribution and consumption of goods and services, turns tangibles into intangibles, physical things into digital bits and bytes.

4.1 National tax sovereignty in a borderless world

Existing CIT and VAT laws applicable to cross-border transactions are creatures of national tax sovereignty. Cross-border coordination is achieved through formal bilateral tax treaties in the case of CIT or the adoption of international norms or best practices in the case of VAT. There are no formal global tax institutions, legal instruments or processes for addressing cross-border tax issues. The OECD has been a de facto world tax organization in terms of developing the OECD Model Convention and its Commentaries, as well as guidelines on transfer pricing and other international tax issues. At best, these amount to “soft law” for OECD countries and would have, expectedly, no legal effect on non-OECD countries. The United Nations plays an increasingly important role in the area of international taxation but, similar to the OECD, it also has no tax law-making power.

The digital economy is borderless in nature. It offers opportunities for businesses (especially MNEs) to exploit differences between and among national tax laws in order to minimize their tax obligations

economy; and James Manyika and others, *Big Data: The Next Frontier for Innovation, Competition, and Productivity*,” supra note 55.

in host or home jurisdictions. At the same time, different national tax laws may also cause double or multiple taxation of income arising from cross-border transactions.

4.2 Physical presence in the digital economy

Jurisdictional nexus under existing tax laws of developing countries is based on physical and tangible connections between a taxpayer and a taxing country. These connections include residential ties or territorial source of income. Under bilateral tax treaties, the jurisdictional threshold for business income is that of a PE, which requires an element of “permanency” in the activity. In the digital economy, a PE is either not needed or can be more easily circumvented.

4.2.1 *Physical presence not needed in market jurisdictions*

Since e-commerce requires little, if any, physical presence in the market jurisdiction, an offshore company can carry on business through a website in the market country without any physical presence. In the following examples, the company located in Country S does not need to have any physical presence in Country C where its customers are:

1. Mr. A, a resident of Country C, purchases a book from BookCo, a publishing company located in Country S. BookCo maintains its server outside Country C and delivers the book to Mr. A via an independent courier service.
2. Ms. B, a resident of Country C, places an order to purchase milk powders from MilkCo, a company located in Country S via MilkCo’s website. MilkCo’s server is outside Country C and its business personnel and production facilities are located in Country S. Ms. B pays for the purchase with her credit card. MilkCo leases warehouse space in Country C to store its products. MilkCo’s agent in Country C handles the orders and delivers the goods to Ms. B.
3. Cco is a company located in Country C and operates a fashion retail store, featuring products designed and made by FashionCo, a company in Country S. Cco’s orders are placed online and payments are made via credit card. The merchandise is delivered through air shipping.

4. Mr. D, a resident of Country C, is enrolled in a language training class offered by LanguageCo located in Country S. Mr. D watches on his computer or mobile phone videos produced by LanguageCo in Country S and has one-on-one tutorial lessons with an instructor once a week via Skype.
5. CCo, a resident of Country C uses CloudCo to store and manage its data and its Intranet. CloudCo is located in Country S and maintains its servers outside Country C.

In the above scenarios, the company located in Country S is not considered to have the necessary taxable presence (to carry on business through a PE) in Country C. A website is not regarded as a sufficient taxable presence. A digital business can locate its website on servers outside the market country and deliver digital goods and services online, barring any legal or logistical issues as well as any Internet controls imposed by the host Government. Social network providers may not need any physical presence in the market country to reach their users. Conventional sales outlets in the market country can be replaced with online licensing of software or specifications if the products can be produced through 3D printing.

It is therefore possible for an offshore company to interact with customers (B2B or B2C) in a country through a website or other digital means without maintaining a physical presence in that country. Remote servers are often not needed in the market country as they can be located anywhere where ICT infrastructure is available. This point is illustrated by the *ITO v. Right Florists Pvt Ltd*⁵⁹ case in India. In this case, the taxpayer, Right Florists, was a company based in India which advertised on search engines supplied by Google (Ireland) and Yahoo (United States) to generate business. Both Google and Yahoo had web servers located outside of India. The issues were whether the payments to Google and Yahoo were subject to Indian withholding tax as “technical service fees” and whether Google and Yahoo earned the fees through a PE in India. The Tribunal held that the advertising fees were not technical services and a search engine, which has only its presence in India through its website, cannot be a PE.

⁵⁹Income Tax Appellate Tribunal Kolkata “B” Bench, Kolkata, *Income Tax Officer v. Right Florists Pvt Ltd*, I.T.A.No. 1336/Kol./2011.

4.2.2 *Avoiding a PE*

E-commerce and new business models in the digital economy enable MNEs to sell goods and services in market countries with a significant business presence, but to avoid having a PE. This can be achieved through: (a) avoiding an agency PE; (b) taking advantage of the exceptions under Article 5 (4) of the OECD Model Convention; or (c) fragmenting business activities to avoid the temporal threshold of a PE.

