

The logo for the Institute for International Development (ICTD) features the letters 'ICTD' in a bold, white, sans-serif font. To the right of the text is a circular emblem composed of several concentric, semi-transparent grey rings.

ICTD

Working Paper 124

**The Contested Shaping of
International Tax Rules:
The Growth of Services and the
Revival of Fractional Apportionment**

Sol Picciotto

July 2021

BILL & MELINDA
GATES *foundation*

The logo for the Institute of Development Studies consists of a stylized 'O' shape above two horizontal bars.

institute of
development
studies

The UKaid logo features a stylized Union Jack flag above the text 'UKaid'.

UKaid
from the British people

ICTD Working Paper 124

The Contested Shaping of International Tax Rules: The Growth of Services and the Revival of Fractional Apportionment

Sol Picciotto

July 2021

The Contested Shaping of International Tax Rules: The Growth of Services and the Revival of Fractional Apportionment

Sol Picciotto

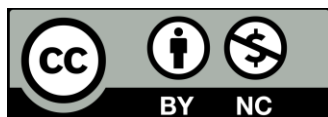
ICTD Working Paper 124

First published by the Institute of Development Studies in July 2021

© Institute of Development Studies 2021

ISBN: [978-1-78118-827-9]

DOI: [10.19088/ICTD.2021.014](https://doi.org/10.19088/ICTD.2021.014)



This is an Open Access paper distributed under the terms of the Creative Commons Attribution Non Commercial 4.0 International license, which permits downloading and sharing provided the original authors and source are credited – but the work is not used for commercial purposes. <http://creativecommons.org/licenses/by-nc/4.0/legalcode>

Available from:

The International Centre for Tax and Development at the Institute of Development Studies, Brighton BN1 9RE, UK

Tel: +44 (0) 1273 606261

Email: info@ictd.ac

Web: www.ictd.ac/publication

IDS is a charitable company limited by guarantee and registered in England

Charity Registration Number 306371

Charitable Company Number 877338

The Contested Shaping of International Tax Rules: The Growth of Services and the Revival of Fractional Apportionment

Sol Picciotto

Summary

The digitalisation of the economy has spotlighted fundamental flaws in international tax rules, which have been exacerbated since the 1970s with the wider shift to the services economy and the growth of international services. These systemic flaws have been more evident from the perspective of countries that are mainly importers of services that have tried to retain rights to tax profits at the source from which they derive. While they succeeded in retaining a wider scope for source taxation, key provisions have been subject to continuing conflicts and contestation over their formulation and interpretation, leaving a legacy of ambiguity and confusion. Digitalisation has now sparked a dramatic reversal of perspective by more developed countries and an acceptance of principles they have long resisted: that taxation of transnational corporations can be based on apportionment of an appropriate fraction of their global income and can be by countries from where they derive income, regardless of physical presence. This paper outlines the contested process that has shaped the formulation of key provisions on taxation of international services, discusses the recent moves to reshape these rules and evaluates some policy options for capital-importing countries to strengthen their taxing rights in the current context.

Keywords: international tax, services, treaties, UN model, digitalisation

Sol Picciotto is an ICTD Senior Fellow specialising in international corporate taxation. He is an emeritus Professor of Lancaster University (UK), coordinator of the BEPS Monitoring Group and senior adviser to the Tax Justice Network.

Contents

Summary	3
Acknowledgements	5
Acronyms	6
Introduction: services and digitalisation	7
1 Development of international tax rules on services	9
1.1 Internationalisation of services and the erosion of the source tax base	9
1.2 Taxable presence and the 'Services PE'	11
1.3 Allocation of income	17
2 Options for source taxation of revenues from services	19
2.1 Withholding Taxes	20
2.2 Taxing net profits	23
2.3 Aligning with and reshaping international tax rules	25
3 Conclusions	28
References	30
Tables	
Table 1.2.1 Treaties with modified UN Model 5.3.b	14

Acknowledgements

I am grateful to colleagues and collaborators at the ICTD, particularly Martin Hearson and Mustapha Ndajiwo, and to Jeffery Kadet, for their helpful comments as this paper developed, and two anonymous referees for their careful reading and comments on the final draft.

Acronyms

AFIP	Administración Federal de Ingresos Públicos [Argentinian Federal Tax Authority]
AOA	authorised OECD approach
ATAF	African Tax Administration Forum
B2B	business-to-business
BEPS	base erosion and profit shifting
DSTs	digital service taxes
DZIT	Department of Zakat and Income Tax
EBOP	extended balance of payments
FATS	Foreign Affiliate statistics
FDI	foreign direct investment
FIRS	Federal Inland Revenue Services (Nigeria)
GATS	General Agreement on Trade in Services
IBFD	International Bureau for Fiscal Documentation
IMF	International Monetary Fund
KPMG	Klynveld Peat Marwick Gverdelier
MAP	mutual agreement procedure
MLI	multilateral instrument
OECD	Organisation for Economic Cooperation and Development
PE	permanent establishment
PPT	principal purpose test
SEP	separate entity principle
TNCs	Transnational Corporations
TRIPs	Trade Related Intellectual Property
WTO	World Trade Organization

Introduction: Services and digitalisation

Recent debates and negotiations on the reform of international taxation have led to a re-examination of the two basic issues for taxation of transnational corporations (TNCs): (i) the basis for taxable presence and (ii) the allocation of TNC profits among countries where they have activities. The recent focus on these issues resulted, in particular, from concerns about the effects of the digitalisation of economic activity, which was Action One of the project on base erosion and profit shifting (BEPS). The BEPS project was launched in 2012 by the Organisation for Economic Cooperation and Development (OECD) and supported by the G20 world leaders in 2013. The report on Action One in the 2015 BEPS project package clearly showed that digitalisation had only exacerbated existing problems in international tax rules resulting from the longer-term process of dematerialisation of economic activities.¹ Hence, the efforts to find a comprehensive solution continued, with participation open to all states through the Inclusive Framework on BEPS (Hearson 2020).

Digitalisation, although significant, has only accelerated these longer-term changes, already seen in the shift from goods to services. Services have grown in economic importance in all countries with the emergence of a post-industrial economy since the 1970s. They now account for over 60% of GDP by value added worldwide and as much as 75% in high-income countries.² Compared to discrete sales of physical goods, services generally involve a closer and more continuous relationship between the service provider and the client or customer, often remunerated through recurring fees rather than one-off payments. Many services are personal and, therefore, their provision usually entails physical proximity.

At the same time, improvements in telecommunications have increasingly facilitated the remote provision and even internationalisation of many types of services. Cross-border trade in services rose from 6% of GDP worldwide in 1975 to 8.5% in 1995 and then more steeply to reach 13% in 2015.³ Services are an important input into other sectors, such as manufacturing and extractive industries, and therefore account for a higher proportion of trade by value added – estimated at almost 50% of world trade by this measure in 2015 (WTO 2019: 45).⁴

¹ All the BEPS project reports are available at <http://www.oecd.org/tax/beps/beps-actions/>; a further lengthy report on Action One in 2018 reaffirmed the 2015 report's conclusions of that digitalisation had affected the whole economy, so solutions could not be ring-fenced. It is worth noting that the conclusions of these reports were very different from those of the lengthy examination of the international tax implications of e-commerce conducted in 1999-2005, which concluded that the business models emerging from new communications technologies 'would not, by themselves, justify a departure from current rules' (OECD 2005: 151).

² See the World Bank's World Development Indicators, Table 4.2 Structure of Output, available at <https://datatopics.worldbank.org/world-development-indicators/>.

³ Derived from World Bank Open Data: <https://data.worldbank.org/indicator/BG.GSR.NFSV.GD.ZS>. These are based on IMF extended balance of payments (EBOP) statistics, which report transactions between residents and non-residents, in line with the UN Manual on Statistics of International Trade in Services, and the definition of services in the UN System of National Accounts (see United Nations 2010: 8; Loungani, Mishra, Papageorgiou and Wang 2017). A wider definition of trade in services is used by the World Trade Organization (WTO) for its General Agreement on Trade in Services (GATS), which covers four 'modes': 1, cross-border supply; 2, consumption abroad; 3, 'commercial presence'; and 4, presence of natural persons. Data for mode 3, 'commercial presence', which involves local sales by a foreign-owned entity, use the Foreign Affiliate Statistics (FATS). Although considered 'trade' in WTO terms, these revenues from the supply of services in a host country by affiliates of foreign entities are not international transactions for tax (or foreign exchange) purposes. The WTO has compiled an analytical dataset using the data from EBOP and FATS, presented by mode of supply, and reallocated according to the WTO's Sectoral Classification List, which differs from the UN and IMF sectoral definitions (WTO 2019; United Nations 2010: Annex IV).

⁴ This is a low estimate, as it does not capture in-house services of manufacturing firms (WTO 2019: 46).

Richer states have dominated the export of services. Although there has been a relative decline in developed countries' share of total services exports, from 99% in 1970 to 82% in 2015, the expanding share from developing countries has been mainly from five jurisdictions - China, India, Singapore, Korea and Hong Kong (Loungani, Mishra, Papageorgiou and Wang 2017; WTO 2019: 33). Furthermore, all developing countries have a substantial net deficit in services trade. According to the World Trade Organization (WTO), developing countries as a whole accounted for 25% of total world services exports in 2017 but 34% of imports (50% higher), while, for least developed countries, exports were 0.3% and imports 0.9% of the global total (300% higher) (WTO 2019: 32).⁵

As these data show, this expansion of services and their internationalisation began in the 1970s and has accelerated since the mid-1990s, greatly aided by digitalisation. This shift to services entailed a dematerialisation of economic activities that made it increasingly easy for TNCs to derive profits from activities in countries with little or no physical presence and attribute large parts of such profits to jurisdictions where they can be taxed at low rates.

The focus on digitalisation in the BEPS project has led to proposals that mark a reversal of direction on international tax rules by OECD member states. There is now an acceptance that some proportion of profits should be taxable by countries where they are earned even without a physical presence and this should be based on apportionment of an appropriate share of the TNC's global profits. However, the proposals have focused on services to consumers, which have become intermediated through digital platforms and the internet. Due to US concerns that new rules should not target only the highly digitalised TNCs, which are mainly US-based, the proposals under Pillar One put forward a wider scope but extending only to 'consumer-facing' business (OECD 2020b). This left the rules for most business services untouched, as well as all other economic sectors.

The need for more comprehensive reforms is evident, especially for countries that are mainly hosts for TNCs. For a much longer period, they have been aware of the wider international tax challenges posed by services more generally and by business services in particular. Wider reforms are important not only to achieve a more equitable allocation of tax revenues but also for economic development. The limitations imposed by tax treaties on source taxation of foreign service providers create competitive disadvantages for local service providers and discourage local employment in these increasingly important sectors. Indeed, all countries have been disadvantaged by the ability of TNCs to create conduit arrangements to route services provision through offshore entities located in countries where their profits are taxed at low or zero rates. Hence, reforms of international tax rules, particularly for business services, are also important for national economic development and to redress the imbalances in international flows of services.

Fortunately, developing countries have long aimed to protect source taxation, particularly of services. This can be seen in differences between the model treaties developed through the OECD and the United Nations.⁶ This paper will outline the historical development of the key provisions on taxation of international services, focusing particularly on the efforts to protect source taxation in the UN model convention and the continuing debates over their interpretation. It will also discuss the recent moves to reshape these international rules, many of which entail revisiting past understandings and interpretations. Finally, it will evaluate some policy options for capital-importing countries to strengthen their taxing rights in the current context.

