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Tax consequences of the digitalized economy

TAX CHALLENGES IN THE DIGITALIZED ECONOMY:

Selected Issues for Possible Committee Consideration[1]

Summary

This paper provides an analysis and evaluation of some current and prospective issues relating to the taxation of the digitalized economy. It addresses, for example: the definitional issues of the terminology surrounding the digitalized economy; the interaction between the traditional "permanent establishment" rule in tax treaties and the new way of business, due to the lack of physical presence, and also gives examples of unilateral action taken by states to address digital economy issues;

There are challenges in the digitalized economy, but also opportunities, including the chance to carefully but critically address the modern relevance of rules, including treaty rules, and also the opportunities to make tax administrations more efficient and effective.

This note addresses also possible roles of the United Nations Committee of Experts on International Cooperation in taking a leadership role in addressing approaches that best help developing countries meet the challenges of the digital economy, and are in a position to take advantage of the opportunities it presents, especially in tax administration. Such work would engage with the work of other organisations, including the OECD, but would be proactive, rather than reactive in approach.

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Introduction

Digitalization has been stated to be the most significant development of the economy since the industrial revolution.[2] This development creates opportunities for innovation, investment, new business, jobs and it is one of the main drivers of sustainable development.[3] However, the taxation of the digital economy has not fully reflected the advantages created by the spread of technology.

2. The lack of a need for physical presence as well as the increased mobility of the digital market has a negative impact on government revenues as compared with traditional ways of doing business, and the issue is to what extent, if any, should there be an international effort to address that trend. Greater international coherent actions are in any case needed to identify and collect the appropriate profits from engagement in the digitalized economy.

3. Even if a single approach cannot be agreed, identifying the pros and cons, domestically and in the international context, of different approaches and encouraging consistent wording internationally when the policy intent is the same, as well as promoting consistent approaches in the administration of similarly worded provisions, would be a valuable contribution to international tax cooperation.

Definitional issues

4. In an attempt to analyse the above topic, there are two main concepts, which need to be examined. **Firstly, the term "digital economy"** has been a matter of discussion for the past two decades, but countries have not agreed on a generally accepted definition.

5. **Second, the aspect of "value creation"** is an essential term, in order to comprehend the basic concept of what countries are aiming to tax, yet where value is

[2] Peitz, Martin, and Joel Waldfogel, eds. *The Oxford Handbook of the Digital Economy*. Oxford University Press, 2012.
[3] United Nations, *Measuring Sustainable Development*, United Nations Economic Commission for Europe, New York and Geneva, 2009

created, by whom and what that created value is, can all be subject to considerable differences of opinion.

6. Both these terms call for a generally accepted understanding when they are referenced, at least at a general level. The terms "digital economy" and "value creation" are not defined by the BEPS project in any detailed sense.[4] For example, even though there is no definition of the digital economy, suggestions are proposed including the term, such as imposing a withholding tax on payments related to the digital transaction. A definition that is generally accepted (even though this probably necessarily means at this stage it is not closely defined) needs to be an essential part of any recommendations that aim at targeting the digital market. This is not just relevant to encouraging ease of compliance by taxpayers and reducing double taxation, but also to easing tax administration burdens and concerns.[5]

7. Any definition ought to be reasonably clear, useful, corresponding to the purpose of the proposal, non-dictionary[6], universal, and minimize the potential for tax avoidance now and in the foreseeable future, especially when it impacts on the language of treaties likely to last for decades. The UN Tax Committee can play an important role, in view of the balance and broad based expertise of itself and its Subcommittees, in clarifying these definitional issues, working with other organisations and stakeholders.

8. In the case of the term "digital economy", the dangers involved are that the definition ought not to be so limited as to exclude essential goods or services, but we will need to indicate what characteristics distinguish digital aspects of the economy from other, more traditional, aspects of the economy, as the two are so intertwined. Some have preferred the term "digitalized" to "digital" in this context, on the basis that there is no

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[4] OECD, *Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report*.

[5] Brauner, Yariv, and Andres Baez Moreno. "Withholding taxes in the service of BEPS action 1: Address the tax challenges of the digital economy." (2015)

[6] The reference to a non-dictionary definition suggests that the definition should not be of an overly technical nature, as the definition needs to provide clarity to both taxpayers and the tax administration.

distinct digital economy, but rather the global economy as a whole has been digitalized.[7] The use of the term "digital economy" in this paper should not be seen as a rejection of that proposition. Little effort has been made to start a discussion as to the definition, as in other international forums the term digital economy has pledged towards its natural meaning.

9. On the other hand, certainty could be enhanced if a definition is broadly accepted and sufficiently clear in its terms. A transparent dialogue to recognize the generally accepted principles and agree on the operational difficulties would convey greater clarity and the treaty negotiators will operate under more transparency.

10. Moreover, the main area of difficulty in defining value creation is that the technological features and digital business models constitute an illustration of integrated global value chains. Therefore, value creation and real economic activity concepts are not easy to identify.[8] The definition of value creation has to contain elements key to the understanding of the term, such as where the value is created, how much value is created in between transactions, the consumers role in the process and the areas that are important to different players in the economy. Currently, there is a lack of explanation as to whether there is a difference between the concepts of value creation, substantial activity and economic activity.[9] Different use of different terms could lead to unnecessary confusion. There is, then, a lack of consensus and guidance in understanding both the terminology of digital economy and value creation. Further efforts must be placed to reach a generally accepted definition, and to be transparent about any differences preventing such an agreement. The UN Tax Committee could play an important catalytic role in this.

11. Additionally, "ring-fencing" the digital economy as distinct from the non-digital economy introduces the issue of the consistent treatment between online retailers and the

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[7] See ICAEW Communities, Tax News, available at: (https://ion.icaew.com/taxfaculty/b/weblog/posts/oecdbepswebcastanupdateonprogress?Redirected=true). The BEPS Monitoring group (BEPS Monitoring Group, April 2014 available at: https://bepsmonitoringgroup.wordpress.com/2014/04/) put forward the terminology difference between the use of the terms "digital" and "digitalized" in response to the OECD Public Discussion Draft on Action 1: Addressing the Tax Challenges of the Digital Economy (OECD, 2014), available at: https://www.oecd.org/ctp/tax-challenges-digital-economy-discussion-draft-march-2014.pdf.

[8] Devereux, Michael P., and John Vella. "Are we heading towards a corporate tax system fit for the 21st century?" *Fiscal Studies* 35.4 (2014): 449-475.

[9] Ibid 7

"brick-and-mortar" retail model. It is assumed that ring-fencing the digital economy could be an impossible project and that the neutrality principal as between different manifestations of the economy and global value chains interacting with it, should be a priority.

12. However, the fact that ring-fencing the digital economy is a challenging approach does not automatically provide a justification for the existence or the passive following of international tax approaches that may be showing their own inadequacies in "fitting in" with a changing world. The old rules are not doing justice to the new economy, and the PE concept in particular is either being manipulated by some participants in the digital economy, or is at least proving inadequate to meet its challenges. There is no obligation to follow the traditional treatment, when the establish principals are dissatisfactory. The old PE rules do not have more weight because they are the general norm. Moving forward and adjusting the current regime to be "fit for purpose" in modern conditions that are only likely to evolve further from current ways of doing business but will involve the interaction of the old ways and the new ways is perhaps a more adaptive approach than one based on ring-fencing the digital economy.