A commissionaire arrangement is an example of avoiding an agency PE. An example of this is where the sales force of a local subsidiary of an online seller of tangible products or an online provider of advertising services habitually plays the principal role in the conclusion of contracts with prospective large clients for those products or services, and these contracts are routinely concluded without material modification by the parent company. These arrangements may not result in a PE for the parent company because the contract was not formally concluded by the subsidiary.

Article 5 (4) of the OECD Model Convention excludes a list of activities in the market country from giving rise to a PE. When the list was originally devised, these activities were of a “preparatory or auxiliary” character. For example, where an online seller or supplier of services and intangibles sets up a website and an office in the market country to support the technical aspects of the website and complete e-commerce transactions, it is unlikely to have a PE because of the list of exceptions. Another example is the maintenance of a very large local warehouse in which a significant number of employees work for purposes of storing and delivering goods sold online to customers.

Rapid advances in ICT have meant that services such as data entry, information processing, research, consulting, design and training can increasingly be carried out remotely or carried out by different parties of the MNE group. The amount of time spent in the market country can therefore remain below the time requirement (less than 183 days) for having a PE in that country. For example, the services of architects, such as schematic design, consultation and development of construction documents can be rendered remotely.

4.3 Attribution of profit and value creation

In the digital economy, machines (computers, mobile phones and other devices) are connected by the Internet and perform functions that were traditionally performed by humans. With advances in artificial intelligence, this trend will continue. The transformation to software-driven business challenges the existing tax rules not just in respect of the jurisdictional nexus, but also in the determination of value creation and profit attribution. Under the existing rules, attribution of profit is based on assets, ownership of intangibles and risks. Little or no profit is attributed to the role of the market, connectivity infrastructure provided by the market country, or the role of customers in generating data which is critical to the success of the digital business.

4.3.1 Limitations of supply-side factors

The limitations of attributing profit to supply-side factors are illustrated by three Indian cases: *Galileo International Inc. v. DCIT*,⁶⁰ *Amadeus Global Travel v. DCIT*⁶¹ and *Travelport L.P. USA, New Delhi v. Assessee*.⁶² In these cases, the facts are similar and the decisions were consistent. The taxpayers were found to have a PE in India, but no profit was attributed to the PE.

In the *Travelport* case, for example, the taxpayer developed and maintained a fully automatic reservation and distribution system with the ability to perform comprehensive information, communication, reservation, ticketing, distribution and related functions on a worldwide basis. The computers installed on the premises of the subscribers in India were connected to the global central reservation system (CRS) owned and operated by the non-resident company. The taxpayer provided the subscribers with a computer modem and software so that they could access the CRS. A host computer (server) was situated in the United States. Using part of the CRS, the subscribers in India were

⁶⁰Income Tax Appellate Tribunal, *Galileo International Inc. v. DCIT* (2008) 19 SOT 257 (Del).

⁶¹Income Tax Appellate Tribunal, *Amadeus Global Travel v. DCIT* (2008) 113TTJ (Delhi) 767.

⁶²Income Tax Appellate Tribunal, *Travelport L.P. USA, New Delhi v. Assessee* (2015) available at <https://indiankanoon.org/doc/176227912/>.

capable of reserving and booking a ticket. The taxpayer also authorized its local agent to conclude contracts with subscribers. It paid one third of its gross revenue to the local agents as commission. The Tribunal found that the taxpayer had a fixed place of business PE in India as well as an agency PE. Notwithstanding the presence of a PE, the Tribunal found that the taxpayer had no profit attributable to the PE since 15 per cent of its gross revenue was sourced to India and the fees paid to its agent in India were one third of its gross revenue. In other words, the Indian source gross revenue was less than the fees paid to the agent in India, hence no profit.

The Tribunal attributed 15 per cent of gross revenue to the PE based on an analysis of functions performed, assets used and risk shared inside and outside of India. It stated that “but for the presence of the assessee in India and the configuration and connectivity being provided in India, the income would not have been generated.”⁶³ However, it also found that “the extent of work in India is only to the extent of generating request and receiving end-result of the process in India ... the majority of the assets, i.e., host computer which is having very large capacity which processes information of all the participants, is situated outside India.”⁶⁴ The major functions, such as collecting the database of various airlines and hotels which had entered into a participating carrier agreement with the taxpayer, took place outside India; the risk in this regard rested entirely with the taxpayer, and that was outside India.

The Tribunal’s approach to profit attribution in the *Travelport* case is not inconsistent with the OECD Commentary on Article 7 (Business Profits) of the Model Convention.⁶⁵ It focuses on location of physical assets (a host computer) and the development of the automated process (CRS). Under this approach, it would be very difficult to attribute a profit to the PE of an online business. It would be even more difficult where access to the automated process is online, requiring no use of computers connected to the process, and the PE exists due to the activities of a local agent. In the *Travelport*, *Galileo International* and *Amadeus Global Travel* cases, the Tribunal made no specific reference

⁶³Ibid., paragraph 12.