⁵ These WTO data include revenues from 'commercial presence', as explained above.

⁶ For an account and discussion of the development of the international tax system from the perspective of developing countries see Picciotto 2013; and Hearson 2021. The latest versions of the models at the time of writing are OECD 2017a and UN 2017.

This paper will show that, from the beginning of the formulation of international tax rules, it was understood that the only effective way to tax the profits of TNCs is to treat them as unitary enterprises and apportion those profits in line with their activities in each country. The recent re-emergence of this understanding can provide a basis for the effective reforms the system now needs, although there remain significant hurdles to overcome. The problems stem not simply from geo-political conflicts between states but require a careful rethinking and reshaping of the principles and technical concepts to enable a better practical operation of the system. It is particularly important in this process to bring to the fore the perspective of lower-income countries since the primary aim of the current reforms should be to strengthen taxation at source where real activities take place.

1 Development of international tax rules on services

Services present the central problem of international tax coordination in a particularly acute form. This problem arises because states can exert their power to tax by asserting personal jurisdiction over their residents on their total income or jurisdiction over activities taking place in their territory or both. Hence, when a resident of one country performs services for customers in another, there is a potential for conflict. The service providers' country of residence can assert the right to tax their income based on their ability to pay. On the other hand, the customer's country can claim that the profits from services delivered in its territory involve close contacts with the country and derive benefits from its infrastructure, and legal and other protections, and that activities should be taxed on the same basis whether they are performed by foreign or local providers. The potential for conflict between these two claims is stronger for services than for goods since it is more likely that significant elements of the activity will take place in both countries.

This tension can be resolved in three possible ways: taxation can be exclusively by either the country of residence of the service provider or by the country where the services are delivered, or there could be an apportionment between them. Taxation solely by the country of residence seems inequitable; it is also problematic in practice since the concept of residence is fluid, especially for a legal entity such as a company. On the other hand, it is difficult for a source state to calculate tax on the net profits from delivery of services since a foreign service provider is likely to incur only part of the relevant operating expenses locally. Apportionment seems, in principle, the most suitable approach, but it has proved difficult to implement.

1.1 Internationalisation of services and the erosion of the source tax base

At the time of formulating the first model tax conventions a century ago, organised business consisted mostly of manufacturing and extractive industries. Services were provided mainly by individuals and generally at the customer's location since international telecommunications were still rudimentary. When providers of professional services began to expand internationally, a specific provision was included in the models (Article 14) to allow taxation of income from 'independent personal services' in the country from which the income derives through physical presence in the country.⁷ This was dropped from the OECD model in 2000 on the grounds that services should be taxed under Articles 5 and 7 whether performed by an individual or through a legal entity (OECD 2000). However, Article 5 was devised for manufacturing and its strict physical presence requirements are inappropriate for services, greatly restricting source taxation (Arnold 2011: 11). Since OECD members are home *and* host countries of services providers, most of them were willing to accept this limitation. As primarily importers of services, developing countries have generally sought to ensure taxation of services where they are delivered and Article 14 was retained in the UN model.

The issue is not only the allocation of taxing rights but also prevention of the erosion of the source country tax base since fees paid to foreign service providers for business and professional services are normally deductible from the taxable business profits of the service recipient. Furthermore, payments for the provision of services can be channelled through conduit companies treated as being resident in countries where such fees are taxed at a zero or low rate, producing 'stateless income', not taxed anywhere (Kleinbard 2011).⁸ It is relatively easy for TNCs to design corporate group structures so that services are provided in this way by intermediary entities 'offshore', interposed between operating affiliates in source countries and the residence country of the ultimate parent. Under existing international tax rules on transfer pricing, it is harder to challenge the attribution of profits to conduits of this type providing services than to a pure 'letter box' company since they may employ some personnel or own assets, even if these are used to provide services elsewhere. Offshore companies providing services, such as sales, marketing, logistics, distribution, engineering and systems support have come to play an important role in many sectors.

⁷ The League of Nations models had a single article for 'labour or personal services', but with a specific paragraph for professional services (League of Nations 1946). A distinction between personal services that are 'independent' or 'dependent' (i.e. employment) was made in the first OECD model of 1963 (OECD 1963) and in the UN model in 1980 (United Nations 1980b) and since. Both models also have separate provisions for remuneration of corporate directors and senior managers, public officials, and artistic and sporting performers, as well as for some specific kinds of services (construction, shipping and air transportation, insurance). Arnold (2011, 2017) argues that the differences in treatment create incoherence and makes suggestions for rationalisation; although he agrees that erosion of its tax base is a strong argument for a source country to have taxing rights, he considers that the fundamental principle is where the services are performed, so he does not accept taxation of payments for services even if performed outside the country concerned (Arnold 2011: 20). Discussion of employment (contracts of service) and of the specific kinds of services is outside the scope of this paper.

⁸ Conduits emerged early using holding company legislation in countries, such as Luxembourg and Switzerland, and taking advantage of exemptions for foreign-source income in countries such as the Netherlands. They have more recently been emulated by others. For example, in 1992, Mauritius enacted offshore business legislation, creating a Global Business Licence regime, to encourage the formation of companies resident in Mauritius to provide services abroad, including information and communication technology, asset management, consultancy, operational headquarters, financial services, insurance, logistics and marketing (TJN 2020). The income and capital gains from such activities would be subject to no or low tax in Mauritius and could escape all tax if protected by suitable treaties (Picciotto 2019: 15). To facilitate this, Mauritius began negotiating treaties, in particular, with African countries, which limited source taxation of fees for services, so that such fees charged by Mauritian companies would be deductible in that country, yet not taxed in Mauritius (see Table 1.2.1 and Section 1.2 below). Together with other treaty restrictions on source taxation, this has caused major revenue losses for African countries that have tax treaties with Mauritius. A study for the World Bank estimated these losses at between 15% and 25% of corporate income tax revenues in those countries, finding also that there were no counteracting benefits from increasing Foreign Direct Investment (FDI) flows (Beer and Loeprick 2018).

Some developing countries introduced withholding taxes on the payments of fees for technical, managerial, and similar business services to protect their tax base.⁹ They also tried to ensure the inclusion in their treaties of a specific article allowing this (Falcão and Michel 2018).¹⁰ To standardise, facilitate and legitimise such provisions, a new Article 12A on fees for technical services was formulated by the UN Committee and included in the UN model in 2017 to complement Articles 7 and 14. These provisions apply to payments made by a resident of the source state, so they include services performed outside that country, unlike the other provisions on services taxation (including Article 5.3.b), which apply only to services performed in the country. However, they do not apply to payments by an individual for services for their personal use.

With the growth of digitalised services to consumers, some OECD countries, especially in Europe, have taken a similar approach by proposing or adopting digital services taxes (DSTs) (KPMG 2019; KPMG 2020). Countries in other regions have also announced or proposed such measures, although fewer have been implemented.¹¹ These aim mainly at consumer services with some differences in their scope. These types of taxes are generally formulated as applicable to the gross payment amounts, whether the obligation to pay the tax is on the person making the payment or receiving it.¹²

The about-turn on source taxation has, since 2018, changed the nature of the BEPS process, which, in its first phase, explicitly excluded any reconsideration of the existing allocation of taxing rights between residence and source. The OECD has now formulated proposals under Action One of the BEPS project covering both automated digitalised services and consumer-facing business, which would grant what is described as a 'new taxing right' for source taxation (OECD 2020a; OECD 2020b). However, although the scope is still to be decided, the proposal does not cover business-to-business (B2B) services. In parallel, the UN Committee initiated work on automated digitalised services, which concluded with the approval of a proposal for a new Article 12B in 2021 (United Nations 2021).

These initiatives and proposals go to the heart of the two central principles in international tax, taxable presence and allocation of income. The next parts of this section aim to improve understanding of these rules by tracing how the relevant provisions of the model conventions emerged and developed.

1.2 Taxable presence and the 'Services PE'

The impact of digitalisation has now clearly shown the unsuitability of the concept of 'permanent establishment' (PE), which became the basis for taxable presence in the model conventions. Indeed, recent measures abandon this concept, although some apply a size threshold, as discussed below.

⁹ See further Section 2.1 below. Conduit structures are also used to channel royalty payments, which are also subject to withholding taxes under Article 12, which is more universally accepted.

¹⁰ A simple search in the main treaty databases suggests that about half of treaties in force include such a provision: 1438 in the database of the International Bureau for Fiscal Documentation (IBFD n.d.), and 1954 in the Tax Analysts database (Tax Notes n.d.). Differences can be due to various factors, such as the method of compilation of the database, and duplication of versions in different languages.

¹¹ The African Tax Administration Forum published model legislation, which included rules for attributing revenue derived from users (ATAF 2020b); some ten African countries have announced their intention to introduce such taxes (Magwape 2021), but it seems that only three have done so (Kenya, Nigeria and Zimbabwe) and that they are of more limited scope and different design from the ATAF suggested approach.

¹² For example, India's Equalisation Levy of 2016 (Finance Act 2016, ch. VIII and accompanying Rules), which was applied to digital advertising, operated by withholding (an obligation on the person paying for the service); the new version enacted in 2020 applies a wider range of services provided by any 'e-commerce operator', although it also is levied on the gross revenues. DSTs introduced by other countries generally apply to the service providers, but they can of course still pass on the charges to their customers by 'grossing up'.

The definition of a PE has been a continuing bone of contention between home and host countries of TNCs. The first model tax treaty provisions negotiated through the League of Nations gave a right to tax active business income to each country where an 'undertaking' has a 'permanent establishment' (League of Nations 1928). If there were PEs in both state parties to a treaty, each could tax the 'portion of income produced in its territory' (ibid.). The concepts of an 'undertaking' and a PE were deliberately open-ended to achieve consensus.¹³ The term 'undertaking' implied simply the business activity, so it could apply to the TNC as a whole, as favoured by those supporting the 'organic unity' concept of a corporate group (Carroll 1933: 664). This would mean that a subsidiary could be a PE and would allow apportionment of profits among all affiliates within a TNC corporate group, treated as a single enterprise (Langbein 1986: 631). Although the League model provided that the undertaking's global income should be apportioned between PEs, the methodology was left to be agreed upon by the competent administrations of the states concerned.

The divergence between capital-exporting and capital-importing countries became evident in the so-called Mexico and London drafts of the League of Nations model.¹⁴ There were some differences between them on defining the PE criterion, but more importantly, the Mexico draft did not limit taxation of business income to the profits attributable to a PE. It included a provision that income from any business or gainful activity 'shall be taxable only in the State where the business or activity is carried out' unless there were only 'isolated or occasional transactions'. This was omitted from the London draft (League of Nations 1946: 13-14; 60).

The shaping of international tax rules began to take a very different direction when the OECD took up the dominant role in formulating a model treaty. This placed the issue of international taxation firmly in the context of the liberalisation of international investment, particularly foreign direct investment (FDI) by TNCs, which the OECD strongly supported.

The OECD's first model convention of 1963 (OECD 1963) firmly restricted taxation at source of business income.¹⁵ First, non-residents could be taxed only on the business income derived from a country through a PE, narrowly defined in physical terms as a 'fixed place of business' (Article 5.1). Secondly, only the income 'attributable to' that PE could be taxed (Article 7.1). Taxation of professional services was also limited to the income attributable to a 'fixed base' (Article 14). Finally, the model prohibited any taxation by the source country not otherwise permitted in the treaty, in the article on Other Income (Article 21). These provisions have remained substantially unchanged to this day.