Unilateral Actions

13. This section aims at summarising some of the unilateral measures undertaken by countries around the world, since the beginning of the OECD BEPS project, in an attempt to adapt their domestic tax systems to the new cross-border business models which can use cutting edge technology, including the speed, reliability and volume of data transfer, to avoid the need to establish a taxable presence in the country where the profits arise, or the consumer market is located. The importance of the consumer market has re-emerged and the attitude of developing counties appears to be changing towards the traditional approaches, as being illustrated by the use of Fees for Technical Services article. Due to the lack of e international consensus on how to deal with taxation of the digital economy, and perhaps in some part with a view to influencing the international debate, many countries have decided to enact their own legislation to deal with the above problems.

14. The term "unilateral action" refers to any individual country attempt to capture "rents" (i.e. through the application of direct and indirect taxes) deriving from a digital activity without engaging into the renegotiation of a bilateral tax treaty, or without the need for consulting comprehensively with other countries. It is characterized by the adoption of new tax laws, or the re-interpretation of existing domestic laws or treaty provisions to adapt to an increasingly digitalised and globalised way of doing business. It is a "bottom-up" approach initiated by the countries, as opposed to a "top-down" approach or facilitated by, an international institution, although such bodies can play a key facilitating role in ensuring an interplay between bottom-up and top-down approaches to dealing with novel challenges and in reducing the number of approaches, as well as promoting transparency on unresolved differences. The OECD's decision to have a further report by 2018 and a final report in 2020[10] may actually encourage countries to take the unilateral initiative rather than wait for the results of that work, which they may not ultimately see as helpful in their situations, in any case.

15. There are various ways by which a sovereign state might decide to domestically legislate (consistent of course with any binding international obligations, such as under treaties). This is the approach taken by some developed world and (to a lesser extent) developing economies, in order to address the challenges faced by the digital economy. Developed countries were the first ones to initiate legislation based reform that would allow for the admission of unilateral actions to address the challenges of the digital economy. However, over time, some developing countries have picked up on that trend, and have legislated to address the issue.

16. The unilateral actions described in this paper cover India, Italy, China, Israel, France, Saudi Arabia, the UK, Australia, Hungary, Luxembourg and Netherlands. They can be divided into (i) VAT based measures, based on the geographical location of the consumer market; (ii) presumed allocation of profits to a domestic jurisdiction (either by making use of an existing PE approach as in the UK and Australian examples, or by

[10] OECD/G20 Base Erosion Profit Shifting Project, Addressing the Tax Challenges of the Digital Economy, Action 1: 2015 Report, paragraph 361, page 138.

requiring taxpayers to register in the country as a result of its significant economic digital presence); (iii) taxes for the use of the country's digital infrastructure (as in India's equalization levy); (iv) transfer pricing related measures (where transfer pricing rules are reformed to take into account the location of the consumer market, as in the Italian example); and (v) withholding taxes on certain types of digital transactions. A further form of unilateral measure might be through the application of border taxes to account for the digital activity, as per the United States' recent (but now apparently dormant) tax reform proposal, although this is not referenced in any of the examples below.

17. Developing countries perhaps have the most to gain from the introduction of policies aiming to address the digital economy. For one, unilateral actions driven by the digital economy have greater emphasis on withholding based structures, be it based on VAT, GST, income, or profit, allowing countries to increase their revenue collection abilities through what is often seen as a form of "country ownership" of a consumer market for goods and services or a digital infrastructure, despite the borderless nature of many digital activities. That is particularly relevant for countries with large consumer markets, or countries facing a lag in development, because it attributes the source country the right to tax without the need for *physical* presence in the markets.

18. A further argument is that this new way of doing business might lead countries to want to reinterpret (or render less relevant in a *de facto* sense) the permanent establishment concept, or add on to the existing concept of permanent establishment (perhaps through the creation of a "digital PE", much as with, as seen in the example of the fees for technical services article adopted by the 2017 version of the United Nations Model – article 12A), developing countries have already taken a leadership role in questioning traditional PE assumptions and their modern relevance.

19. Major changes to the PE concept would require the revision of the United Nations Model Double Taxation Convention between Developed and Developing Countries (UN Model)[11], as well (more directly) of bilateral treaties binding countries of course, the debate

[11] United Nations, *United Nations Model Double Taxation Convention between Developed and Developing Countries* (New York 2011).

on the pros and cons is one that developing countries may want to have under the aegis of the United Nations, even if also discussed in other fora.

20. The Committee of Experts in International Tax Cooperation (Tax Committee) is widely regarded as the only body in the world where developed and developing countries have equal standing in the *development* of tax policy norms (which should not be confused with important, but differing, *norm-implementing* bodies). The Tax Committee would therefore be an environment capable of providing developing countries, and Least Developed Countries, in particular, with equal standing when analyzing issues related to the regulation of unilateral actions in view of the demands of the digital economy, and the re-rationalization of the concept of permanent establishment in light of those changes. Developing a set of rules that are fit for purpose for all nations is to the benefit of all stakeholders in tax systems.

21. This topic is timely, and should be discussed now in light of the unilateral measures introduced by countries across the world, and the likelihood of greater regional cooperation on these issues. These measures are only made possible due to the lack of a common international framework to regulate the distribution and allocation of taxing rights between countries. This paper does not attempt to include an exhaustive list of the existing measures. It merely aims to reflect the practice by some countries, for illustration purposes. Further work may be mandated for this subject, upon the formation, for example, if the Committee so decides, of a Subcommittee on the Digital Economy.

India

22. India's Finance Bill 2016 introduced an equalization levy, the most recent legislation enacted in term of a digital tax.[12] The tax includes a surtax of 6%, levied on payments to foreign companies for online advertising services, when those companies do not hold a permanent establishment in India. The Indian resident taxpayer has the

[12] CBDT, *Proposal for Equalization Levy on Specified Transactions*, Report of the Committee on Taxation of E-Commerce (Feb. 2016), http://www.incometaxindia.gov.in/news/ report-of-committee-on-taxation-of-e-commerce-feb-2016.pdf.

obligation to withhold the tax upon remittance of the payment abroad.[13] The equalization levy was the Indian government's response to the issues raised in the OECD BEPS Report on Action 1 and follows one of the reform options that the OECD had discussed but not recommended in its Final Report on the tax challenges of the digital economy.[14] A key issue for on the digital economy is that they are a member of the developing world and a stand-alone nation of a huge consumer base. The authorities appear to consider it unreasonable to allow digital economies to take advantage of their market without the appropriate source base taxation.[15]

Italy

23. In 2013-2014, Italy debated the introduction of a VAT in digital economy; the implementation of this measure was firstly delayed and later repealed. There is one Bill currently debated in the parliament, however. Italy is discussing legislation to modify both its transfer pricing legislation and to apply a withholding tax on intermediates, also referred to as a "web tax". The goal of the proposed legislation on transfer pricing is to stipulate the use of valuations techniques other than cost-based indicators for determining the arm's length prices of digital transactions.[16] The web tax, if accepted, will impose withholding taxes at source and modify the PE status by introducing a minimum threshold of revenues and costs test for MNEs with presence in Italy.[17]

United Kingdom

24. The Financial Act of 2015[18], enacted the "diverted profits tax" in the UK. The regulation provides that all profits found to be "diverted" will be taxed at 25%. Profits are deemed to be diverted where a non-UK company seeks to avoid trading through a UK PE