⁶⁴Ibid.

⁶⁵Paragraphs 10 and 42.4 of the Commentary on Article 5 of the OECD Model Convention.

to the value created by the activities of the local agent and seemed to assume that the commissions earned by the agent exceeded the revenue earned in India.

4.3.2 “Free” data created by customers

Current international tax norms do not attribute profit to the demand side or the role of customers in creating data valuable to e-commerce or digital companies. In the digital economy, data gathered from various sources is often a primary input into the process of value creation. The “expanding role of data raises questions about whether current nexus rules continue to be appropriate or whether any profits attributable to the remote gathering of data by an enterprise should be taxable in the State from which the data is gathered, as well as questions about whether data is being appropriately characterised and valued for tax purposes.”⁶⁶ The reliance of MNEs on intangibles accompanied by the increasing importance of data in the global value chains put additional pressure on transfer pricing rules and profit attribution to PEs.⁶⁷

Take the *Right Florists* case as an example. Google and Yahoo earned fees from an Indian florist for online advertisements targeted primarily at Indian residents and other local businesses. Presumably, the advertising fees were priced on the basis of the number of clicks or impressions by Internet users who searched for florist shops in India (or a specific location in India). The more clicks by Indian users, the more advertising fees Google and Yahoo earned. For tax purposes, however, there was no profit allocated to India for lack of a PE. Even if a website were deemed to constitute a PE, there would be no profit attributable to the website under the approach adopted in *Travelport*. It is the algorithm and the host server that would be assumed to have earned the profit, and they were outside India.

4.4 Traditional characterization disrupted

Dematerialization blurs the traditional distinction between goods and services. A traditional sale of tangible goods can be transformed into

⁶⁶OECD Final Report on BEPS Action 1, supra note 1, paragraph 262.

⁶⁷It is beyond the scope of the present chapter to discuss transfer pricing issues.

a licence for downloading a digital file. The increasing use of 3D printing technology may further convert goods (sales profit) into intangibles (royalties or fees for technical services) if direct manufacturing for delivery evolves into a licence of designs for remote printing directly by purchasers. Are payments for cloud computing in the nature of technical services, fees for the use of intangible property rights or general services? More specifically, questions arise regarding whether Infrastructure-as-a-Service transactions should be treated as services, rentals of space on the cloud service provider's servers, or fees for the provision of technical services. The same questions arise regarding payments for Software-as-a-Service or Platform-as-a-Service transactions.

Controversial characterization of payments is not unique to payments in the digital economy. For example, payments for the use of satellite, transponder, cable or optic fibre are characterized as "rental fees" in some countries,⁶⁸ but "business profits" in others.⁶⁹ Withholding tax on royalties is avoided when payments are characterized as services that give rise to business profits. The growth of the digital economy means the disappearance of the traditional withholding tax on royalties as the existing characterization rules are ill-suited to capturing payments for new digital products or services.

4.5 Risk to the tax base of developing countries

Conceptually, the tax base of developing countries is potentially at risk in the digital economy for the following reasons: the income or transaction is not captured by the existing tax rules because the business models require no physical presence or defy the characterization rules; the new business models of the digital economy make it easier for companies to circumvent the existing tax rules and avoid source-country taxation (resulting in BEPS); furthermore, the taxes due under existing laws cannot be effectively administered due to the

⁶⁸China, State Administration of Taxation, Circular [1998] No. 201, which was upheld by Chinese courts in *PanAmSat International Systems, Inc.* (2001).

⁶⁹This is the more common characterization. For example, the tribunals in India held that such payments do not give rise to "royalty" for treaty purposes. See *Asia Satellite Communication Co. Ltd.* (332 ITR 340) (Del) and *Skycell Communications Ltd.* (251 ITR 53) (Mad).

lack of enforcement mechanisms. However, it is difficult to ascertain the extent of this risk or the amount of loss in tax revenue.

4.5.1 *Base cyberization*

Base cyberization is the broader and more fundamental issue because profit is not even in the tax base as defined by the existing rules. This issue goes to the fundamental assumptions underlying the design of the current system: physical presence of activities and the factors of production including land, labour and capital. As mentioned above, these assumptions do not apply to digital transactions or value derived from data sourced from customers.

More specifically, business profits earned by non-resident companies from online sales or supply of services or intangibles are not taxable in the market country for lack of a PE or lack of profit attributable to the PE. Fees for online services, such as cloud computing and online travel booking, do not generally give rise to royalties or technical service fees for withholding tax purposes, even though the proprietary technology in the form of an algorithm, software or code enables the online business to generate such fees.⁷⁰ “Other income” is taxable exclusively in the resident country.