¹³ The 1928 model stated only that 'Income from any ... undertaking ... shall be taxable in the State in which the permanent establishments are situated. The real centres of management, branches, mining and oilfields, factories, workshops, agencies, warehouses, offices, depots, shall be regarded as permanent establishments' (League of Nations 1928). Jogarajan's detailed account of the work of the government experts shows that they left unresolved deep differences that are still present today on key problems 'such as the definition of PE, the treatment of agents, and the apportionment of profits', and consensus was reached only by leaving terms undefined or ambiguous (Jogarajan 2018: 246). This she regards as a necessary compromise between divergent perspectives, though she concedes that the strongly pro-residence views of the British and Swiss experts were influential. Kobetsky considers that at the time the business profits article was a 'significant achievement by source countries' (Kobetsky 2011: 125). Wells and Lowell make the strongly-expressed counter-argument that the primacy of residence taxation as the 'foundational premise' of tax treaties originated already in the League models, stemming from a 'mercantilist paradigm ... premised on the belief that the imperial countries were the source of capital and know-how while the colonies were rather passive suppliers of goods or services with little value added functionality' (Wells and Lowell 2012: 540). They also point out that business representatives, through the International Chamber of Commerce, endorsed a formulaic apportionment approach to the allocation of TNCs' business profits as the best way to ensure no double taxation at that time (Wells and Lowell 2013), and both Langbein (1986) and Kobetsky (2011) consider that this was the better road not chosen.

¹⁴ Published in 1946, based on drafts resulting from regional conferences held in Mexico City in 1940 and 1943 attended mainly by Latin American countries and from a London meeting in 1946 (League of Nations 1946).

¹⁵ Following the failure to continue the League's work through the United Nations, the OECD took a dominant role in international taxation (Picciotto 1992: 50-52, Hearson 2021). However, the restrictions on source taxation made the OECD model an unsuitable basis for negotiating treaties with countries that are mainly hosts for foreign investment, resulting in the establishment of a United Nations Group of Experts on Tax Treaties Between Developed and Developing Countries in 1967. Its 25 members are appointed as individual experts, though they have generally been government officials or advisers, at least when appointed; since it is a UN body, there is a 'balanced' representation of all states, so its reports and decisions inevitably entail compromises.

In contrast, the UN Group of Experts, set up in 1967, attempted to find compromises between the perspectives of home and host countries of TNCs.¹⁶ These were particularly acute for services, for which a majority of members, especially those from developing countries, favoured taxation at source (Surrey 1978: 8-14). The UN model tax convention that was finally published in 1980 gave a much wider scope for source taxation of services than the OECD's model, although it did not go as far as this majority wished.¹⁷ It included a provision that income from the furnishing of services in a country by an enterprise above an agreed monetary threshold should be taxable in that country, although only as an option in the Commentary.¹⁸ A monetary threshold criterion was also included in the article on fees for professional services (Article 14), along with two further criteria for source taxation: if the income was attributable to a fixed base or if the service provider stayed in the country for 183 days or more. The Commentary explained that these three provisions were included as alternatives to represent the different views of members.¹⁹ The monetary threshold criterion was omitted from the UN model's Article 14 in 1999.

The UN model also included a provision in Article 5 for a 'services PE', allowing taxation of a non-resident on profits from services if they were delivered in a country through personnel:

Article 5.3. The term 'permanent establishment' likewise encompasses: [...] **b.** The furnishing of services, including consultancy services, by an enterprise through employees or other personnel engaged by the enterprise for such purpose, but only where activities of that nature continue (for the same or a connected project) within the country for a period or periods aggregating more than six months within any 12-month period. (United Nations 1980b: 21).

¹⁶ The Group started from the text of the existing OECD model, while recognising its unsuitability for treaties between countries with asymmetrical capital flows. Nevertheless, the UN model followed the general approach and structure of that of the OECD, and adopted many of the articles verbatim, including in such cases extracts from the Commentary of the OECD model in its own Commentary. Both Commentaries are published together with the text of the respective model, citations to the Commentaries will refer to the paragraph of the Commentary relating to the treaty Article concerned, as is customary.

¹⁷ After five meetings of the Group, the UN Secretariat in 1974 produced a set of Guidelines based on its discussions (United Nations 1974), which were approved at its sixth meeting. At the seventh meeting in 1977, it decided to draft a model convention (United Nations 1978: 4), responding to a suggestion in the report of a UN Group of Eminent Persons on *The Impact of Multinational Corporations on Development and on International Relations*. A draft model based on the Guidelines (Surrey 1978) was produced by a group at Harvard Law School, supervised by Prof. Stanley S. Surrey, who had been Assistant Secretary for Tax Policy at the US Treasury (1961-69) and acted as special advisor to the rapporteur of the UN Group. The 1978 draft model appears to have been considered in January 1979 by a drafting committee established at the Group's seventh meeting. It was further scrutinised and revised at the Group's eighth meeting in December 1979 on the basis of written comments received by members (United Nations 1980a: 3-4) and another drafting committee was established. The model convention (United Nations 1980b) follows the 1978 draft, but has some significant differences. A revised version of the 1974 Guidelines became the first *UN Manual for the Negotiation of Tax Treaties Between Developed and Developing Countries*.

¹⁸ There were divergent views on suitability of, or even the need for, a monetary threshold (UN 1980b: 65).

¹⁹ It also clarified that Article 14 concerned the remuneration of individuals; payments to an enterprise came under Article 5 (United Nations 1980b: 160-161).

This was a compromise formulation. The six-month requirement was not in the initial draft prepared under Stanley Surrey's supervision but was inserted after discussions in the Group or its drafting committee.²⁰ The Commentary reported that some developing country members preferred that there should be no time threshold requirement (for either construction activities or services).²¹ Article 5.3.b has remained substantially the same since that time.²²

Around one-third of actual treaties now in force include a services PE provision based on the UN model's Article 5.3.b.²³ However, a few of these provisions diverge from the UN model in significant respects. In particular, a variation has been used, mainly by Mauritius, which limits it to services furnished through employees or other personnel 'engaged in' the source state (see Table 1.2.1).²⁴

Table 1.2.1 Treaties with modified UN Model 5.3.b

Date signed	In force	State A	State B
24/04/1992	22/01/1996	Ecuador	Romania*
12/03/1994	28/07/1995	China	Luxembourg
29/06/1994	08/11/1994	Mauritius	Swaziland
01/08/1994	05/05/1995	Mauritius	China
09/01/1995	18/05/2001	China	Croatia
04/03/1995	25/07/1996	Mauritius	Namibia
24/08/1995	pending	Mauritius	Russia
26/09/1995	13/03/1996	Mauritius	Botswana
12/03/1996	02/05/1997	Mauritius	Sri Lanka
14/02/1997	08/05/1999	Mauritius	Mozambique
15/02/1997	16/02/1999	India	Namibia
29/08/1997	09/09/2004	Mauritius	Lesotho
01/10/1997	10/06/1998	Mauritius	Thailand
30/03/1998	23/06/2000	Namibia	Russia
21/01/2000	12/06/2000	Mauritius	Cyprus
30/07/2001	14/04/2003	Mauritius	Rwanda**
19/09/2003	21/07/2004	Mauritius	Uganda
31/08/2004	10/09/2006	Netherlands	Uganda

²⁰ There do not seem to be official records of the work of the drafting committees or of the comments provided by members on the drafts; some documentation may exist in Stanley Surrey's papers deposited at Harvard Law School, but these have not been accessed for the present paper.

²¹ United Nations 1980b, 64. This statement has been retained in the 2017 model (Commentary para. 10).

²² The final clause was amended in the 2011 model to read '183 days in any twelve-month period commencing or ending in the fiscal year concerned' and in the 2017 model the phrase '(for the same or a connected project)' was omitted.

²³ An analysis using the IBFD database in May 2020 found that this provision was included in 1131 (35.6%) of the 3181 treaties in force with an English version. This was conducted as a TradeLab project by students at the Graduate Institute of Geneva (Edgard Carneiro Vieira, Boris Ohanyan and Natalia Mouzoula) and I am grateful to them for the study. This study involved rigorous sifting and manual evaluation of the search results to produce both more accurate quantitative data and the significant qualitative findings discussed in this paper.

²⁴ The treaties negotiated by Mauritius did not contain a services PE provision until the treaties with Swaziland and China in 1994, but since then, when a services PE was included, it was this modified version in all but seven treaties. This was evidently linked to the adoption by Mauritius in 1992 of offshore business legislation, discussed in the introduction above. A brief account of Mauritius's tax treaties, from a practitioner's perspective, is provided by Erriah (2020), but it does not mention this variation from the UN model or discuss the reasons for it.

This was revised in 2018 after review as a 'harmful tax practice' under Action 5 of the BEPS project, but it was replaced by a partial exemption provision that has a similar effect.

11/03/2005	22/06/2005	Mauritius	Seychelles
18/09/2006	31/07/2007	Mauritius	UAE
21/12/2009	15/09/2010	Mauritius	Bangladesh
21/11/2011	22/02/2017	Kenya	UAE
29/05/2012	13/07/2017	Kenya	Iran
10/08/2012	pending	Mauritius	Nigeria
19/12/2012	10/03/2014	Mauritius	Egypt
15/10/2014	23/04/2015	Mauritius	Malta
11/03/2017	22/01/2019	Mauritius	Ghana
16/10/2019	pending	Mauritius	Kenya

** The 1992 Ecuador – Romania treaty has a slightly different version: ‘through its own personnel or through other personnel employed in the other Contracting State’. This creates further ambiguity, as it is not clear whether the limitation ‘employed in the other Contracting State’ also applies to its own personnel.*

*** No longer in force.*

This apparently minor change largely nullifies the effect of the article since there is no reason or incentive for the non-resident entity to employ local personnel. Hence, the provision has the effect of exporting potential jobs, as well as tax revenues from the source country. Conduit countries are more likely to accept a services PE than a withholding tax, which is much easier to apply. Only four treaties negotiated by Mauritius allow a withholding tax on fees for technical services (those with Botswana 1995, Uganda 2003, Rwanda 2013 and India 2016). Those negotiating treaties with Mauritius may have been lulled into thinking including a services PE was sufficient protection without noticing the significant modification in this version of the provision.

A second distinctive variation is that some treaties include the services PE provision in Paragraph 2, which may be read to imply that the requirement of Paragraph 1 for a ‘fixed place of business’ must also be satisfied.²⁵

The Services PE provision also leaves considerable room for interpretation of the degree of physical presence required and wide divergences have become evident. At the UN Committee of Experts in 2013, some members said that they interpreted Article 5.3.b as meaning that the delivery of services must continue for 183 days but this requirement does not apply to the physical presence of personnel.²⁶ The Committee as a whole agreed that the traditional interpretation of the provision requires some physical presence of employees in the source state. Some members argued that the question should be addressed in the commentary, especially in the context of digitalisation (United Nations 2013: paras. 16-17). The need to revise the commentary was reiterated in 2014 (United Nations 2014: para. 19) but did not occur. Hence, the ambiguity has remained.