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[13] Olbert, Marcel, and Christoph Spengel. "International taxation in the digital economy: challenge accepted?." *World Tax Journal:* 9.1 (2017): 3-46.
[14] Singh, Manoj Kumar. *Taxation of Digital Economy: An Indian Perspective*. *Intertax* 45.6 (2017): 467-481
[15] Ibid.
[16] G. Gallo, *Italy – Budget Law for 2014 – details* (7 Jan. 2014) News IBFD
[17] Marco Allena, *The Web Tax and Taxation of the Sharing Economy: Challenges for Italy*, European Taxation, 2017 (Volume 57), No. 7
[18] The Financial Act 2015, United Kingdom, Chapter 11, Part 3

and where a UK company enters into intra-group transaction lacking 'economic substance' which results in an effective tax mismatch. A practical example would be when a foreign tax paid is less than 80 per cent of the UK tax saved. The main objective of the proposal was to counteract arrangements used by large companies that would otherwise erode the UK tax base. It has been dubbed the "Google Tax", as it was rumoured to be focussed on addressing large digital MNEs, however it has been applied in other cases[19]. The above legislation was not well received by the academia, the businesses and different international organizations due to the generic approach of the legislation. Australia

25. Australia has followed the UK in taxing aspects of the digital economy by re-designed domestic rules. They introduced the Multinational Anti-Avoidance Law, which took effect from the 1st of January 2016[20] although the Diverted Profits Tax operated only from July 2017. The legislation was not specifically targeted towards the digital market, the reform is said to have targeted multinational companies generating sales in the country by running local initiatives but remotely concluding contracts with customers.[21]Bearing in mind that inspiration is clearly drawn from the UK legislation, it is assumed that the tax will influence the digital economy in the same way as the UK tax. Moreover, Australia has released an exposure draft legislation[22] to give effect to the announcement that digital currency will be treated like traditional forms of money for GST purposes. The legislation aims at avoiding the anomaly of taxing digital currencies twice, firstly, on the purchase of the currency and secondly, on their use. It is proposed that the legislation will have retrospective effect form the 1st of July 2017.

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[19] Julia Kollewe, "Smirnoff owner Diageo to pay HMRC £107m in 'Google tax' crackdown" (11 May 2017) *The Guardian*, https://www.theguardian.com/business/2017/may/10/diageo-to-pay-revenue-107m-in-google-tax-crackdown
[20] Tax Laws Amendment (Tax Integrity Multinational Anti-avoidance Law) Bill 2015, The Parliament of the Commonwealth of Australia, 2015
[21] EY, *Digital Tax Developments April 2016* (EY 2016), available at http://www.ey.com/Publication/vwLUAssets/ey-digital-developments-map-di- rect-tax-april-2016/$File/ey-digital-developments-map-direct-tax-april-2016.pdf.
[22] Exposure Draft Legislation, Treasury Law Amendment (Measures for a later sitting) Bill 2017: GST treatment of digital currency, July 2017 available at: https://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Consultations/2017/GST%20removing%20the%20double%20taxation%20of%20digital%20currency/Key%20Documents/PDF/Exposure_draft_-_GST.ashx

France

26. France has been considering the idea of taxing digital economy by the introduction of corporate taxes on income generated in the market country, the redefinition of the digital economy including the unpaid nature of work accomplished by Internet users and the identification of data generated by Internet users in a regular manner in the market country.[23] France recently changed administrations and the new administration has not stated if the previous administrations tax proposal will be abandoned or implemented. The main aim of this proposal is to tax tech giants according to their bandwidth and not their reported profits.[24] France also suggested attributing profits to jurisdictions, where users of social media services are located according to the destination principle instead of the origin principle.[25] The two concepts were further discussed in a report published by France Stratégie in 2015[26], which recommended two specific digital taxes. The first is a tax based on revenues in sales or advertising. The second is a tax based on activity such as number of users, flow of data or number of advertisers concerning collection of data. It is clear that the proposal targets at ring fencing the digital economy. In order for the existing system to accommodate the above suggestions the PE status needs to be redefined according to a formula that will include sales, customers and selling agents. [27]

Saudi Arabia

27. One of the main differences between Saudi Arabia and the rest of the world is that the Department of Zakat and Income Tax (DZIT) has established a 'virtual' service PE.[28] A foreign service provider may give rise to a PE in the source state if it provides services

[23] European Parliament, Smit, J., et al. "Directorate General for Internal Policies. Policy Department A: economic and scientific policy." (2016).
[24] Collin and Colin (2013) *Rapport au Ministre de l'economie et des finances, au Ministre du redressement productif, au Ministre delegue charge du budget et a la Ministre deleguee chargee des petites et moyennes entreprises, de l'innovation et de l'economie numerique*, available at https://www.economie.gouv.fr/files/rapport-fiscalite-du-numerique_2013.pdf.
[25] Gaoua, Noah. "Taxation of the Digital Economy: French Reflections."*European Taxation, (January 2014)* (2010).
[26] France Stratégie (2015) Taxation and the digital economy. A survey of theoretical models (https://ec.europa.eu/futurium/en/system/files/ged/ficalite_du_numerique_9_mars_13_h.pdf).
[27] O. Popa, *Taxation of the Digital Economy in Selected Countries – Early Echoes of BEPS and EU Initiatives*, 55 Eur. Taxn. 1, sec. 1. (2016), Journals IBFD. p 39
[28] https://dzit.gov.sa/collection-of-tax

within that state that continue for more than six months. The traditional OECD understanding is that in order for a services PE to exist the work needs to be physically performed in the country for the specified period. However, the DZIT insists on the registration of a PE in Saudi Arabia if the total duration of a contract exceeds 6 months.[29] Under the DZIT no physical presence is required and that the only aspect that matters is the duration of the contract. The fact that the service is provided both inside and outside of Saudi Arabia is irrelevant, where the total contract exceeds the threshold of six months.

Israel

28. Israel also developed legislation to tax foreign companies providing services in Israel through the Internet.[30] The Israeli legislation emphasizes that income of foreign digital providers of services and goods to Israeli residents should be taxed even if they have no physical presence in Israel under the "conventional rules" (referring to the OECD BEPS action 1 (tax challenges of the digital economy)).[31] An amendment to the VAT legislation was also under discussion according to the relevant governmental Circular. The proposal is to require non-resident suppliers of digital services to register and account for VAT in Israel. The above measure will target “B2C” (business to consumer) transactions, which supply digital services and are liable for VAT. The MNEs will have to account for such changes in the VAT even if they are selling only virtual content or providing Internet services to Israel customers.

China

29. China has been implementing reforms on both the corporate income tax level and the VAT level relating in particular to source taxation of the digital economy. The Ministry of Finance (MoF), the State Administration of Taxation (SAT) and the General Administration of Customs jointly issued a notice on 24 March 2016 (Cai Guang Shui

[29] Vladimir Gidirim, Taxation of Foreign Multinationals Enterprises Conducting Business in and with Saudi Arabia, Bulletin for International Taxation, April 2006

30 Israel Tax Authority, Circular 4/2016 (available in Hebrew only)

[31] IBFD, *Taxation of foreign digital companies* – circular issued, 12 April 2016 (Report from IBFD correspondent Henriette Fuchs).

[2016] No. 18) concerning the tax policy on cross-border retail e-commerce. According to the notice, the import of retail goods through e-commerce (i.e. B2C transactions) is subject to customs duty, value added tax (VAT) and consumption tax. The price of the transaction, including the price of the goods, freight charges and insurance premiums, forms the tax base. The e-commerce enterprise, platform or logistics enterprise can act as a withholding tax agent.[32] For example, e-commerce platforms and postal couriers are responsible for collecting indirect taxes from online traders or new arrangements that seek to expedite import and export clearance[33]

30. Moreover, China aims at becoming the most technologically advanced society and a goal is to attract the development of new technologies under their jurisdiction. In order to achieve the above the government has recognized that, to accomplish the necessary migration of developer talent, tax incentives are needed. The objective is to target a substantial increasing of profitability margins, as a suitable motivating factor for developers. Super deductions are a part of the Chinese tax system, as R&D expenses can be deducted to the extent of 150% before corporate income tax. Furthermore, for high and new-technology enterprises corporate income tax is 10% lower than the standard rate.[34] It is probable that new legislation could alter the incentives on the personal income tax level.