4.5.2 *Base erosion*

The BEPS issues are relevant to the extent that suppliers of goods and services in the digital economy still require physical presence in the market country, where a substantial portion of their profit is earned. For example, Google has offices in more than 40 countries, supports more than 130 languages or dialects and offers a personalized version of the search engine for more than 115 countries. Amazon has subsidiaries and/or fulfilment centres in over 22 countries in Africa, Asia, Australia, Europe, Latin America and North America.⁷¹ Corporations

⁷⁰ Indian case law suggests that technical services should be supplied by a “human touch”; see Income Tax Appellate Tribunal Kolkata “B” Bench, Kolkata, *Income Tax Officer v. Right Florists, Pvt Ltd*, supra note 59; and Income Tax Appellate Tribunal, *Siemens Ltd. v. Commissioner of Income Tax*, 2013, TII-34-ITAT-MUM-INTL.

⁷¹ See <http://www.amazon.com/Locations-Careers/b?ie=UTF8&node=239366011>.

conducting e-commerce may minimize assets and risks in market jurisdictions by using a subsidiary or PE to perform marketing or technical support, or to maintain a mirrored server to enable faster customer access to the products sold by the corporate group, with a principal company, often in the form of a holding company located in a low-tax jurisdiction or a tax haven, bearing the contractual risks and claiming ownership of intangibles generated by these activities.

BEPS occurs when a corporate group can avoid having a PE in the market country by using legal structures, such as commissionaires, or fragmentation of activities to avoid the time requirement, such as 183 days or six months.⁷² In the case of a business selling tangible products online, a local subsidiary or PE may maintain a warehouse and assist in the fulfilment of orders and qualify for the exemptions under Article 5 (4) of the OECD Model Convention.

If a PE must be maintained, BEPS can also occur when business profit attributable to the PE is deliberately minimized by limiting the services provided through the PE. Alternatively, functions purported to be undertaken by local staff under contractual arrangements may not correspond with the substantive functions performed by the staff. For example, staff may not have formal authority to conclude contracts on behalf of a non-resident enterprise, but may perform functions that indicate effective authority to conclude those contracts. If purported allocations of assets, functions and risks do not correspond to actual allocations, or if less-than-arm's length compensation is provided for intangible property of a principal company, these structures may present BEPS concerns, particularly if emphasis is overly placed on the form or structure of transactions, and not their substance or actual reality on the ground.

BEPS issues are not unique to digital companies or e-commerce companies. All MNEs have adopted business models that incorporate ICT or e-commerce.⁷³ For example, Yihaodian is a Chinese

⁷²In the absence of such structures, both the "legal profit" as defined under existing rules and "economic profit" as determined by the business activities would be taxed in the source country.

⁷³*The Economist*, "The emporium strikes back: Retailers in the rich world are suffering as people buy more things online. But they are finding ways to adapt," 13 July 2013, available at <http://www.economist.com/news/>

company owned by Walmart. The subsidiary uses an app to allow smartphone users to shop online in 1,000 “virtual stores” accessible only on specific websites. To operate the “virtual” aspect of its business, Walmart has 1,500 employees in Silicon Valley (United States) “trying to out-Amazon Amazon in areas such as logistics and making the most of social media.”⁷⁴ Therefore, the global platforms used by digital companies or e-commerce companies and the reliance on data and intangibles presumably create more opportunities for BEPS.

4.5.3 *Collection of taxes*

Collection of taxes (CIT and VAT) is more complicated when the subject matter of cross-border transactions is digital or intangible, especially when no local intermediaries (either ISPs or financial institutions) are involved. The enforcement challenges are more immediate in respect of the VAT.

Enforcing the destination principle is difficult in the digital economy because non-resident vendors are generally not required to register for the collection of VAT purposes unless they carry on business in the destination jurisdiction. The collection of VAT on imported goods and services depends on self-assessment by the consumer. Self-assessment in B2B transactions is less problematic as the customer is often registered for VAT purposes and entitled to claim an input credit for the VAT. In contrast, self-assessment of VAT by individual customers is problematic as the amount of VAT owed might be small and the process for reporting and remitting the amount of tax lacking or inefficient. Cross-border movement of goods is subject to customs clearance, and thus creates no major issues. However, there is no equivalent fiscal frontier for the movement of digital goods and services. This is a particular concern in respect of B2C transactions, because it is unrealistic to rely on individual customers to self-report and remit the tax on online purchases from unregistered non-residents.

briefing/21581755-retailers-rich-world-are-suffering-people-buy-more-things-online-they-are-finding.

⁷⁴Ibid.

5. Some options for developing countries

5.1 Opportunity for change

The tax challenges raised by the digital economy are global. Global solutions are therefore needed. Back in the 1920s when the current international tax system was developed, developing countries were not at the table. In spite of the subsequent efforts to modify the system to meet the needs of capital-importing countries, the system remains one that is largely made by developed countries for developed countries. Recent international efforts in combating BEPS provide an historic opportunity for developing countries, some of which are part of the G20, to actually have some real say in how international tax problems are resolved.