²⁵ The commentary for Paragraph 5.2 of the UN model states that ‘the requirements of paragraph 1 must also be met’ (UN 2017: 154), implying that a fixed base is needed. However, in India, which has a number of treaties of this type, the courts have not accepted this interpretation (see in particular Morgan Stanley 2007: 14). This was also the view taken in a South African case AB LLC and BD Holdings LLC (2015), which concerned the US-South Africa treaty, in which the services PE provision is paragraph 5.2(k). The services provider in that case sent employees who worked at the client’s premises, which it contended could not be regarded as a ‘fixed place of business available’ to it, as required by paragraph 1. The Tax Court held that the term ‘includes’ in Paragraph 2 can mean ‘extends to’, but courts in other countries may take a different view (Gerwig 2019: 80).

²⁶ The specified period can be shorter or longer in actual treaties, many provide for 90 days. It may be significant that 5.3.b uses the term ‘furnish’ rather than ‘perform’, which is used in Article 14. The optional provision for a services PE included in the OECD model’s Commentary in 2010 (discussed in Section 1.2 below) specifies that the services must be ‘performed ... through one or more individuals who are present and performing such services in that other state’ (OECD 2017a: para. 144). The UN article is obviously worded more widely.

As it stands, it seems that there are three different interpretations of Article 5.3.b held by states: (i) that the physical presence of personnel must extend to 183 days; (ii) that there must be some physical presence of personnel in the source state, but the 183-day threshold applies to the period during which the services are provided and not to their presence; or (iii) no physical presence of personnel is needed, provided that the delivery of services extends for 183 days. Under this third interpretation, it is still necessary to show that the services are delivered in the state concerned since the article specifies that the activities must continue 'within' the state for the requisite period. This may occur without the physical presence of personnel if, for example, advisory or consultancy services are provided by telephone or internet.

Services may also be considered taxable regardless of where they are delivered if the payment is deductible by a person resident in the state since this erodes the country's tax base (Arnold 2017: 73-4). This principle has been adopted in tax treaty provisions for taxation of fees for technical services (Section 1.1 above). It is now included in Article 12A of the UN model, in which the nexus is simply the residence of the payer (United Nations 2017: 327). Similarly, the alternative recently developed for article 12B in the UN model to allow source taxation of income from automated digital services (United Nations 2021) requires only that the underlying payments are made by either a resident of or a PE in the source state. Hence, both articles apply to services even if performed outside the country that is the source of the payment.

Remarkably, the recent discussions in the BEPS project have now led to an acceptance that the requirement of physical presence to constitute a PE could be abandoned, particularly for digitalised services. A new concept of 'significant economic presence' has emerged, reviving the principle in the Mexico model of applying only a revenue threshold (OECD 2015: 107). The blueprint for Pillar One of the BEPS project for a 'new taxing right' proposed a dual-threshold test based on the TNC's global revenue and a minimum level of in-scope business outside the TNC's domestic market (both amounts to be determined), but no threshold or presence test for sales in any particular jurisdiction (OECD 2020b: Section 2.3).

Ending the presence requirement raises the need for a methodology to define and allocate the taxable net profits. In the context of an apportionment methodology, rules to identify the source of sales revenue no longer determine total taxation rights since sales revenue is only one of the factors used in formulary apportionment to allocate net income. The Pillar One blueprint provided detailed rules to identify the source of services income, but only for consumer services, based on the place of consumption of the service, even if the payment is made elsewhere. For example, advertising targeted at consumers in a country may be paid for by a TNC from its global advertising budget; tourists may pay for their travel and accommodation in their own residence country rather than the country they visit. However, for services of intermediation between buyers and sellers (e.g. a travel booking website), the blueprint proposes a 50:50 split between the location of the purchaser and the seller. For sales of user data, the source of the income would be the user's location when the data was collected (OECD 2020b: Chapter 4).²⁷ These rules attribute the location for sales revenues by destination, which should be one of the factors used to apply formulary apportionment. For a wider application, rules to define the destination of sales for business services would be needed. In this context, the location of the person making the payment is clearly important since it indicates the beneficiary of the service. A further practical reason for adopting this sourcing rule in Articles 12A and 12B is that it is easier to administer a tax on the payment of fees by using a withholding mechanism.

1.3 Allocation of income

²⁷ This includes detailed 'indicators' with a specified hierarchy to be used in identifying the location to be used as the source.

Once a broad right to tax income at source is accepted, ascertaining the appropriate taxable income becomes crucial. Apportionment seems the most appropriate method since the activities involved in the provision of services do not occur only in the place of consumption, and apportionment avoids a binary choice between the country where the service provider is based and the customer's country. Instead, the income can be allocated based on factors reflecting the extent of real activities in each country. As we have seen, the principle of apportionment of the total profits of an enterprise has been envisaged since the earliest model treaties. A shift occurred when the first OECD model in 1963 introduced the separate entity principle (SEP) for 'associated enterprises' and for PEs of an enterprise.

At the same time, Article 7(4) of the OECD model of 1963 provided that a PE could be taxed 'on the basis of an apportionment of the total profits of the enterprise to its various parts', in so far as such a method had been customary in a state (OECD 1963: 43). The term 'enterprise' continues to be ambiguous: it is unclear whether it refers to the entity or the business activity. Since the 1963 convention, the phrase 'an enterprise of a contracting state' has been defined as 'an enterprise carried on by a resident of a contracting state' (OECD 1963: 39). This is the phrase used in Article 9 and, in that context, it is usually taken to mean a legal person. However, the word 'enterprise' itself has, since 2000, been defined in the OECD model as 'the carrying on of any business'.²⁸ Hence, in Article 7(4), the term can be interpreted to mean the 'business' of the corporate group as a whole. Furthermore, a subsidiary can be treated as an 'agency' PE of its parent.²⁹ Hence, Article 7(4) can be understood to allow the attribution of profits based on an apportionment of the total profits of a TNC corporate group.

Article 7(4) was retained in the UN model of 1980, even after it was dropped from the OECD model in 2010. It is included in some two-thirds of current in-force treaties and some 28% of these treaties contain both this and the Services PE provision of the UN model.³⁰ Hence, a high proportion of existing treaties allow a fractional apportionment method to be used to calculate the net profits of a PE and, in a significant number, this method can be applied to the furnishing of services with no need for a 'fixed base'. However, no agreed methodology has ever been developed for apportionment.³¹

²⁸ This was done as part of the OECD decision to omit Article 14 and treat services as taxable under Articles 5 and 7, whether performed by a legal entity or a natural person; a further definition was added to specify that 'the term "business" includes the performance of professional services and of other activities of an independent character' (OECD 2000). Since the UN Committee did not accept the omission of Article 14, these additional definitions have not been included in the UN model.

²⁹ This also depends on the interpretation of Article 5(7): see Le Gall 2007, Avi-Yonah and Tinhaga 2014.

³⁰ This data comes from the TradeLab study conducted in 2020 mentioned in the previous sub-section. Of the 3181 identified treaties in force with an English language version, 2161 included Article 7.4 and 905 included both provisions.

³¹ The UN Committee has not provided its own guidance on Article 7.4; the commentary to the UN model has simply reproduced some paragraphs from the pre-2008 OECD model commentary.

Difficulty has also been caused by the widening gap between the apportionment approach and the separate entity principle. The latter most clearly underlies the attribution of profits to associated enterprises in Article 9, but a version with slightly different wording has also been included in Article 7.2. This requires that the profits attributable should be in line with those that might be expected for an independent entity 'engaged in the same or similar activities under the same or similar conditions'.³² Yet, the results of apportionment, according to paragraph 4, 'shall be in accordance with the principles in the article'. Hence, the standard for attribution of profits was essentially the same whether the starting point was separate accounts or the apportionment of consolidated accounts. Its presence in both articles is because it was devised as essentially an anti-abuse provision based on the understanding that the close relationship of affiliates of a TNC group makes it problematic to rely on the separate accounts.³³

However, the OECD has increasingly adopted an interpretation of the separate entity principle that makes it incompatible with an apportionment methodology. This began by developing methods for applying Article 9 that focused on adjusting the terms of transactions between affiliates, especially since the adoption of the OECD Transfer Pricing Guidelines in 1995. Although these include a 'profit split' method, which essentially entails apportionment, it is also described as 'transactional'. The OECD then went further and aimed to align Article 7 with the transactional approach adopted for Article 9 by adopting the 'authorised OECD approach' (AOA) to the application of a revised Article 7 in its model in 2010. This also entailed omitting the provision for apportionment in Paragraph 4, which had become incompatible with this interpretation of the separate entity principle.³⁴ The focus on transactions is particularly unrealistic and impractical for PEs since they are not legally separate entities, so they cannot conclude contracts and are not required or normally expected to produce separate financial accounts (Kobetsky 2011: 285-6).

These revisions to the interpretation of Article 7 created considerable confusion in relation to prior treaties (Kobetsky 2011: Chapter 6), especially as not all OECD members accepted the AOA (OECD 2017a: 197-8). The implications for services also caused disagreements, as shown in an extensive new section of the Commentary on Article 5 (OECD 2017a, pp. 154-164),³⁵ which also included a suggested provision for a services PE based on the physical presence of personnel for the first time. This is defined in more detail than in the UN model's Article 5.3.b and clarifies that the services must be performed in the state by individuals physically present there.³⁶

³² This originated in a draft Convention adopted in 1935 to allow tax authorities to adjust the accounts of affiliates of a TNC (League of Nations 1935: 5-6). It specified that if separate accounts were unavailable or unsuitable, 'empirical' methods could be used, applying a suitable percentage to the establishment's turnover; if this was found to be inapplicable, the net income could be determined by apportioning the total profits of the enterprise as a whole, applying 'coefficients based on a comparison of gross receipts, assets, numbers of hours worked or other appropriate factors, provided such factors be so selected as to ensure results approaching as closely as possible to those which would be reflected by a separate accounting' (ibid.). These were the two main methods that the report by Mitchell Carroll for the League had found to be generally used by tax authorities (Carroll 1933: 12; see Picciotto 2018: 30-31). They were included in the League's model conventions of 1946, but omitted when the principle was incorporated into the OECD model in 1963.

³³ This was clearly the rationale in Carroll's report (Carroll 1933). He found that since separately incorporated affiliates are required to produce their own accounts, these were used as the starting point by most tax authorities, but that national law also gave powers to adjust the accounts. Article 7(4) was included only for PEs, because they would not normally be obliged to produce separate accounts. Carroll also stated that 'the term "undertaking" or enterprise includes, when referring to a corporation, merely the corporate entity and its own branches' (Carroll 1933: para. 623), excluding the 'organic unity' view of the corporate group, although the use of the term in the 1928 reports allowed both interpretations.

³⁴ This was agreed in 2008 after seven years' work (OECD 2008, Kobetsky 2011).

³⁵ This was added in 2008.

³⁶ Now in OECD 2017a: 157. Articles based on this provision appear to have been included in 21 treaties since 2008, mainly with Norway and New Zealand, and three with the UK.

Not surprisingly, the AOA was not accepted by developing countries or by the UN Committee (United Nations 2017: 214). Further guidance on Article 7 was issued following revisions to Article 5 made in the BEPS project, which again stressed the separate entity principle and the AOA (OECD 2018). However, due to objections from developing country members of the Inclusive Framework (ATAF 2018), a footnote was added stating that the new guidance on Article 7 was not intended to extend the application of the AOA to countries that have not adopted that approach in their treaties or domestic legislation (OECD 2018: 10).