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[32] IBFD, *Tax policy on cross-border retail e-commerce clarified*, 31 March 2016, IBFD publications (news) (Report from Shiqi Ma).
[33] KPMG, China in the Digital Age, Issue 1, 2016, Hong Kong available at kpmg.com/cn
[34] PWC, China Research & Development Tax Services, An Opportunity for Tax savings, available at: https://www.pwchk.com/en/migration/pdf/prctax-corp-research-develop.pdf

Hungary

31. Hungary has adopted new legislations, which does not specifically target the digital economy, but highly influences the operation of the digital market. An advertising tax is being imposed on the media sector including non-resident providers, in respect of publishing activities, as well as advertising activities, including Internet portals, at a 5.3% fixed rate on tax bases over HUF 100 million and 5% for taxpayers ordering the publication of advertisements.[35] The Bill sets provisions to facilitate the fulfillment of tax obligations arising from the publishing of Internet based advertisements by publishers not established in Hungary.[36] Hungary is arguing that a VAT of that structure provides neutrality between digital and tangible services, as well as simplicity in administration.

Luxembourg and Netherlands

32. There are countries, however, which have expressed the opinion that they will not initiate any measures targeting the digital economy, as they do not consider that the digital economy demands any special treatment. Luxembourg[37] and Netherlands[38] believe that the economy is a digital economy, and that ring fencing digital activities will not produce any desirable results. As a result, their approach appears to be to wait for the 2020 BEPS report and not take any further action before that.

33. The proliferation of a variety of uncoordinated measures implemented within the existing framework is unlikely to provide a long-term satisfactory solution to the challenges of the tax system presented by digitalization.[39] Intrusive policies, which try to tackle the issue of the digital economy, might interfere with the allocation of the taxing rights. If a country has committed itself by participating in international tax treaties, then it is limited by those treaties as to the actions it can take affecting treaty partners. On the

[35] L. Torma & Á. Burján, *Hungary – Corporate Taxation* sec. 2.3.10., Country Analyses IBFD
[36] Deloitte available at https://www2.deloitte.com/content/dam/Deloitte/hu/Documents/tax/HU-taxalert-20160701-EN.pdf
[37] Available online at https://www.gouvernement.lu/4569773/.
[38] Available online at https://www.rijksoverheid.nl/documenten/kamer- stukken/2013/12/10/brief-over-europese-aanpak-belastingfraude.
[39] Devereux, Michael P., and John Vella. "Implications of digitalization for international corporate tax reform" (Working Paper 17/07." (2017)).

other hand, unilateral actions are presenting innovative ideas, which might be followed by other countries

34. Similarly, unilateral actions may be used as a proof of concept, and depending on the empirical evidence, the suggestions may be preserved or abandoned. Unilateral action could be the last resort solution when the citizenry of countries demand change. The lack of an international accepted framework that could coherently present a resolution, might appear to mean the only practical alternative is unilateral action. Lastly, the most significant suggestion is to initiate discussion aiming at creating a coherent international framework, which will result in a proposal fit for the purpose of the digital economy and attempt to avoid the hazards of country-by-country approaches that differ without good reason.

Relevance of the History of the Permanent Establishment

35. Unilateral actions are threatening the PE's status in international taxation. However, if the PE model was sufficient and relevant, then countries would arguably not feel the need to interfere unilaterally. It is debatable whether the PE concept can survive the modern conditions. The concept of the PE is an established term, even before the application of first international double tax treaty. The first permanent establishment model can be traced back to 19th century; it has Prussian origins and was seen in an early agreement between Germany and Switzerland.[40] Even though years have been invested in perfecting the model, tax authorities still struggle to properly regulate its application.

36. The PE approach was agreed upon as a temporary measure when the League of Nations in 1928 was presenting their first draft. The drafters were unable to ignore practical considerations and the likely inertness of economic forces in formulating their final conclusions.[41] Almost one hundred years latter there is still no better alternative approved

[40] Skaar, Permanent Establishment (1991), p. 72
[41] Sunita Jogarajan, "Stamp, Seligman and the Drafting of the 1923 Experts' Report on Double Taxation" 5 (3) World Tax Journal 368 (2013).

by the international community. Furthermore, the changes in the society and in the economy demand for a more relevant PE proposition. Modern scholars have considered the 1923 Report as ‘the intellectual base from which modern tax treaties developed’.[42] The importance of the Report has perhaps been overemphasized, especially in relation to developing countries, although echoes of its rejection of source-based taxation can be recognized in modern tax treaties.[43] It is a possibility that the international tax system has been rendered archaic by the international expansion of the digital economy and the expansion of international digital activities by the large multinational businesses.

37. In 1923, the drafters could not agree on a precise formula regarding the attribution of profits between states. Due to the lack of consensus, the great compromise led to the suggestion of a PE as a provisional measure.[44] The original hypothesis of the PE suggested that there should be a minimum threshold before a company has taxable exposure in a country. The primary function of the PE was to allow the companies to test if the investment was economically viable in the other country before they start being taxes in the source state. In order to rationalise the above proposition an understanding of the society at that time is required. In the early 1930s, the technology and communication was in a preliminary stage, a period impossible to compare with the advances of communication that are experienced in today’s society. Products and companies were not digital, this explains the reason why more source county taxation was present. International taxation was packaging together the PE concept and other forms of taxes such as custom duties. It is clear that all the variables contributing to the existence of a PE depend on physical presence of either personnel or fixed place of business.[45] The above factors are irrelevant when analysing the digital economy nowadays. The business models have been modified but the existence of PE has not and now is the appropriate time for a change.

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[42] Reuven S. Avi-Yonah, “The Structure of International Taxation: A Proposal for Simplification”, 74 TEX. L. REV. 1301, 1303 (1996).

[43] Graetz, Michael J., and M. O'Hear Michael. "The original intent of US international taxation." *Duke LJ* 46 (1996): 1021.

[44] Report Presented by the Committee of Technical Experts on Double Taxation and Tax Evasion, *Double Taxation and Tax Evasion* (1927)

[45] OECD, *Model Tax Convention on Income and on Capital* (Paris, 2010).

Digital Business Models

38. Digital economy business models have substantial differences from the established brick-and-mortar retail model, therefore the planning opportunities in the digital space are utilized by technology companies in different ways. Firstly, the platform-based model is the digital version of a traditional ‘broker-dealer’ structure. The technology companies simply create a platform, which connects sellers of goods or services to buyers and changes a fee for that service. The new business model is more efficient because it eliminates costly intermediaries. A digital company could potentially locate their key production factors anywhere and minimize their tax exposure in the source countries.[46] This marketplace could be used to connect advertisers to web pages, as well as connect service providers like drivers, landlords, housekeepers, nannies, cooks and also online products with or without physical presence to consumers. The value of the platform is on the viewership and the number of people using the app or website.

39. Technology companies that have been making headlines for their perceived tax structures are Google, Facebook, Amazon and Apple. Their response to criticism is often is that they are simply following the law of the countries and if countries need more source taxation they need to change the rules. The reason these rules are not relevant nowadays is the element of physical presence. The online business model is also likely to evolve over time and become more sophisticated. It is time to change the rules, as they are not fit for purpose anymore. It is appropriate that the new rules be forward looking and foresee some of the changes that are likely to be introduced in digital economy the years to come. The Committee might decide to introduce some changes in order to tackle the difficulties in the digital economy. These changes will be included in the tax treaty models. However, the fact that they are encompassed in the model does not suggest that they are automatically included in the bilateral treaties. The related parties still have the freedom of choice when deciding their international tax agreements.