Because the digital economy brings about a fundamental shift in how business is conducted and value is created, it is necessary to investigate whether there should be a fundamental shift in thinking about the basis for allocating taxing rights. Developing countries should play an active role in the process of reshaping the international tax system. The United Nations is the ideal institution to lead this important initiative and to coordinate with the OECD.

In developing appropriate international tax rules to allocate taxing rights between countries in a fair manner, it may be helpful to revisit the fundamental theories and principles underlying the existing system. A digital economy may involve a shift in how business is done and how value is created, but it does not necessarily remove the need for an economic nexus between income and the taxing jurisdiction. Therefore, a digital economy may require new “tools” to allocate the global tax base among nation States. It remains important to keep in mind the fundamental theories and policy justifications in designing the new tools.

Developing country concerns with BEPS and base cyberization differ from those of OECD countries. To begin with, they are predominantly source countries. The tax base of the source country is defined differently under the United Nations and OECD Model Conventions, especially in respect of royalties and services. The BEPS debates have been focused primarily on the use of legally sophisticated structures to

avoid the tax base defined under the OECD Model Convention, such as the use of commissionaires to avoid the classification of a dependent agency PE. The more common issue in developing countries is likely base cyberization, where the income is not captured by the existing rules, due to the design of the rules (not due to the use of artificial legal structures). Developing countries are thus advised to go beyond BEPS and to take advantage of the historic opportunity of a burgeoning multilateral process and address the fundamental base definition and tax enforcement issues that arise in a digital economy. Specifically, the focus should be on how to change the tax rules that govern the digital economy, rather than on attempting to fit the digital economy into traditional tax rules.

5.2 Designing rules fit for the digital economy

The principles of neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility continue to be a good starting point for a framework for evaluating options for addressing the tax challenges raised by the digital economy.⁷⁵ It makes little sense to develop new rules to apply only to digital transactions. Ring-fencing the digital economy is very difficult to implement as the entire economy is increasingly digitized. It violates the tax neutrality principle without any apparent policy or principled justifications.⁷⁶

However, because the digital economy exposes the weaknesses in the fundamental design of the existing rules, it is imperative to address these fundamental design issues in order to allocate the international tax base fairly among countries. For example, when significant amounts of profits are derived by a non-resident enterprise from sales to customers in the market country without the need for any physical presence or human agent, it makes little sense from a policy perspective to leave the market country without any right to tax the profits. The non-resident taxpayer benefits from the ICT connectivity and the legal infrastructure for digital businesses provided by the

⁷⁵These principles were endorsed by 29 OECD Member countries and 11 non-member countries at the Ottawa Ministerial Conference on Electronic Commerce (1998) (Ottawa Framework).

⁷⁶This is the position stated in the OECD Final Report on BEPS Action 1, *supra* note 1, paragraphs 20–21.

market country. Consequently, the non-taxation of the non-resident enterprise in the market economy violates the economic allegiance theory and benefit theory, causing inequitable treatment of traditional business and digital business.

Therefore, existing principles of international taxation call for the use of new rules in order to fairly allocate the tax base in the digital economy. The new rules should recognize the features of the digital economy and the increasing role of consumers and the market in creating value for the non-resident enterprise.

5.3 Reimagining the PE test

The current definition of PE is anchored in the notion of a physical presence or human agents. Such a physical footprint is redundant or avoidable in the digital economy. A redesign is warranted and some leading ideas are summarized below.⁷⁷

5.3.1 Amending Article 5

Amending Article 5 (Permanent Establishment) is a modest step in ensuring that the threshold for source-country taxation is low enough to capture some profit from e-commerce transactions. This can be achieved through revising the list of exemptions under Article 5 (4) of the OECD Model Convention and the time requirement in Article 5 (3) of the United Nations Model Convention, and introducing anti-fragmentation rules into both Model Conventions.

Article 5 (4) of the OECD Model Convention can be revised to ensure that each of the exceptions listed in this paragraph is restricted to activities that are otherwise of a preparatory or auxiliary character. This will reflect the fact that the use of a fixed place of business to purchase, warehouse and deliver merchandise can be a core activity for e-commerce businesses.

⁷⁷See OECD, *Preventing the Artificial Avoidance of Permanent Establishment Status, Action 7—2015 Final Report* (Paris: OECD, 2015), available at http://www.oecd-ilibrary.org/taxation/preventing-the-artificial-avoidance-of-permanent-establishment-status-action-7-2015-final-report_9789264241220-en, which is relevant to transactions in the digital economy; and chapter VII of the present *Handbook*, supra note 11.

An anti-fragmentation rule is suggested to prevent the avoidance of PE status via the breaking up of a cohesive operating business into a number of discrete and distinct operations in order to claim that each part is merely engaged in preparatory or auxiliary activities that benefit from the exceptions in Article 5 (4) of the OECD Model Convention, or that the required time period has not been met.