As with taxable presence, there has now been a reversal of direction and a revival of interest in apportionment. A submission from the G24 group of developing countries in Action One of the BEPS project proposed a new taxable nexus based on 'significant economic presence', using a monetary threshold and an apportionment of profits (G24 2019). The subsequent proposals from the OECD secretariat for a 'unified approach' also entailed formulaic methods for apportionment, although only for part of the global consolidated profits of TNCs (OECD 2020a; OECD 2020b). However, they would apply only to some of the largest TNCs and would also retain existing methods based on the ALP to allocate the bulk of the profits. Furthermore, they would not apply to business services.

As this discussion shows, there have long been many disagreements about the appropriate principles for taxation of profits from services, which have been pursued through the formulation and interpretation of the rules. The current situation in international tax is clearly highly fluid, as new rules are being formulated and old ones reinterpreted. We are in a transitional period, involving a shift away from dogmatic interpretations of the arm's length principle and the formulation of new methodologies for implementing the principle of apportionment, the importance of which was identified from the start but which has remained largely undeveloped. The attempt in the BEPS project to reform rules originating a century ago presents formidable challenges, particularly if changes require revision of treaties. However, as we have seen in this section, much also depends on the interpretation and activation of existing rules in treaties and the model conventions, especially the UN version. The next section will briefly consider approaches available to developing countries for reinforcing source taxation while ensuring that their domestic laws and policies can be considered compatible with their tax treaties.

2 Options for Source Taxation of Revenues from Services

Countries are free to design their laws to suit their own circumstances. Treaties can restrict the application of national law, but only in relation to residents of a treaty partner. Developing countries generally have relatively few tax treaties, but TNCs may be able to take advantage of any treaty by creating an affiliate that is resident in that treaty partner. Provisions against treaty abuse may be used to combat such techniques, discussed further below. Treaty policies should, as far as possible, be designed to ensure that no treaty creates an undesirable restriction on domestic policies. At the same time, domestic law should also take into account the possible restrictions in treaties.

Most countries tax profits arising from all activities in the country, including the delivery of services, under their domestic law (Govind 2012).³⁷ However, taxation of a non-resident faces practical difficulties since the person or entity may not be registered for tax in the country. It may be difficult to enforce an obligation on them to do so, although this is easier if they have substantial local sales. Also, if the non-resident is an entity within a TNC corporate group, there may be another affiliate that is resident and can be made responsible. With the rise of e-commerce, this issue also emerged for value-added tax, which has been reformed to apply on a destination basis. This has led to the strengthening of methods for collection from non-residents, such as the use of the 'reverse charge' mechanism (requiring the customer rather than the supplier to account for the tax), simplified registration procedures, and collection through intermediaries such as online sales platforms (OECD 2017b; OECD 2019). These are also relevant for enforcing tax on non-residents' profits.

Further problems arise in determining the appropriate net profits from cross-border delivery of services since a high proportion of the costs will be incurred outside the country where the revenue is generated. Hence, the issue of tax nexus and the definition of the tax base are closely linked.

2.1 Withholding Taxes

For these reasons, source countries have often preferred to use a withholding tax mechanism applied to payments to non-residents. Withholding taxes are relatively easy to administer and hence effective. They can be formulated as a tax, either on the income of the non-resident or on the transaction. In the former case, some countries allow the taxpayer the option to have net profits taxed with a credit for the tax paid and perhaps a refund of any excess. However, in developing countries, they are usually treated as a final amount (Arnold 2017: 74-5).

A tax on the gross payment needs to be calibrated to bear a reasonable relationship to the profitability of the transactions, as well as to counteract the tax loss from deduction of the payment from the customer's business profits. This is particularly important for services provided by a related entity within a TNC group since the payment may be subject to no or low taxation in the hands of the recipient. As the tax is usually collected from the person paying for the services, it may simply be added to the charge for the services by 'grossing up' so that the service supplier receives the same net payment. Hence it will directly increase the price to the customer, whether formulated as an income or a transaction tax.

³⁷ For example, the US taxes non-residents on income 'effectively connected' to a trade or business in the US (Kirsch 2010); India taxes non-residents on income 'accruing or arising, whether directly or indirectly, through or from any business connection in India' (Income Tax Act s.9); Kenya taxes both residents and non-residents on income 'accrued in or derived from' Kenya (Income Tax Act s.3).

The characterisation of the tax is important in deciding whether it can be valid under tax treaties, which restrict the right to tax the income of a resident in the treaty partner. A tax formulated as applying to transactions and not as a tax on income would fall outside the scope of tax treaties altogether unless it can be considered discriminatory.³⁸ Hence, countries have been advised to formulate DSTs as taxes on transactions to make it easier to adopt them unilaterally (ATAF 2020a; ATAF 2020b). However, in practice, this characterisation can be hard to maintain. Nevertheless, it does seem that these taxes have not yet been challenged under the 'mutual agreement' procedures of tax treaties, although this cannot be stated for certain in view of the secrecy of tax treaty disputes (Picciotto 2016). On the other hand, if the tax is not covered by a tax treaty, it is not eligible for credits in the residence country (Hohenwarter, Kofler, Mayr and Sinnig 2019),³⁹ although. However, it can usually be deducted as a business expense.

A tax on services furnished by a non-resident may be regarded as a barrier to market access by foreign service providers and, hence, a possible breach of obligations under either the WTO's General Agreement on Trade in Services or bilateral or regional trade and investment agreements (Kelsey, Bush, Montes and Ndubai 2020). For this reason, DSTs have been attacked as unfair trading practices, particularly by the US. This is a much more potent response than invoking tax treaty procedures since it can result in retaliation through trade sanctions. This has been done unilaterally by the US, but the validity of this retaliation has not been tested through the WTO.⁴⁰ The conflicts over the DSTs have increased the pressures for reform through the BEPS process and they should be phased out if an agreement is reached. However, since the current BEPS project proposals do not extend to business services, source taxation of these services may also result in such threats. Countries should carefully consider the tax consequences before accepting any market access obligations for services in trade and investment agreements. Developing countries should, in any case, be wary of making such commitments, given the imbalances in international trade in services.

³⁸ The non-discrimination provision, in both the OECD and UN models applies to 'taxes of every kind and description' if they can be shown to discriminate against non-residents.

³⁹ In September 2020 the US Treasury proposed revisions to its foreign tax credit regulations to add a jurisdictional nexus requirement to its definition of an income tax eligible for credit; this would disqualify most DSTs for credit, but was criticised as having far wider ramifications.

⁴⁰ Investigations under s.301 of the US Trade Act found France's DST to be discriminatory in July 2020 and, subsequently, those of Austria, Brazil, the Czech Republic, the European Union, India, Indonesia, Italy, Spain, Turkey and the United Kingdom. Retaliatory tariffs were announced on a range of imports, but suspended to allow time for the BEPS negotiations; their implementation would hurt both exporters from those countries and US consumers. They have not yet been challenged at the WTO, but an authoritative decision is not currently possible due to the paralysing of its Appellate Body. An evaluation of a possible complaint by the US against France under the WTO's GATS suggests that it would have a good chance of success: since the EU has made GATS commitments to the computer and business services covered by the French DST, the tax is likely to be found de facto discriminatory against US firms and, since it is not an income tax, it would not be excluded by GATS article XXII.3 as a measure falling under a tax treaty (Forsgren, Song and Horváth 2020).

A tax on the income of a resident in a treaty partner must, under the OECD model, be specifically permitted in the applicable treaty. This is because the 'Other Income' article prevents any source taxation of income 'not otherwise dealt with' in the treaty.⁴¹ However, in the UN model this article has an additional paragraph that allows the source country to tax income arising in that state and 'not dealt with' elsewhere. In the view of one commentator, this 'should be regarded as a clear rejection of the prevalence of residence state taxation' (Schoueri 2020 : section 1.2.4).⁴² Under this interpretation of the UN model, a withholding tax may be applied to any type of payment, even if not explicitly included in the treaty. Nevertheless, withholding taxes have been challenged based on the argument that the income is 'dealt with' in Article 7, so they should be treated as business income, even if this means it would be untaxed due to lack of a PE. Unfortunately, little guidance is provided in the Commentary on the interpretation of this provision.⁴³ However, if the domestic law provisions clearly provide for taxation of payments or income deriving from the country, a domestic tribunal should not interpret a treaty based on the UN model in such a way as to override the application of the tax since, in general, domestic law should apply unless there is a clear conflict with a treaty provision. Justifying such a tax under the UN model's Other Income provision may nevertheless result in complaints under the tax treaty disputes procedure, under which the competent authorities must 'endeavour' to resolve the conflict (Picciotto 2016).⁴⁴

A further difficulty with withholding taxes is how to categorise the payment. This is particularly hard for digitalised services, which do not easily fit into the existing categories of taxable payments in treaties (OECD 2015: 104-5). As discussed above, the main category is fees for technical, professional and business services. However, this has been interpreted to require human knowledge and skill and, thus, to exclude services such as digitalised advertising, which are delivered automatically, although humans design and operate the software. This is the interpretation given in the Commentary to the new UN model Article 12A on fees for technical services.⁴⁵ An alternative version of this article that applies to all services, with some limited exceptions, is available in the Commentary (Para. 26).

⁴¹ Australia, Canada, Chile, Mexico, New Zealand and the Slovak Republic have a reservation against this Article 21.

⁴² This interpretation of Article 21.3 of the UN model is not even mentioned by Yoshida (2019), though he does discuss other problems of its application.

⁴³ The Commentary on UN model Article 21.3 simply confirms that it 'allows the State in which the income arises to tax such income if its law so provides' and states that any double taxation due to its application should be relieved. Aside from the clear intent of Paragraph 3 of Article 21, it seems far-fetched to suggest that income from services is 'dealt with' under Article 7. This article deals with taxation of (net) profits and, of course, does not allow taxation of a non-resident unless there is a PE, whereas Article 21 refers to 'income' and withholding taxes apply to gross payments.

⁴⁴ Brazil has had such conflicts, resulting in an accommodation with Spain, but contributing to Germany's revocation of its treaty (Schoueri and Silva 2012: 188); in 2014 Brazil recategorised payments for technical assistance and services as royalties and, hence, taxable under treaties (Salerno, Bel, Dias, Landaluce, Vianello, and Vasquez 2014; Arnold 2017: 86). Kenya's taxation of fees for technical services paid to an affiliate in the same corporate group has been challenged based on this interpretation of the Other Income article and a court case was stayed pending the outcome of the MAP (Total Kenya 2020).

⁴⁵ The Commentary to new Article 12A (para. 62) states that technical services 'must involve the application by the service provider of specialized knowledge, skill or expertise on behalf of a client or the transfer of knowledge, skill or expertise to the client'. Although the term 'technical services' is not further defined, the Commentary states it should be given the ordinary meaning, which would override any wider meaning it may be given in domestic law (Arnold 2017: 110).

Another categorisation problem has arisen in relation to services involving the supply of computer software. Software applications are often supplied free to facilitate delivery of other services, payments for which would be taxable under Articles 12A or 12B. However, much business software is licensed and deduction of such costs by business users can cause significant tax losses for importing countries. These payments should be taxable under Article 12 of the model treaties, which covers royalties for copyright works.⁴⁶ However, in 1992 the OECD amended its interpretation of this article to specify that it does not apply to payments for rights to run or operate a computer program or distribute copies, only to the more extensive rights to modify it.⁴⁷ Payments for the rights to use software have been explicitly included in the royalties article in over 600 bilateral tax treaties. In 2021, the UN Committee agreed on the inclusion in its Commentary of an alternative to the OECD's interpretation of Article 12, but issues of interpretation still remain.⁴⁸ Even so, payments for services enabled by a computer application (e.g. for booking transport or accommodation) are not likely to qualify as payments for the right to use the application or software.