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[46] S. Sim and M.J. Soo eds., Asian Voices: BEPS and Beyond (IBFD 2017) chapter 28

40. The main issues concerning the digital economy are (a) nexus, (b) data and (c) characterization.

(a) nexus

41. "Nexus" broadly means the connection between an activity and a state sufficient to allow, at domestic law and under a treaty (where applicable) sufficient to tax the returns from such an activity. "Data" refers to the information collected digitally, which creates value to the MNEs. "Characterization" refers to the treatment of different activities in the economy, which affect the tax charges of the MNEs.

42. The above categories overlap when discussing the tax treatment of good or services. In terms of taxable nexus, the supply chain in the digital economy is shaped by the spread of core functions across multiple jurisdictions and it is possible to segregate the core activities from the consumer market.

43. There are recent changes to the taxable nexus brought (for parties to it) by the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (the "Multilateral Instrument" or "MLI")[47]. This will in effect reduce the thresholds for taxing activities conducted through commissionaire agreements and make it simpler to establish the existence of a PE with the agency test, as well as limit the preparatory and auxiliary activities standards. Nevertheless, the actual source revenue effects are likely to be minimal because the MLI will modify characteristics that are not relevant to the digital economy as they are focused on physical presence.[48]

44. Even if a PE is found, under the dependent agent MLI changes, the taxable amount for the source country will not be enough. According to the technical analysis of the attribution of profits rule, the only taxable amount would be the earnings of the dependent

[47] MLI Explanatory Statement, available at: https://www.oecd.org/tax/treaties/explanatory-statementmultilateral-convention-to-implement-tax-treaty-related-measures-to-prevent-BEPS.pdf.
[48] Blum, Daniel W. "Permanent Establishments and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative-The Nexus Criterion Redefined'." *Bulletin for International Taxation 69 (June/July 2015*): 314-317.

agent PE arm's length.[49] Substantial additional profits should not be expected under the MLI modifications. There are businesses that can remotely generate revenues without the need of physical presence or nexus in the source country.[50] As a result, the existing rules should perhaps be reformulated to consider taxing business profits in the country where revenues are generated from a good or service.[51]

(b) data

45. Moreover, the consistent application of the attribution of value to the use of data is unclear. Customer meetings comprise of product demonstrations and data driven presentations to persuade the customer of its need to have a product or service. Not all raw data have value, nevertheless, most of the data collected are extremely valuable, the main challenge is understanding how data are monetized. For example, an online gift platform could acquire data of the emails and date of births of customers. The way to monetize these date is to contact the customers closer to that date of their birthdays resulting in significantly higher sales, buying and collecting the dates of birth of clients is a well know way to increase sales, and these may be on sold to non-competing businesses.

46. There is an issue of whether value should be allocated either in the purchase of data or in the application of data on the algorithms. It is known that, raw data without their use in a system do not create any value, but valuing the data on the algorithm could create higher inconsistencies in the valuation of intangibles. The remote collection of data could potentially give rise to a taxable nexus; the analysis should include the functions performed, assets used and risks assumed in order to reflect the business of leveraging data. If the nexus is assumed then transfer-pricing mechanisms allocate profits on the countries where data are collected, processed and used.

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[49] R. Petruzzi & R. Holzinger, *Profit Attribution to Dependent Agent Permanent Establishments in a Post-BEPS Era*, 9 World Tax J. (2017), Journals IBFD.

[50] R. García Antón, *The 21st Century Multilateralism in International Taxation: The Emperor's New Clothes?*, 8 World Tax J. (2016), Journals IBFD.

[51] S. Sim and M.J. Soo eds., *Asian Voices: BEPS and Beyond* (IBFD 2017) chapter 28

(c) characterization

47. Characterization of payments plays a vital role in the taxation of the digital economy. It is a challenging task to qualify payments as royalties, fees for technical services or business profits, each of which may be accorded very different treatment under treaty allocation rules. Furthermore, innovative parts of the new business models, such as 3D printing, are expected to further complicate the situation until precedents are in place.[52] If nexus is established by the existence of a PE, business profits are taxed in the market jurisdiction applying the net principle, but royalties give rise to withholding taxes and payment are taxed on a gross basis. Net and gross taxation include major differences due to the fact that gross taxation does not inherently recognize the profit margins of a business. Neutrality could be affected if the gross taxation does not allow the business to be profitable as it might destroy the market especially for smaller, newer, entrepreneurial steps. Moreover, cloud computing creates a shift towards a service oriented model for hardware and software. Nexus and characterization together determine how certain digital transactions are taxed.

Information Flows

48. The most important factor of digitalization is the new wave of digital information flow, immediately accessible anytime, anywhere.[53] Information asymmetry need not be as great of a challenge as it used to be to the proper assessment of business transactions of MNEs.[54] Pre-digitalization, tax authorities would not have the necessary information available to support attributing users, data, consumers and revenues to specific locations. The information flow is now one click away in digitalized markets. Unfortunately, there is sometimes a lack of political motivation to utilize this information. There are fears that in the primitive years of digital tax information flows the developing countries will be unable to fully achieve the benefits of such flows under the excuse of concerns about confidentiality. Tax confidentiality is important, but the legitimate concern can be used to

[52] European Commission, *Report of the EU High Level Expert Group on Taxation of the Digital Economy, 2014*
[53] Devereux, Michael P., and John Vella. "Implications of digitalization for international corporate tax reform" (Working Paper 17/07." (2017)).
[54]S. Sim and M.J. Soo eds., Asian Voices: BEPS and Beyond (IBFD 2017) chapter 28

argue against a necessary transparency of action – as was the case in the past in relation to bank secrecy. Developing countries have been accused in the past of misuse of information, yet most tax “leaks” nowadays are initiated by whistle-blowers within taxpayers or their advisers and there is no empirical evidence that there is more risk involved when the developing countries are exposed to information. Confidentiality is important but a right to it is not limitless and it should it be used as an excuse to protect ones corporates from liability for not paying taxes abroad when due.

49. In the second stage of the proposals, the technical issues will be resolved, allowing different timetables for different participants, the treatment of international digital investments will be revolutionized and greater transparency will benefit the international tax ecosystem.

50. There is perhaps no clear rational in modern conditions for having a threshold for a company to be exposed in a country and to illustrate taxable presence. The valid explanations presented in pre-digitalization era were the administrative difficulties, packaged with a successful permanent establishment model; both of the above have vanished in the age of digitalization. Even if there was once a rationale to limiting source country taxation based on the principle that business profits are associated with the country where production factors of economic activities are located, which is highly debateable, it is now vital to consider whether information (or knowledge) is a new fifth factor of production in the recent advances in the area of e-commerce. Information (or knowledge) is in large part derived and produced in the source state.[55]

[55] J.F. Bianco & R. Tomazela Santos, *A Change of Paradigm in International Tax Law: Article 7 of Tax Treaties and the Need To Resolve the Source versus Residence Dichotomy*, 70 Bull. Intl. Taxn. 3 (2016), Journals IBFD.

The UN Tax Committee and the Digital Economy

51. The United Nations Committee of Experts on International Cooperation in Tax Matters early recognized important tax issues relating to the digital economy. As a consequence, the Committee has already agreed on a 'Fees for Technical Services' Article for the 2017 update of the Model Tax Convention – Article 12A. If the developing countries decide to include this article in their tax treaties, then they acquire an instrument, which allows them to obtain jurisdiction over some revenues stemming from the digitalized economy. That connection is the subject of a separate paper for this Committee session (CRP.23) and so will only be addressed briefly here.