Article 5 (3) (a) of the United Nations Model Convention may be modified by reducing the period of time required to give rise to a PE in respect of construction, assembly or installation projects, or supervisory and consultancy services. Even with further dematerialization, these types of services still need to be provided with some physical presence in the client's country. However, dematerialization can significantly reduce the amount of time required for the physical presence. Thus, the current six months or 183 days should be adjusted downwards significantly, especially in cases where a portion of the project is implemented in the service provider's home country or a third country.

Article 5 (3) (b) of the United Nations Model Convention can be modified to prevent fragmentation by removing the requirement that services be rendered in respect of "the same or a connected project." For example, a PE is deemed to exist where "an enterprise that performs services in the other Contracting State, for a period or periods exceeding in the aggregate 183 days in any twelve-month period, and these services are performed through one or more individuals who are present and performing such services in that other State."⁷⁸

Finally, the dependent agency PE definition can be changed to ensure that where the activities exercised by an intermediary in a contracting State are intended to result in the regular conclusion of contracts to be performed by a non-resident enterprise, that enterprise should be considered to have a PE in that State, unless the intermediary is performing these activities in the course of an independent business.

⁷⁸See the Agreement Between the Government of the Republic of Chile and the Government of the People's Republic of China for the Elimination of Double Taxation and the Prevention of Tax Evasion and Avoidance with respect to Taxes on Income of 25 May 2015.

5.3.2 *A virtual PE based on significant economic presence*

Moving away from a physical footprint, a website or other forms of digital presence in the market jurisdiction can be considered to exhibit a sufficient nexus—a virtual PE—for sourcing the profit to that jurisdiction for tax purposes.⁷⁹ A new paragraph can be added to Article 5 of the OECD Model Convention to deem a non-resident enterprise to have a PE if it “has a significant economic presence in a country on the basis of factors that evidence a purposeful and sustained interaction with the economy of that country via technology and other automated tools.”⁸⁰

The virtual PE would apply to the remote supply of digital goods and services. This option is a radical departure from the traditional physical presence test. In the absence of a meaningful threshold, it would be difficult to enforce, causing uncertainties for businesses and customers. The OECD project on BEPS recommends a significant economic presence test based on the revenue derived from remote transactions into the market country.⁸¹ A range of digital factors (such as a local domain name, a local digital platform and local payment options) and/or user-based factors (such as monthly active users, online contract conclusion, and data collected) can also be used as part of a test for significant economic presence.

Some countries have indicated that they will adopt the virtual PE test.⁸² For example, Israeli tax authorities published a draft circular stating that where a foreign corporation’s core activity is conducted through the Internet and some or all of certain terms (such as the Internet site’s connection with the Israeli market) are found to exist, the corporation’s activity should constitute a PE in Israel. It is considered to have the digital presence necessary to maintain close client relations.

⁷⁹See OECD Final Report on BEPS Action 1, *supra* note 1, paragraphs 277–283.

⁸⁰*Ibid.*, paragraph 277.

⁸¹*Ibid.*

⁸² See Ernst and Young, “Global Digital Tax Developments Review,” (2015), available at <http://www.ey.com/GL/en/Services/Tax/ey-global-digital-tax-developments>.

5.3.3 *General revenue-based PE*

Instead of applying the significant economic presence test to e-commerce and digital transactions, developing countries may wish to explore the option of using a revenue-based significant economic presence as a general PE. A revenue-based threshold would replace the existing thresholds based on a fixed place of business, duration-of-service activities, or the conclusion of contracts by dependent agents. It would remove the need for having a list of exceptions or distinguishing between dependent and independent agents. The revenue realized from transactions (online or offline) with customers in a market country would be the only, or main, basis.

The goal of the revamped PE is to ascertain the level of a non-resident enterprise's engagement in the economy of the market country and the enterprise's benefit from the infrastructure and business environment created by that country. It would treat traditional businesses and digital businesses in the same manner. A non-resident enterprise's significant economic presence in a market country entitles that country to tax the profit derived from such presence. It would be consistent with the policy rationale of the current test. However, as a radical change from the existing test, it could be difficult to develop an international consensus on the issue.

5.4 **Attributing profit to a PE**

5.4.1 *Factors of attribution*

Merely revising the PE test will not suffice to protect the tax base of the market jurisdictions. The current profit attribution rules must also be revisited so that meaningful profit could be attributable to the market jurisdiction. Under the existing rules, profit is attributable to people functions, assets or risks, which are factors on the supply side of an enterprise. A virtual PE would involve little or no physical presence in terms of tangible assets and/or personnel in the market country. More fundamentally, the current rules do not attribute profit to the market itself or the value created by customers or users.