Largely due to these uncertainties, some countries introduced taxes targeted specifically at payments for digitalised services, notably India with its equalisation levy.⁴⁹ The new Article 12B approved by the UN Tax Committee is designed to plug this gap in tax treaties by allowing taxation of payments for automated digital services. The combination of Articles 12, 12A and 12B should adequately provide for the application of withholding taxes on the gross amount of the payments for all services. Maximum rates must be fixed when negotiating the treaty, and if different rates apply, the categorisation of the payment could affect the rate applicable. As discussed in Section 2.1 above, they apply to payments made by a person resident or located in the state, regardless of where the service is delivered. Alternatively, a country may prefer the wider version of Article 12A provided in the Commentary, which covers all services (United Nations 2017: 330-332). However, this alternative does not allow taxation of services performed outside the source country unless the fees are paid to a closely related enterprise.

The new Article 12B also includes an innovative option for net profits taxation, which will be discussed in the next section.

2.2 Taxing net profits

⁴⁶ This article allows taxation at source of payments for 'the use of, or the right to use' a range of rights to intellectual property, by analogy with the letting of tangible property.

⁴⁷ Article 12 allows source taxation of royalties, defined to include payments 'for the use of, or the right to use, any copyright', as well as patents. In the early 1990s some argued that computer programs should not be treated as creative works and protected by copyright, but as functional technical innovations and, hence, industrial property. The powerful business software lobbies secured both types of protection. Hence, many computer programs can now obtain patents and, since 1995, all members of the WTO have been obliged to give computer programs automatic copyright protection as literary works, by s.10 of the Agreement on Trade Related Property Rights (TRIPs). Thus, payments for any rights to use computer software fall within the plain meaning of royalties under Article 12. However, the OECD introduced confusion in 1992 by stating that payments for rights to operate a program by a user should be treated as business profits and not royalties (Commentary to article 12, para. 14). The proper question is whether the acts of copying concerned are protected by copyright: e.g. in many countries copying software onto a computer for private use is a permitted use (see the recent decision by the Supreme Court of India, *Engineering Analysis* 2021). Furthermore, when software is supplied in conjunction with the sale of a physical product (e.g. a car, or a 'smart' TV), especially when the user does not control operation of the software, the payment can be regarded as being for the product and not for rights to use the software. For further detail see BEPS Monitoring Group 2021.

⁴⁸ The paragraphs in the OECD commentary were also included in the UN model's commentary, but with the addition of a dissenting view from some members (United Nations 2017: 315). This alternative position was amplified in further revisions agreed in 2021 to the Commentary on UN model Article 12.

⁴⁹ Payments for digital advertising were judged to be neither fees for technical services nor royalties by a tribunal in *Right Florist* (2013), although the government subsequently won on some of the arguments in later decisions (Tandon 2018: 3-4); payments for provision of bandwidth services have also been held to fall outside both categories (*Reliance Jio* 2019). In these cases, the payments were deductible by the customer, but could not be taxed as the business profits of the service provider since it was a non-resident with no PE in India.

The concern with the impact of digitalised services has led to an increased focus on how to tax TNCs on their net profits in line with their activities in each country. It is now also accepted that this includes the country of sales, in view of the increasingly close connection between supplier and customer, especially for services. This suggests that receiving revenue from sales in a country is sufficient to create a taxable nexus with that country. As we have seen in Section 1.1, this was proposed in the Mexico model and was included as an option in the Commentary of the UN model of 1980. As discussed in the previous section, reliance on withholding taxes on the gross payments is largely due to the practical difficulties of determining net profits.

The new article 12B now, for the first time, provides a specific method for defining taxable net business income by apportionment, although only for automated digital services and at the option of the taxpayer. This allows the source state to give the beneficial owner of the revenue the choice of having the 'qualified profits' taxed at the source country's standard tax rate. The qualified profits would be calculated formulaically, as 30% of the amount resulting from applying the profitability ratio of the TNC group concerned (or of its relevant business segment) to the gross revenue from the relevant services in that country. Under this option, the tax payable would be directly related to the activity's profitability for the TNC as a whole.⁵⁰

Pillar One of the BEPS project also proposes a formulaic method, but the formula envisaged is a fixed percentage, decided politically, unrelated to each TNC's actual profitability. Also, as discussed in Section 1.2 above, the Pillar One blueprint includes rules for defining the source of revenues. To deal with the rather complex rules for income allocation and to avoid double taxation, the blueprint envisages that reporting, audit and tax assessment would be primarily by the tax authority of the TNC's parent, with review by a representative panel from countries concerned. In contrast, Article 12B defines the source as the country of residence of the payor and uses a simpler withholding mechanism for collection.

Several countries have recently explored options for source taxation of business income from services, testing their validity under existing international tax rules. For example, in 2018, Argentina's federal tax administration, the Administración Federal de Ingresos Públicos (AFIP), issued opinions that digital ride-sharing platforms could be taxed on the income from passengers in Argentina. This was based on the view that such platforms provide transportation services through the drivers and, hence, could be considered to have a services PE in India. It has been reported that a challenge has been made to this interpretation of Article 5.3.b under the 'mutual agreement procedure' (MAP) of the Argentina-Netherlands treaty since the company in question is resident in the Netherlands (Teijeiro and Vázquez 2019: 11).⁵¹ As no tax assessment has been published, it is not known how the taxable income would be calculated.

⁵⁰ The UK's DST also gives the taxpayer an option for taxation on net profit, calculated as 80% of the operating margin on the relevant UK sales (UK Finance Act 2020: s.48). The operating margin takes account of the operating expenses attributable to the UK revenue, whereas the proposed UN Article 12B refers to the group's profitability ratio on that business worldwide.

⁵¹ The company is presumably Uber, see Cicin-Sain 2020.

In 2018, India introduced the concept of 'significant economic presence' for taxation of non-residents on their income through a 'business connection' in India. This applies to transactions exceeding a prescribed amount in aggregate and is not limited to digitalised transactions, although mainly aimed at them. This was followed in 2019 by a discussion draft on the determination of taxable income in such cases, published for public comment. It proposed the introduction in India's domestic law of a formulary method to define profits derived from India. The proposal is to multiply the revenues from sales in India by the global operational profit margin of the TNC and then attribute the taxable profits using an apportionment method applying a 3-factor formula of sales, employees and assets (India 2019: Paras. 150, 159, 199).⁵² If enacted, the applicability of this method would depend on the interpretation of any relevant treaty. The 2019 discussion draft pointed out that India's tax treaties are generally based on the UN model and, hence, include provisions for a services PE, as well as for formulary apportionment in determining income attributable to a PE. As shown in Section 2 above, a substantial number of treaties in force contain these provisions, so other countries could consider adopting this approach.

Such moves have not been limited to digitalised services. In 2015, it was reported that the tax authority of Saudi Arabia, the Department of Zakat and Income Tax (DZIT), had changed its interpretation of the taxable nexus for services, adopting the position that no physical presence is needed even of personnel, only that the services are delivered for the requisite period (normally 183 days) (EY 2015). As discussed in Section 1.1 above, some members of the UN Tax Committee considered that this is a valid interpretation of Article 5.3.b in the UN model, although OECD member states reject this view. An appeal by the taxpayer arguing that the DZIT interpretation was contrary to the Saudi Arabia-Netherlands tax treaty was upheld (Gidirim 2016), so it seems that the ruling would not be applied if there is such a conflicting treaty.

Like Saudi Arabia, Nigeria has also long been concerned by the erosion of the tax base due to provision by non-resident entities of engineering and other services in the oil and gas sector. Nigerian legislation requires any foreign company intending to do business in Nigeria to incorporate a local affiliate (Companies and Allied Matters Act: s.54),⁵³ thus side-stepping the nexus requirement in tax treaties. To determine the net profits of such a taxable person, Nigeria's income tax law (Section 30) allows the Federal Inland Revenue Services (FIRS) to assess profits tax on a 'fair and reasonable percentage' of turnover. It seems that this is done by charging the standard corporate income tax rate of 30% on a 'deemed profit' of 20% of the turnover, an effective tax rate of 6% of the turnover. However, TNCs can separate the activities so that they can attribute some elements, such as design and consultancy, to an offshore entity. If the payment for these elements is made outside Nigeria, a withholding tax could not apply. In such circumstances, the FIRS has taken the view that the local subsidiary can constitute a PE of the foreign entity, although this has led to conflicting court decisions. (See Ndajiwo 2020: 14-15).

2.3 Aligning with and Reshaping International Tax Rules

⁵² The employee factor would be a 50:50 weighting of manpower and wage costs; for enterprises whose SEP is due to the number of users, it proposed modifications of the formula; where the TNC is globally loss-making, it proposed a minimum rate of 2% of gross revenue or turnover derived from Indian operations.

⁵³ This does not apply to foreign companies exempted under a treaty, presumably to comply with provisions of investment treaties that grant a right of establishment.

Tax treaties can be a significant restriction on national tax policy since they are directly incorporated into domestic law in most countries, in different ways, creating rights for non-residents. They can even override conflicting provisions of national tax law, giving non-residents tax advantages over local companies. Treaties are negotiated between governments, generally with little public or parliamentary scrutiny. Often the impetus is political and driven by the assumption that they will stimulate foreign investment with no real assessment of the impact on either investment or tax revenue and sometimes even no involvement of the revenue authority (Mutava 2019). Fortunately, this is now changing, with a growing awareness of the need for careful scrutiny of proposed treaties and a re-evaluation and, where necessary, renegotiation of existing ones.⁵⁴

Governments can and should renegotiate or withdraw from unsuitable treaties, particularly if they result in tax losses due to treaty-shopping.⁵⁵ To protect their right to tax income from services performed or paid for in the country, they should ensure that their treaties allow a suitable withholding tax. Where their treaties include the UN model's Other Income article, countries can clarify that this justifies the application of a withholding tax.⁵⁶ This can be made even more explicit by the inclusion in treaties of provisions based on Articles 12, 12A and 12B of the UN model, or the broad version of 12A in the Commentary. Alternatively, where treaties include Articles 5.3.b and 7.4, net profits could be taxed, using an apportionment methodology, although some may contest this.

Fortunately, developing countries generally have few tax treaties, so compliance with treaty provisions should not determine national tax policy. Treaties are supposed to encourage direct investment between the two states concerned; hence treaty benefits should only be available to genuine residents of the treaty partner. Some consider that even one treaty can open the way for all TNCs since they can exploit the treaty system by routing activities and transactions through affiliates resident in suitable jurisdictions. However, this can be countered by applying rules against treaty-shopping or treaty abuse, and countries should ensure the inclusion of suitable anti-abuse provisions both in domestic law and in all their treaties.

⁵⁴ Notably, in Kenya the Tax Justice Network's legal challenge to a proposed treaty with Mauritius (Mutava and Hearson 2019), has led to public debate, with the publication of proposed treaties and their scrutiny by the National Assembly. OECD countries have also come under pressure to evaluate whether their treaties are development-friendly and some, such as Ireland and the Netherlands, have attempted such reviews. See, for example, the debate in Ireland's parliament on 20 September 2018, on the treaty signed with Ghana (Dáil Éireann 2018).