52. The PE model is almost at a breaking point when it is dealing with digital services.[56] The "Services PE" provision[57] found in the UN Model and finding support among a significant number of OECD countries even, is less focused on physical presence in an identifiable fixed location. Subsequently, mere presence in the country as a whole for 183 days in a twelve month period is sufficient to satisfy the nexus approach.

53. The next stage after a services PE involved creating a 'Fees for Technical Services' Article that does not require any presence at all in the country on the recipient,[58] since many digital structures nowadays are extracting revenues from source countries without any physical presence. This Article could constitute the start of the redefinition of a 'digital PE' in order to place greater emphasis on the source taxation. It should be noted that developing countries have in many respects led the country practice on services PEs and fees for technical services, and they are likely to take an increasing leadership role in digitalised economy issues also.

PE Approaches - OECD

54. The current permanent establishment model is relatively easy to explain, hard to administer and can be seen as impossible to be suggested as the long-term solution. The

[56] S. Sim and M.J. Soo eds., Asian Voices: BEPS and Beyond (IBFD 2017) chapter 3
[57] Article 5 para 3b, United Nations, Model Double Taxation Convention Between Developed and Developing Countries, (New York, 2011)
[58] S. Sim and M.J. Soo eds., Asian Voices: BEPS and Beyond (IBFD 2017) chapter 3

profits of a company resident in one state should be taxable only in that state, unless that company carries on business in a source country through a permanent establishment (PE) situated therein. If that company carries on such business, the profits that are attributable to the permanent establishment may be taxed in the source country.

55. The concept of a PE is highly important as it determines a company's exposure to source country taxation. There are two ways by which a PE could be found to trade in a country. Firstly, Article 5 (1) to (4) OECD Model[59] states that a business which is part of the same enterprise, under common ownership and control will be an 'associated permanent establishment'. Secondly Article 5(5)-(6) present the second type, an agent who is legally separated from the enterprise, but dependent on the enterprise to the point of forming a PE. Physical presence is demanded in both tests.[60] However, in a digital economy it is possible for companies to remotely generate revenues from a country through an online platform without having a physical presence or nexus in that country.

56. The next step is to identify the closest approximation to physical presence a digital company can have in a country according to the fixed place of business test for a PE. A server is the closest physical presence of a digital company, for 5(1) to be imposed the server has to be at the disposal of the company, according to 42.3 of the OECD Commentary.[61] The server is situated on an immovable piece of land, as a result a fixed place could be assumed to constitute a permanent establishment. If the MNEs own or lease the whole server in the country then the server qualifies as a fixed place of business for a PE. However, digital companies select to avoid the PE status by renting a space on someone else's server in the source country. This approach can be questioned because the OECD Commentary assumes that if the MNE rents space in someone else's server then there is not enough physical presence to constitute a PE. However, analysing the same scenario in a brick-and-mortar approach suggests that if you rent business space on someone else's building then you have a PE. In order to achieve neutral treatment between online and

[59] OECD, *Model Tax Convention on Income and on Capital* (Paris, 2010).
[60] L.U. Cavelti, C. Jaag & T.F. Rohner, *Why Corporate Taxation Should Mean Source Taxation: A Response to the OECD's Actions against Base Erosion and Profit Shifting*, 9 World Tax J. (2017), Journals IBFD.
[61] Para. 42.3 *OECD Model: Commentary on Article 5* (2014).

physical retailers, the space that the digital company's electrons take upon rented space in a server needs to constitute a PE. On the other hand, electrons stored in a server are hard to be viewed as a fixed place of business. As a result, there perhaps has to be a better way to achieve neutrality between wholly online business and brick-and-mortar retailers.

57. It is a concern that the time limit for the existence of a permanent establishment is less clear than might first appear. One of the requirements for the permanent establishment to suggest a fixed place of business is to be "fixed" in time. There is no time limit to propose that there is a threshold of time, in the form of an objective test. However, the Commentary suggests the typical limit of six months, many countries have expressed their concerns on the above proposition.[62] Business has expressed worries about the uncertainty concerning the period of time required for a location to be considered a permanent establishment, especially after the recent Formula One case in India.[63] The international community remains uneasy over the uncertainties arising out of the lack of any rules relating to the duration of an activity to be judged a PE. It is the nature of the activity that can convert a place that is intended to exist for a short period into a place of business that is not set up for a temporary purpose. The meaning of the Commentary must be as clear as possible and the language used must be comprehensible to the typical reader who is familiar with international tax principles - in that way both tax administrations and taxpayers could benefit. The nature of business is important when assessing the time limit. It is presumed that the time threshold will be lowered when dealing with digital business due to the high mobility of the sector and the high revenues that can be earned in very small amount of time, analogous to the special rules in both the UN and OECD Models for entertainers and sportspersons.

[62] Para. 6 *OECD Model: Commentary on Article 5* (2014).
[63] IBFD, Indian Supreme Court orders taxes on Formula One, confirms "Permanent Establishment" status in India, new item offered by Taxsutra, available at https://www.ibfd.org/sites/ibfd.org/files/content/pdf/Taxsutra-Indian-Supreme-Court-Holds-Formula-One-PE-in-India.pdf

A New Taxable Nexus Approach?

58. There are different ways to modify the PE threshold and some of them have been extensively discussed in the OECD, such as a new taxable nexus based on the concept of significant economic presence.[64] The aim is to find the taxable nexus in a country on the basis of factors that determine a persistent and sustainable interaction with the economy of that country using technological processes. The factors that will be selected will also have an important reflection to the attribution of income, as well as the new nexus approach.

59. The elements discussed have been[or included]:

- the revenues stemming from the source country;
- the local digital presence including the local payment options;
- the user-based factors of monthly active users;
- online contracts concluded; and
- data collection.

60. Moreover, adjustment may need to be made to the existing attribution of profit rules, to align with the combinatory nature of the new nexus test. The nexus test is substantively closer to the economic reality in comparison with the current model. However, ring-fencing the digital economy could create new problems such as the coexistence of the new nexus digital PE with the current PE, including the increasingly difficult task of defining and "patrolling" the borderlines between types of activities covered by each, with possible opportunities for arbitrage.

61. The only way a problem will not be created between the interaction of the current and new nexus test is if the new test is ultimately focussed only on unique characteristics of the digital trade that could be distinguished from the old model. There is an argument that having two PE tests would cause more options to avoid tax and MNEs could potentially restructure their business to follow the PE test they prefer. It will be a great challenge to

[64] OECD/G20 Base Erosion Profit Shifting Project, Addressing the Tax Challenges of the Digital Economy, Action 1: 2015 Report, paragraph 361, page 108.

define a digital PE for treaty purposes and to create a definition that will not be open to misuse. The new nexus PE designed for the digital economy could not be applied universally, as it is structured to tackle a specific sector where the current PE test is at a breaking point. There are many practical issues involved with the new nexus approach, such as the loss making position. However, discussing a proposal, which conveys that international taxation needs to be closely aligned with the economic reality is a step in the right direction.

62. Inspired by the BEPS discussion, there is another new proposal of a new PE nexus test based on three components:[65] a *de minimis* revenue threshold, a time threshold and one thousand monthly users existing in a county.