One option to consider is to extend the force of attraction principle under Article 7 of the United Nations Model Convention so that

income earned by a non-resident enterprise from transactions with customers in the market country would be attributable to a PE.⁸³ Such a change would require some clarification of Article 7 of the United Nations Model Convention, which currently limits the principle to profit attributable to a PE, profit from sales of the same or similar kind as those sold through that PE, or other business activities carried on in the market jurisdiction of the same or similar kind as those effected through the PE. In essence, the expanded force of attraction principle would deem all online or digital activities as “same or similar” for purposes of Article 7.

Other options include: deeming the customer/user to perform certain functions on behalf of the non-resident enterprise;⁸⁴ deeming a portion of automated services as being performed in the market country; or including sales as a factor in attributing profit.

5.4.2 *Methods for determining profit*

Instead of attributing profits to a PE based on functions, assets and risks and treating the PE as a separate entity dealing at arm’s length with the non-resident enterprise, the profit of the PE could be based on other methods, such as fractional apportionment or deemed profit methods.⁸⁵

A fractional apportionment method would “apportion the profits of the whole enterprise to the digital presence either on the basis of a predetermined formula, or on the basis of variable allocation factors determined on a case-by-case basis.”⁸⁶ It is possible to include sales as an allocation key.

According to the OECD Final Report on BEPS Action 1, deemed methods have already been used in the insurance industry and the domestic law of some countries. For the insurance industry,

⁸³See Walter Hellerstein, “Jurisdiction to Tax in the Digital Economy: Permanent and Other Establishments,” (2014), Vol.68, No. 6/7 *Bulletin for International Taxation* at 349.

⁸⁴This is suggested in the OECD Final Report on BEPS Action 1, *supra* note 1, paragraph 286.

⁸⁵*Ibid.*, paragraphs 287–291.

⁸⁶*Ibid.*, paragraph 287.

the deemed profit method is used by applying a coefficient based on the ratio of profit to gross premiums of resident insurance companies to gross premiums received from policy holders in the market country.⁸⁷ Chinese domestic law allows the use of deemed profit methods based on the profit rate of identical or similar enterprises, the enterprise's cost plus reasonable profit, or a reasonable proportion of the related party's group profit.⁸⁸

5.5 Deeming online services as technical services for withholding tax purposes

A withholding tax on digital transactions is a possible option for protecting the tax base of market countries.⁸⁹ It could apply to payments by residents of a country for online purchases of goods and services from non-resident enterprises. This withholding tax could be a stand-alone gross-basis final tax or a collection mechanism to backstop a net-basis tax on profit of the PE in the market country.

The current United Nations Model Convention allows a broader scope of withholding taxes than the OECD Model Convention, especially in respect of royalties and technical fees. Developing countries may find this option of great interest because dematerialization has meant a conversion of traditional services, including technical services into automated services online. Certain online services can be deemed to be technical services for withholding tax purposes. In such cases, the withholding tax would be a gross-basis final tax. Alternatively, if non-resident enterprises are taxable in the market country for having a virtual PE, the withholding tax can be used as a collection tool. The requirement for the withholding of taxes on digital transactions can begin with B2B transactions as a business making online purchases is likely to deduct the payment in computing its income, thereby reducing its CIT liability.

Deeming all B2B payments for online services (such as cloud computing) to be technical fees would have several advantages. First, it is evolutionary and, thus, would be more easily accepted. The United

⁸⁷Ibid., paragraph 289.

⁸⁸Ibid., paragraphs 289–291.

⁸⁹Ibid., paragraph 292.

Nations Committee of Experts on International Cooperation in Tax Matters has added a new provision on technical services in the United Nations Model Convention. Second, it is consistent with the principle of neutrality, as services delivered online would be subject to the same rules (as an alternative, all digital services could be deemed to be “technical services” or royalty-generating services) as services delivered through various physical media. Third, it would be administratively feasible. The existing mechanism of withholding can be used. As discussed above, it is difficult to characterize transactions in the digital economy in general and related-party B2B transactions in particular. Thus a general deeming rule has a catch-all effect that allows the effective collection of the widest base possible, although B2C transactions would not be subject to this deeming rule.

However, this option is not without disadvantages. It would be a shift in the “source rule” for services. Instead of the place of performance, the source rules would be similar to that in Article 12 (5) (residence of payer) or Article 12 (6) of the United Nations Model Convention. It would be a departure from the current OECD position that e-commerce payments should be characterized as business profits, not subject to withholding tax. A withholding tax might be a poor proxy for a tax on net income and the tax burden would be shifted to resident companies, increasing their cost of doing business. If the source-country tax is not recognized by the residence country, there is potential for double taxation. Like other options, there are administrative challenges.

Countries that adopt a virtual PE test can impose a gross-basis withholding tax on all payments for digital transactions to back up the net-basis taxation of profit earned through the PE.