⁵⁵ For example, treaties with Mauritius have been cancelled by Senegal (2019) and Zambia (2020), and renegotiated by South Africa (2013), Rwanda (2013), and India (2016).

⁵⁶ This could be done by individual countries or collectively; for example, ATAF could revise the Commentary to this article in its model treaty, which is based on the UN model.

This has now been facilitated through the commitment for members of the Inclusive Framework on BEPS to include a principal purpose test (PPT) in all their treaties. The quickest and easiest way to achieve this is through the so-called multilateral instrument (MLI) on BEPS (OECD 2016).⁵⁷ However, progress has been surprisingly slow: by mid-2020, only some 370 treaties had been amended to comply with this minimum standard.⁵⁸ This is partly because many signatory states have yet to ratify the MLI, while a significant number have not even signed it, although it is open to all states. Also, states can decide which of their existing treaties to designate as covered by the MLI, and unlisted treaties must be separately renegotiated.⁵⁹ However, there should be no need to link the inclusion of this minimum standard to any wider treaty renegotiation; its inclusion should be regarded as automatic.

The inclusion of a PPT provision in all treaties would be a significant step towards ending treaty shopping.⁶⁰ In particular, it could be used to prevent the use of conduits in low-tax jurisdictions to provide services from offshore unless these entities are genuinely carrying out the relevant activities. To clarify this, the Commentary includes an example discussing the application of the PPT to an affiliate providing management, financial, or other services to other affiliates in a region.⁶¹ While it suggests that the choice of a low-tax location for such an affiliate does not in itself justify denial of treaty benefits, it does make clear that the affiliate must be shown to assume real risks and exercise substantive economic functions through its own appropriately qualified personnel. This is rarely likely to be the case for conduit entities. A more vigorous application of provisions against treaty shopping would protect countries against abuse of tax treaties that undermines their tax base.

Another advantage for developing countries is that their treaties are often based on the UN model and, hence, generally provide stronger protection of source taxation. However, as we have also seen, the application of many of these provisions depends on their interpretation. This has tended to disadvantage developing countries because expertise in international tax, like many other fields, is dominated by the perspectives of those who can command the most resources in its production. The processes of interpretation of tax treaties have been dominated by experts from capital-exporting countries and paid advisers of TNCs. They are ever-present in the key arenas, both where concepts are formulated (such as professional congresses and publications) and where norms are established and applied (such as writing commentaries and guidelines and resolving disputes). Unsurprisingly, they have generally supported the perspective that tax treaties' restriction of source taxation is necessary and desirable to stimulate foreign investment. The fundamental flaws of the international tax system, which became evident particularly following the great financial crisis in 2008-9, have led to the recent rethinking of international tax rules and the possibility of a paradigm shift (Picciotto 2021). This should aim to align the taxation of TNC profits with where activities take place, which generally means the source country.

⁵⁷ Countries can also include these provisions through bilateral negotiations. The BEPS minimum standard allows three options: (i) a PPT, (ii) a PPT combined with a 'simplified' limitation of benefits provision (also included in the MLI) and (iii) a more detailed limitation of benefits provision together with detailed anti-conduit rules. The third option was included because the US would not accept the PPT, and this is one reason the US has not joined the MLI.

⁵⁸ As at 1 July 2020 (OECD 2021: Para. 46).

⁵⁹ For example, Mauritius, initially listed only 23 treaties as covered when it signed the MLI in 2017, excluding almost all its treaties with other African countries and announcing its intention to deal with them bilaterally. On ratification in 2019, all its treaties were listed as covered, but many are still not amended because many of its treaty partners are not yet MLI parties.

⁶⁰ The PPT has now also been included as Paragraph 9 of Article 29 of both the OECD and the UN models and the commentary to this provision adopted in the BEPS project report on Action 6 has been included as Paragraphs 169-182 of the OECD Commentary on Article 29, which are reproduced also in the UN model's Commentary.

⁶¹ Example G in Paragraph 182 (United Nations 2017: 794-5).

Hence, much can be done to reshape international tax rules by adopting interpretations that appropriately protect source taxation. Countries should make their interpretation clear to provide more certainty for investors. Several examples of provisions with disputed meanings have been discussed in earlier sections of this paper. These include in particular:

- (i) that the time threshold in the Services provision in Article 5.3.b applies to the period for which the services are furnished and not necessarily the physical presence of personnel (Section 1.2 above);
- (ii) that the additional Paragraph 3 of the Other Income article in the UN model allows the source state to introduce a withholding tax on payments for items not already specified in the treaty (Section 1.1);
- (iii) that Article 12 on Royalties applies to payments for the right to use the copyright in computer programs or software, including the right to operate the program (Section 2.1);
- (iv) that the independent entity principle in Articles 7 and 9 refers to the right to adjust accounts to ensure a fair allocation of profits, and is not incompatible with apportionment (Section 1.3);
- (v) that Article 7.4 allows attribution of profits to a PE based on apportionment of the TNC's global profits and that an affiliate of the TNC can be treated as a PE and taxed on this basis.

It is important that source countries act together to ensure an appropriate interpretation of these provisions. In principle, this should be the role of the UN Tax Committee. In practice, however, it has aimed to try to find compromises between its diverse membership, a third of whom come from OECD countries. Indeed, these grey areas and disputed interpretations have generally resulted from formulations of the model treaty provisions that, deliberately or not, papered over the cracks of divergent views. The task of the UN Committee is made particularly difficult because of the coalescence, in the specialist technical discourse on treaties and their interpretation, around an orthodoxy that is dominated by the OECD perspective. Its recent work has begun to strike a more independent path, but this needs to be strengthened by developing technical capacity that is able and willing to challenge the dominant orthodoxy. This could perhaps be provided through regional organisations such as ATAF, as well as the strengthening of the capacity not only of revenue authorities but of wider civil society in developing countries to engage in these debates.

Conclusions

The focus on taxation of international services in this paper shows the need for reforms that go beyond current concerns about digitalisation and consumer services. The growth of services and their internationalisation date back to the 1970s and have exacerbated economic imbalances and underdevelopment. The restrictions on source taxation in international tax rules have greatly contributed to these problems by undermining the tax base of services-importing countries while also facilitating TNC tax avoidance more generally. Furthermore, these limitations have created competitive disadvantages for local services providers and discouraged the creation of local jobs in source countries by TNCs, particularly in high-value aspects of services provision.

Countries that are primarily services importers have attempted to resist the strengthening of residence-based taxation led by the OECD. Hence, provisions allowing a wider scope for source taxation have been retained in the UN model convention and in actual treaties. However, these have been subject to continuing conflicts and contestation over their formulation and interpretation, leaving a legacy of ambiguity and confusion.

Digitalisation has sparked a dramatic reversal of perspective by OECD countries. This has now led to a rapid acceptance of principles they have long resisted; that taxation of TNCs can be based on apportionment of an appropriate fraction of their global income and by countries from where they derive income, regardless of physical presence. This opens up the prospect for a fundamental paradigm shift in international taxation, reviving understandings present since its origins but which had become eclipsed since the 1970s.

However, the reshaping of the system depends not just on international political and economic power relations. It also requires major changes in the mindset of the international tax experts who mould and manage the rules and their interpretation and application. This entails more than simply improving the training of specialists from developing countries, which may end up only reproducing and extending an inappropriate orthodoxy. It involves working constructively together to develop a critical analysis of the system to provide a basis for much-needed reforms.

References

- AB LLC and BD Holdings (2015) *In the Matter of AB LLC and BD Holdings and the Commissioner of the South African Revenue Service*, Case No. 13276, Tax Court, Johannesburg
- Arnold B. J. (2011) 'The Taxation of Income from Services under Tax Treaties: Cleaning Up the Mess – Expanded Version', *Bulletin for International Taxation* 65.2: 59-68
- Arnold B. J. (2017) 'Taxation of Income from Services', in A. Trepelkov, H. Tonino and D. Halka (eds) *United Nations Handbook on Selected Issues in Protecting the Tax Base of Developing Countries*, New York: United Nations
- ATAF (2018) 'Resolving African Challenges in Transfer Pricing. ATAF makes critical contribution to affect global tax standards', *Medium*, <https://medium.com/african-tax-administration-forum/resolving-african-challenges-in-transfer-pricing-44868cfacb64>
- ATAF (2020a) *Digital Services Taxation in Africa. Policy Brief*, Pretoria: ATAF.
- ATAF (2020b) *Suggested Approach to Drafting Digital Services Tax Legislation*, Pretoria: ATAF
- Avi-Yonah R. S. and Tinhaga Z. P. (2014) *Unitary Taxation and International Tax Rules. International Centre for Tax and Development*, ICTD Working Paper 26, Brighton: ICTD
- Beer S. and Loepnick J. (2018) *The Cost and Benefits of Tax Treaties with Investment Hubs: Findings from Sub-Saharan Africa*, IMF Working Paper /18/227, Washington D.C.: IMF
- BEPS Monitoring Group (2021) 'Payments for Software Under the UN Model Convention', <https://www.bepsmonitoringgroup.org/news/2021/3/18/payments-for-software-under-the-un-model-convention>
- Carroll MB (1933) *Taxation of Foreign and National Enterprises. Volume 4: Methods of Allocating Taxable Income. Document No. C.425(a). M.217(a). 1933. II.A. Geneva: League of Nations.* <http://setis.library.usyd.edu.au/pubotbin/toccer-new?id=cartaxa.sgml&tag=law&images=acdp/gifs&data=/usr/ot&part=0>
- Cicin-Šain N. (2020) 'Taxing Uber' in J. Marin, S. Petrović, M. Mudrić and H. Lisičar (eds) *Uber—Brave New Service or Unfair Competition Legal Analysis of the Nature of Uber Services*. Springer, New York City: Springer Link
- Dáil Éireann (2018) *Taxation Agreements: Motions. Select Committee on Finance, Public Expenditure and Reform. 20 September.* https://www.oireachtas.ie/en/debates/debate/select_committee_on_finance_public_expenditure_and_reform_and_taoiseach/2018-09-20/3/
- Engineering Analysis (2021) *Engineering Centre of Excellence Private Limited v. Commissioner of Income Tax and another*. Supreme Court of India. https://main.sci.gov.in/supremecourt/2011/38137/38137_2011_33_1501_26629_Judgement_02-Mar-2021.pdf