63. Clear objective tests are easy to administer (as long as pertinent facts can be established); unfortunately it is also easy to manipulate and avoid them for that reason the international tax models have historically aimed at avoiding *de minimis* approaches. It is common to face *de minimis* rules in national legislation but their international application is perhaps more fraught. Moreover, having the one thousand monthly active users (MAU) threshold is a universal approach that may not create equity when the different sizes of population are taken into consideration. Furthermore, another suggestion could be to leave the MAU, the time and the *de minimis* revenue threshold up to negotiation between the countries settling the terms of a treaty. On the other hand that could, while allowing tailored solutions, create inconsistencies and incentivise tax competition between states - as a result the problem of the race to the bottom in taxation will not be resolved.

Source and Benefit Theory

64. According to the source and benefit theory, conducting digital business within a country should justify the existence of a PE. First, the source theory should include the digitalized transaction since the value creation occurs in a unique, modern and less physical sense. Second, the benefit theory is strongly embedded in the taxation of the digital economy. Digital markets take advantage of the stable legal systems of the countries, their

[65] Hongler, Peter, and Pasquale Pistone. "Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy." (2015).

strong Internet network continuously expanding to reach more consumers on behalf of the digital MNEs, and the supplies of energy that are essential components of the business model. Therefore, if the PE concept is expanding it needs to appropriately preserve source states sovereignty to fairly tax income in the digital era and discussing suggestions such as the above could lead us to the desirable solution.

Other Proposals

65. There are other proposals similar to the new nexus OECD approach. The proposal suggested by Avi-Yonah, states that the time has come to re-evaluate the PE concept in the modern economy by adjusting the PE with a plausible formula that will include an absolute threshold of digital sales into the given host jurisdiction. Taxpayers with digital sales in a country will be deemed to have a PE in that country, if they exceed ‘x’ (the number to be agreed) amount of sales in any given calendar year and will be taxed on profits attributable to those sales. In order to avoid manipulation of this approach by selling through minimal profit distributors or disaggregating related sellers, look-through rules and attribution rules need to be in place. For the above reform to be in place all the treaties of a country would need to be rewritten. This proposal is a useful example of amalgamating economic substance with taxable nexus. However, the absolute threshold of sale is not essentially needed. It would only cause problems with sellers manipulating the structures of the companies to avoid the threshold. Moreover, the tax administration will need to invest money and personnel in order to constantly police the threshold and defend the substance over form approach.

Destination Based Cash Flow Tax

66. The destination principle has been further examined by proponents of the “destination based cash flow tax”. The only proposal available, in order to tax sales in a country, without any absolute threshold, is destination base cash flow tax. DBCFT in shortened terms is equivalent to a VAT with a deduction for wages. Utilizing the above method will simplify the tax system, as only the end products will be taxed on a consumer level. Consequently, in many circumstances, double taxation will be avoided and complicated PE rules will be redundant, as all of the PE regulations are irrelevant to the

implementation of DBCFT.[66] However, there are dangers and uncertainties involved in implementing an unprecedented radical reform such as the DBCFT. The dangers involve the distinction of final products, the treatment of the financial services and the pressure the measure is going to bring for the creation of secondary markets. The debate on implementing a radical proposal with unique advantages and disadvantages is complicated, as the administration has to decide on fighting the tax demons we know over the tax demons we do not know. That is not to say it should not be explored, as on one view, radical and disruptive changes to business models and the way the world works inherently call for radical and disruptive responses that are informed by the past, but are not a captive to it.

Tax Administration Going Digital

67. As the world changes, one thing is certain, our taxation rules and the tax administration practices have not caught up with the speed of change in the business environment. The digitalized economy has created a new wave of digital information and a new wave of applications that aim at making peoples life better, simpler and faster. As a result, the simplification of the work of the tax administration was also targeted. This part of the paper seeks to briefly explain the steps a tax administration could utilize to "go digital", not for the sake of it, but because of the needs for digital responsiveness, and the benefits of "leapfrogging" challenges by taking advantage of such an approach. The final part will include an evaluation of the last step which is the new digital trend termed "blockchain".

68. Digitalization will allow taxpayers information to be cross-referenced and shared among governments and agencies. It is assumed that the businesses that have not adapted yet to the changes mentioned will face increased risk, unexpected compliance costs and challenges, if they are not ready to respond. The move to digitalization is not linear, there should be space for different digital transformation rates for companies and governments, and as between governments with different capabilities – even if (as hoped) movement is in the same direction with a view to meeting at the same place.

[66] Auerbach, A. J., Devereux, M. P., Keen, M., & Vella, J. (2017). Destination-Based Cash Flow Taxation.

69. There are different levels of digitization that could be illustrated according to the experience of different countries; the following assessment will illustrate the most common five steps of tax digitalization in an economy:[67]

- The first step is usually **'E-filing'** which suggests that businesses are required to utilize a standardised electronic form for filling their tax returns.

- The second step is '**E-accounting'** when corporate entities are required to submit accounting or other source data such as invoices to support filing in a suggested electronic format at a predetermined frequency.

- The third step typically involves **'E-matching'** where businesses submit additional accounting, bank and source data, in order for the government to match the data across taxpayers and jurisdictions in real time.

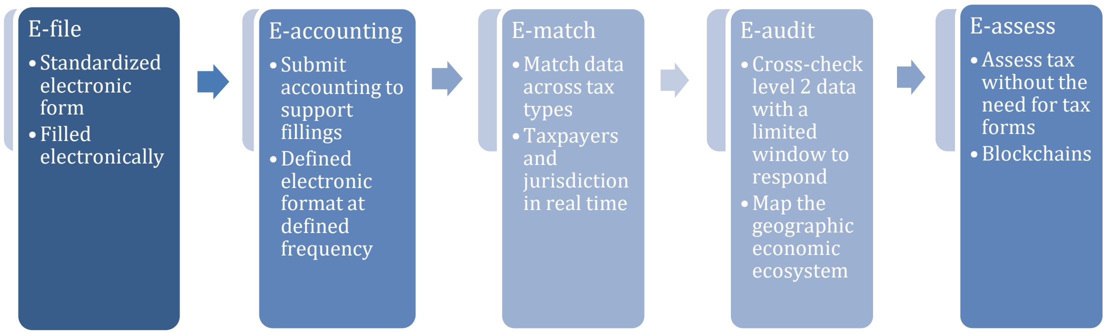
- The fourth step is **'E-auditing'**, where governments send taxpayers electronic audit assessments with a fixed window to respond, the data provided is analysed by the government and crosschecked to prevent fraud.

- The fifth stage is that of **'E-assessment'**, whereby government entities to use submitted data from corporate entities to assess taxes without the need for tax forms such as by the use of blockchains.

70. Higher level of digitization should not be viewed as the ultimate goal and different countries could use different timelines and approaches adapted to their objectively differentiated needs and situations to apply the new systems. Premature digitalization with systems that are not ready to process the required information are potentially harmful to taxpayers and tax authorities. To sum up, the steps of the following diagram should not be received as comprising strict guidance as countries may implement measures with different prioritization.

Figure 1. Different Levels of Digitalization[68]

[67] EY, Tax Administration Is Going Digital, available at http://www.ey.com/us/en/services/tax/ey-tax-administration-is-going-digital
[68] Ibid.



71. Three main issues arising during the transformation of the tax administration are transparency, business impact and meeting the challenge. In terms of transparency most of the countries taking a lead on digitalization have been using agreements with other countries to exchange information in order to enhance their taxpayer profiles. This emphasize the importance of developing countries being accorded a fair opportunity to benefit from such information sharing if they are to successfully address the digital economy.