5.6 Domestic anti-avoidance measures

Some countries have introduced measures to prevent profit diversion through contrived or artificial means. For example, the United Kingdom imposed a Diverted Profits Tax of 25 per cent on profits that are considered to be artificially diverted from the State. One situation in which the tax may be triggered is where a non-resident company sells goods or services to customers in the United Kingdom and a related company that is domestically located performs activities

related to those sales without triggering the existing PE threshold.⁹⁰

Australia announced a change to the General Anti-avoidance Rule (Part IVA) to tackle perceived tax avoidance by MNEs, especially United States-based technology companies.⁹¹ The new rules will affect global groups with annual revenue exceeding A\$ 1 billion based on accounting principles, and the tax rate is 40 per cent of the diverted profits. This diverted profits tax is aimed at arrangements involving transactions with overseas related parties which are subject to a tax rate of less than 80 per cent of the tax rate applied in Australia, where the arrangement lacks economic substance.

Another possible anti-avoidance measure is to deny the deduction to domestic taxpayers in respect of payments to non-resident enterprises when the payments are free from domestic withholding tax. For example, a rule in Greece provided that in order for a taxpayer to deduct expenses from certain transactions, the taxpayer would be required to withhold an amount equal to the income tax corresponding to the tax benefit of the deduction.⁹²

5.7 Registration and enforcement measures

Registration for VAT purposes is particularly important and urgent. Some countries have already introduced measures to mandate non-resident vendors that do not have a PE in the market country to register, collect and remit VAT to that country. For example, South Africa introduced this requirement in respect of “electronic services”

⁹⁰For further information, see HM Revenue & Customs (United Kingdom), “Diverted Profits Tax: Guidance,” available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480318/Diverted_Profits_Tax.pdf.

⁹¹Australian Government, “Implementing a Diverted Profits Tax,” Treasury Consultation Paper, 3 May 2016, available at <http://www.treasury.gov.au/ConsultationsandReviews/Consultations/2016/Implementing-a-diverted-profits-tax>.

⁹²This rule was repealed, in part, on the grounds that it was found by the European Commission to have violated several principles of the Treaty on the Functioning of the European Union. See Ernst and Young, “Global Digital Tax Developments Review,” *supra* note 82, at page 32.

in B2B and B2C transactions. The threshold for registration is the value of such sales exceeding R50,000.

Multilateral cooperation among countries could help make the requirement easier to enforce. Corporations, such as Amazon, eBay and Google would certainly have the technology and administrative means to comply with the requirement. In the United States, Amazon and other online vendors are required to collect and remit state-level sales taxes under the laws of a number of states in which they have a warehouse or distribution centre—the “Amazon tax.”⁹³

5.8 Collection of VAT

Under the existing rules, many countries require that VAT be assessed at the border for each import of goods, subject to a low-value exemption threshold. No such requirement applies to importation of digital goods or services.

Maintaining separate systems for material goods and digital goods or services is one option. Several models of collection can be considered to improve efficiency in collecting VAT on tangible goods. These include: using electronic processes by customs to assess VAT; requiring the purchaser to self-assess and pay the VAT on the imports; requiring the non-resident vendors to charge, collect and remit the VAT in the country of importation; or requiring intermediaries (such as postal operators, express carriers, transparent e-commerce platforms and financial intermediaries) to collect and remit VAT in the country of importation.⁹⁴

Some countries, such as Israel, Japan and New Zealand have indicated that cross-border supplies of services would be subject to VAT.⁹⁵ For example, the New Zealand Government released a discussion document on 18 August 2015 containing proposals to require

⁹³ Amazon collects sales taxes on sales sold into over 20 states in the United States, see <http://www.amazon.com/gp/help/customer/display.html?nodeId=468512>.

⁹⁴ OECD Final Report on BEPS Action 1, *supra* note 1, paragraphs 326–331.

⁹⁵ Ernst and Young, “Global Digital Tax Developments Review,” *supra* note 82.

overseas suppliers to register and return a Goods and Services Tax (GST) when they sell “remote-services” to consumers in New Zealand. Remote-services include digital services that are typically electronically delivered (such as e-books and music videos), as well as more traditional cross-border services supplied remotely by a business offshore (such as professional advice). The registration requirement may also apply to intermediaries, who market and sell services on behalf of a non-resident supplier, considered to be “electronic marketplaces.”

Australia has proposed to abolish the low-value exemption for imported goods online so that a single system of VAT collection can apply to all digital transactions. A non-resident vendor must register and remit GST if the amount of its supplies to Australian customers exceeds the threshold for registration (A\$ 75,000). New Zealand is likely to follow suit.

6. Conclusion

The digital economy raises the same kind of tax challenges for developing countries and OECD countries. However, the adverse impact of these challenges is likely greater in developing countries as they rely more heavily on CIT and VAT and are net-importing countries. To protect the tax base, developing countries have options. Some options are more immediate, such as amending domestic law to require VAT registration of offshore suppliers of digital goods and services or extending withholding tax to technical services. Other options require more multilateral coordination, such as reforming the test for jurisdictional nexus or new profit determination methods. Ultimately, the tax base of developing countries is tied to the growing global digital economy.