- Erriah DR (2020) The History of Mauritius' Double Tax Conventions. In: Lang M and Reimer E (eds) *The History of Double Taxation Conventions in the Pre-BEPS Era*. Amsterdam: IBFD.
- EY (2015) Saudi Arabian tax authorities introduce Virtual Service PE concept. EY Global Tax Alert, 30 July. https://www.ey.com/en_gl/tax-alerts/saudi-arabia-clarifies-permanent-establishment-force-of-attraction-rules
- Falcão T. and Michel B. (2018) 'Scope and Interpretation of Article 12A: Assessing the Impact of the New Fees for Technical Services', *British Tax Review*, 422-440
- Forsgren C., Song S. S. and Horváth D. (2020) 'Digital Services Taxes. Do They Comply with Tax and Trade Agreements and EU Law?', *TradeLab*, <https://www.tradelab.org/single-post/2020/05/10/digital-services-taxes-do-they-comply-with-tax-and-trade-agreements-and-eu-law>
- G24 (2019) Proposal for Addressing Tax Challenges Arising from Digitalisation. Intergovernmental Group of Twenty Four. www.g24.org/wp-content/uploads/2019/03/G-24_proposal_for_Taxation_of_Digital_Economy_Jan17_Special_Session_2.pdf
- Gerwig A (2019) The Service PE (Article 5). In: Binder A and Wöhrer V (eds) *Special Features of the UN Model Convention*. Vienna: Linde Verlag.
- Gidirim V. (2016) 'Taxation of Foreign Multinational Enterprises Conducting Business in and with Saudi Arabia', *Bulletin for International Taxation* 70.4
- Govind S. P. (2012) 'The International Tax Treatment of Cross-Border Services', *Bulletin for International Taxation* 66.1: 1-6
- Hearson M (2020) *Corporate Tax Negotiations at the OECD: What's at Stake for Developing Countries in 2020?*, ICTD Summary Brief 20, Brighton: ICTD
- Hohenwarter D., Kofler G., Mayr G. and Sinnig J. (2019) 'Qualification of the Digital Services Tax Under Tax Treaties', *Intertax* 47.2: 140-147
- IBFD (n.d.) Tax Treaties Database. www.ibfd.org/IBFD-Products/Tax-Treaties-Database
- India (2019) Proposal for amendment of the rules for profit attribution to a permanent establishment. Ministry of Finance, Department of Revenue, Central Board of Direct Taxes (Foreign Tax and Tax Research - I). incometaxindia.gov.in/news/public_consultation_notice_18_4_19.pdf
- Jogarajan S. (2018) *Double Taxation and the League of Nations*, Cambridge: CUP
- Kelsey J., Bush J., Montes M. and Ndubai J (2020) 'How 'digital trade' rules would impede taxation of the digitalised economy in the Global South', *Third World Network*, <https://www.twn.my/title2/wto.info/2020/ti200812.htm>
- Kirsch M. S. (2010) 'The Role of Physical Presence in the Taxation of Cross-Border Personal Services', *Boston College Law Review* 51: 993-1080

- Kleinbard E. D. (2011) 'Stateless Income', *Florida Tax Review* 9: 700-773
- Kobetsky M. (2011) *International Taxation of Permanent Establishments: Principles and Policy*, Cambridge: CUP
- KPMG (2019) Taxation of the Digitalized Economy.
<https://home.kpmg/xx/en/home/insights/2019/06/tnf-digital-economy0.html>
- KPMG (2020) KPMG's Taxation of the digitalized economy – Developments summary.
<https://home.kpmg/xx/en/home/insights/2019/06/tnf-digital-economy0.html>
- Langbein S. I. (1986) 'The Unitary Method and the Myth of Arm's Length', *Tax Notes* 30: 625-681
- League of Nations (1928) *Double Taxation and Tax Evasion: Report Presented by the General Meeting of Government Experts on Double Taxation and Tax Evasion*, Document C.562.M.178.1928.II, Geneva, https://biblio-archiv.unog.ch/Dateien/CouncilMSD/C-88-M-88-1946-II-A_EN.pdf.
- League of Nations (1935) *Report of Fiscal Committee to Council on the Fifth Session of the Committee*, Document C.252.M.124 1935 IIA, Geneva, <http://www.uni-heidelberg.de/institute/fak2/mussgnug/historyoftaxdocuments/normtexte/voelkerrecht/V00016.pdf>
- League of Nations (1946) *London and Mexico Model Tax Conventions Commentary and Text*, C.88.M.88.1946.II.A, Geneva, https://biblio-archiv.unog.ch/Dateien/CouncilMSD/C-88-M-88-1946-II-A_EN.pdf
- Le Gall JP (2007) The David R. Tillinghast Lecture Can a Subsidiary Be a Permanent Establishment of its Foreign Parent? Commentary on Article 5, par. 7 of the OECD Model Tax Convention. *Tax Law Review* 60: 179-214.
- Loungani P., Mishra S., Papageorgiou C. and Wang K. (2017) *World Trade in Services: Evidence from A New Dataset*, IMF Working Paper No. 17/77, Washington D.C.: IMF
- Magwape, M. (2021) 'Digital Sales Taxes in Africa and the Covid-19 Pandemic', *AfronomicsLaw*, <https://www.afronomicslaw.org/category/analysis/digital-sales-tax-africa-and-covid-19-pandemic>
- Morgan Stanley (2007) *DIT (International Taxation), Mumbai v Morgan Stanley & Co.* India Supreme Court. *Supreme Court Cases* 7:1. Case 2914/2007.
<https://main.sci.gov.in/jonew/judis/29205.pdf>
- Mutava C. N. (2019) *Review of Tax Treaty Practices and Policy Framework in Africa*, ICTD Working Paper 102, Brighton: ICTD
- Mutava C. N. and Hearson M. (2019) 'Reflections on the Kenya-Mauritius Tax Treaty Ratification', *ICTD*, <https://www.ictd.ac/blog/reflections-kenya-mauritius-tax-treaty-ratification/>
- Ndajiwo M (2020) *The Taxation of the Digitalised Economy: An African Study*. ICTD Working Paper 107. Brighton: ICTD.

OECD (1963) *Report of the Fiscal Committee on the Draft Convention for the Avoidance of Double Taxation with Respect to Taxes on Income and Capital among the Member Countries of the OECD*, Document C(63) 87, <https://www.taxtreatieshistory.org/>

OECD (2000) *Issues Related to Article 14 of the OECD Model Tax Convention*

OECD (2005) *E-commerce: Transfer Pricing and Business Profits Taxation*

OECD (2008) *Report on the Attribution of Profits to Permanent Establishments. Committee on Fiscal Affairs*. Paris: OECD.

OECD (2015) *Addressing the Tax Challenges of the Digital Economy ACTION 1: 2015 Final Report*. Paris: OECD.

OECD (2016) *Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting*. Paris: OECD.

OECD (2017a) *Model Tax Convention on Income and on Capital*. Paris: OECD. Available at <https://www.oecd.org/ctp/treaties/model-tax-convention-on-income-and-on-capital-condensed-version-20745419.htm>

OECD (2017b) *Mechanisms for the Effective Collection of VAT/GST Where the Supplier is not located in the Jurisdiction of Taxation*. Paris: OECD.

OECD (2018) *Additional Guidance on the Attribution of Profits to Permanent Establishments. BEPS Action 2*. Paris: OECD.

OECD (2019) *The Role of Digital Platforms in the Collection of VAT/GST on Online Sales*. Paris: OECD.

OECD (2020a) *Statement by the OECD/G20 Inclusive Framework on BEPS on the Two-Pillar Approach to Address the Tax Challenges Arising from the Digitalisation of the Economy*. Paris: OECD.

OECD (2020b) *Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint*. Paris: OECD.

OECD (2021) *Prevention of Tax Treaty Abuse – Third Peer Review Report on Treaty Shopping*. Paris: OECD.

Picciotto S. (1992) *International Business Taxation*. London: Weidenfeld & Nicolson. Electronic version available at <http://taxjustice.blogspot.be/2013/06/international-business-taxation.html>

Picciotto S. (2013) *Is the International Tax System Fit for Purpose, Especially for Developing Countries?*, ICTD Working Paper 13, Brighton: ICTD

Picciotto S. (2016) *International Tax Disputes: Between Supranational Administration and Adjudication*, ICTD Working Paper 55, Brighton: ICTD

Picciotto S. (2018) 'International tax, regulatory arbitrage and the growth of transnational corporations' *Transnational Corporations Special Issue on Investment and International Taxation* 25.3, Part 2: 27-53

- Picciotto S. (2019) 'The Interactions of National and International Tax Law and the Kenya-Mauritius Tax Treaty', *Journal on Financing for Development* 1.1
- Picciotto S. (2021) 'Technocracy in the Era of Twitter. Between Intergovernmentalism and Supranational Technocratic Politics in Global Tax Governance', *Regulation & Governance* 15.3
- Salerno J. A., Bel M., Dias M., Landaluce D., Vianello R. and Vazquez J. (2014) 'Brazil Issues Guidance on Service Fee Payments under Treaties', *Journal of International Taxation* 25.9
- Schoueri L. E. (2020) 'Article 21 - Other Income – Global Tax Treaty Commentaries' in: *Global Tax Treaty Commentaries*, Global Topics Amsterdam: IBFD
- Schoueri L. E. and Silva N. M. (2012) 'Brazil' in: Lang M., Pistone P., Schuch J. and Staringer C. (eds) *The Impact of the OECD and UN Model Conventions on Bilateral Tax Treaties*, Cambridge: CUP
- Surrey S. S. (1978) 'The UN Group of Experts and the Guidelines for Tax Treaties between Developed and Developing Countries', *Harvard International Law Journal* 19: 1-220
- Tax Notes (n.d.) Worldwide Tax Treaties. www.taxnotes.com/worldwide-tax-treaties.
- Teijeiro G. O. and Vázquez J. M. (2019) 'Taxation of the Ride-Sharing Economy: Source Taxation through Service Permanent Establishment Provisions Revisited – The Case under the Argentine Treaty Network', *Bulletin for International Taxation* 73.12
- TJN (2020) 'Narrative Report on Mauritius', *Tax Justice Network, Financial Secrecy Index*, <https://fsi.taxjustice.net/PDF/Mauritius.pdf>
- Total Kenya (2020) 'Total Kenya Ltd v. Commissioner of Domestic Taxes', *Tax Appeal Tribunal, Nairobi*, <http://kenyalaw.org/kl/index.php?id=8380>
- United Nations (1974) *Guidelines for Tax Treaties Between Developed and Developing Countries*, Doc. ST/ESA/14
- United Nations (1978) *Work of the Group of Experts on Tax Treaties Between Developed and Developing Countries*, Doc. E/1978/36
- United Nations (1980a) *Tax Treaties Between Developed and Developing Countries. Eighth Report*, Doc. ST/ESA/101
- United Nations (1980b) *United Nations Model Double Taxation Convention between Developed and Developing Countries*, Doc. ST/ESA/102
- United Nations (2010) *Manual on Statistics of International Trade in Services (MSITS)*
- United Nations (2013) *Committee of Experts on International. Cooperation in Tax Matters. Report on the ninth session, E/2013/45-E/C.18/2013/6*
- United Nations (2014) *Committee of Experts on International. Cooperation in Tax Matters. Report on the tenth session, E/2014/45-E/C.18/2014/6*

United Nations (2017) *United Nations Model Double Taxation Convention between Developed and Developing Countries*, ST/ESA/PAD/SER.E/. Available at <https://www.un.org/esa/ffd/publications/model-double-taxation-update-2017.html>

United Nations (2021) *Tax consequences of the digitalized economy – issues of relevance for developing countries. Co-Coordinator's Report, Document E/C.18/2021/CRP.1*

Wells B. and Lowell C. (2012) 'Tax Base Erosion and Homeless Income: Collection at Source is the Linchpin', *Tax Law Review* 65: 535-617

Wells B. and Lowell C. (2013) 'Income Tax Treaty Policy in the 21st Century: Residence vs. Source', *Columbia Journal of Tax Law* 5: 1-39

WTO (2019) *World Trade Report. The future of services trade.*

Yoshida F. S. P. (2019) 'Additional Provisions for the Taxation of Other Income (Article 21)' in: Binder A. and Wöhrer V. (eds) *Special Features of the UN Model Convention*, Vienna: Linde