72. However, the increase in information sharing it is not only growing in an inter-nation approach but also from an intra-nation perspective the collaboration is increasing in order to produce higher compliance. Moreover, country-by-country reporting by the large MNEs is expected to result in information needed by the tax administration becoming more available to it. Automatic exchange of information is the new reality under the government information exchange mechanisms and the digitalization of the tax authorities had a major role in the growth of country-by-country reporting and exchange of information. Again, it is critical that developing countries benefit from automatic exchange, and in a timely manner, if they are to be in a position to fully engage with the digital economy.

73. The impact on the business sector of changes in tax administration cannot be overlooked, as the data businesses are may be asked to submit go far beyond just tax forms because they include accounting analysis and even sales data. The sales data are essential in the tax administration in order to efficiently comprehend the margins and not allow any negative neutrality effects to be caused by taxation.

74. The most significant challenges for the business sector include the inability to respond to audit notices in a timely and effecting manner, along with the inability to

respond quick enough when there is a disagreement with the authorities. It is clear that digitalization will create a financial burden to business that require more complex data analysis, the reconstruction of the new tax system demands more retooling which will affect the cash flow of businesses negatively. Meeting the challenge of digitalization is about creating equilibrium; on the one part the tax authorities move at a varying speed to meet the other part of the private sector while they are developing an understanding of the digital tax requirements in their market. As governments expand their digital capabilities, businesses need to be engaged in order to minimise the transitional period costs. Businesses have to be able to defend audits in real time but also governments need to be up to speed with requests to close an audit due to time constraints. The economy is moving faster in a digital era and the above should not be a disadvantage for the business or the government during their "five level" move to digitalization.

"Blockchains" and Developing Countries

75. Most countries, including many developing countries have made some small steps to tax digitalization. However a very small number of countries have fully engaged with the fifth step of a decentralized model. The "blockchain" concept is relevant in this context. Blockchains were invented in 2008 as a technology that targets the removal of intermediaries from transactions and allows the direct peer-to-peer exchange of value thus reducing the transaction costs. [69] Moreover, blockchain is an efficient way to keep records on transparent and immutable ledges accessible to everyone and is allegedly immune to tampering.[70]

76. Such technology is aligned with the government tax authority's goal to improve compliance and efficient information sharing both domestically and internationally, although like many digital developments, the quest for decentralisation and avoiding governmental regulation may cause difficulties for tax administrations. The first

[69] Jeffrey Owens, Taxation on the Blockchain: Opportunities and Challenges, Tax Notes International, AUG. 7, 2017, P. 601
[70] IBM, Blockchain/DLT: A Game-Changer in Managing Multinational Corporations' Intercompany Transactions?, June 2017

application of blockchains was on bitcoins, it is essentially a continuous log off transaction that is synchronously updated across the distributed network. As a result, all parties store, control and access the database and no control hub holds a master key. The transactions saved on the network are stored into blocks. It is stated that one single party cannot temper with the database because inconsistencies will be identified.[71] To sum up, blockchains are implementing a trust mechanism for data in a decentralized manner, as they will be stored on transparent, permanent and immutable ledgers.

77. The codification and validation process is an essential part of the application of blockchains. The use of smart contracts is vital; they are not contracts in the legal sense but a piece of self-executed code in order to accept the transactions. Smart contracts allow the workflow and validation performed by intermediates to be programed into the blockchain.[72] Some countries already trust the blockchains in their administration. One very successful illustration involves land registration in Sweden, which is more efficient and transparent after the use of blockchains. However, the Swedish land registries usage and the tax use for transfer pricing include different limitation and risks that should not be understated.

78. Blockchains could reduce tax fraud by increasing transparency and integrity, real-time tax administration and tracing. This system could be of use in transfer pricing due to the fact that accounting systems could be tracked down to the transaction level, improving the substance over form approach and provide information to auditors anywhere in the network with trustworthy records. Smart contracts would assist the accounting systems of MNEs to be autonomous and automated. Consequently, transparency is increased and cross-border exchange of transfer pricing information becomes instant.

79. On the other hand, the main disadvantage of decentralization is that data possessed by the government are sensitive. Obstacles will be presented due to the issues of data

[71] Id., at 58

[72] Jeffrey Owens, Taxation on the Blockchain: Opportunities and Challenges, Tax Notes International, Aug. 7, 2017, P. 601

protection and security. The International Standards Organisation (ISO) is working on the effective growth of blockchain, in order to protect international standards and the integrity of the program.[73] The issue will be the extent to which ISO standards could guaranty the security and reliability of the blockchain.

80. Moreover, the lack of intermediary and the lack of key master creates a crucial problem, when the private key is lost there is a risk of the user being permanently locked out of the network. Additionally, there is an increased reliance on technical expertise, when the public sector is lacking technical training, it is hard to place blind trust on outsourced programmers to produce a code that would be safe to apply on such a broad audience. The lack of an intermediary and a key master removes the so-called "right to be forgotten" and the integrity of information. It is problematic that the records are permanent and there is never a choice to delete any entry. Most importantly, there is no mechanism to ensure that the data entered in the software are valid in the first place – the old adage applies: "garbage in/ garbage out"). There are limits to the extent that a blockchain could help with transfer pricing issues, for example, as the data entered, especially on the valuation of intangibles will not be checked or validated by anyone. A mechanism that has as an aim the decentralization of a function, which by definition is perhaps an action that should be taken by the government, has obstacles in gaining governmental acceptance.

81. However, in regards to less intrusive policies such as e-voting or public notary services, a technology such as the above has great potential if a form of validation of data could be implemented. To conclude blockchain technology is still in its infancy. The proof of concept has not been established yet. As a result sophisticated areas, such as transfer pricing and other large-scale processes are currently beyond the boundaries of the technology. Nevertheless, blockchain is the future in digital taxation. After the technology is substantially developed and applied in the private sector, the public sector will comprehend the risks better, in order to decide when is the appropriate time for a move to the future.

[73] Clare Naden, Blockchain Technology Set to Grow Further with International Standards in Pipeline, ISO, available at https://www.iso.org/news/Ref2188.htm

Options and Recommendations

82. A first option for the Committee is to anticipate and examine what the next proposals of the OECD are going to include. However, there is much to be said for the Committee of Experts becoming actively involved with the digital economy early, especially through the services aspects of treaties, and does not wait until 2020 when the OECD/G20 BEPS report on this issue is finalized[74] as it will be too late and valuable resources and opportunities to respond will be wasted in between those years.

83. Policy elaboration in regards to digitalization is essential for most developing countries due to the fact that some very large consumer markets are located in their jurisdiction. Allowing the digital business to profit from such markets without contributing to the revenue is likely to receive great public scrutiny. The issues discussed in this paper are not fully elaborated on by the international tax community. Therefore, closer cooperation in international tax matters is necessary, in consultation with other geopolitical bodies on both regional and international levels. Broader representation needs to be in place in order to secure the diversity of ideas and opinions. The concerns of tax administrations in terms of risks and opportunities have to be prioritized, apart from the policy analysis and legal focus.

84. A related option is for the Committee to form a Subcommittee on the digital economy, in order to examine all the relevant issues mentioned above and take the necessary action according to the needs of the developing countries. The Committee has a unique opportunity to lead the international tax discussion on digitalization. As illustrated in this paper, developing countries have already started creating milestones in the taxation of the digital economy.

85. With the appropriate guidance and encouragement, every step will move the global society towards better international digital tax policy. We emphasize the importance of the inclusive cooperation and dialogue among national tax authorities and international agencies on the international tax aspects of the digital economy. A possible mandate could

[74] Id., at 7

be that the subcommittee works on proposals to enhance the international policy making on the digital economy by firstly, analysing the definitions of digitalization and value creation and secondly, strengthen the efficiency and operation capacity of the PE in the digital era.