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Taxation of the Digital Economy: "Quick Fixes" or Long-Term Solution?

Over a few short years, Google, Facebook, Amazon and many other "digital" companies became a fixed feature of our everyday life and now drive the economy. Digital business models must, however, deal with national and international tax law systems that face significant challenges. As such, policymakers are trying to find solutions that will achieve fair and effective taxation. In this article, the authors address the current status of political discussions and analyse the strengths and weaknesses of the options discussed.

1. Introduction

In the "Rome Declaration" of March 2017, the EU Member States, Council, Parliament and Commission noted the need to embrace technological transformation in order to ensure a prosperous and sustainable future.[1] Indeed, technological transformation and digitalization profoundly affect a great many elements of society – jobs, industries, education and welfare systems.[2] They also, however, create challenges for existing tax systems. The new business models of the "digital economy" are based on modern information and communication technologies and the exploitation of large amounts of data, blurring the line between goods and services and varying widely in their approach, form, impact and monetization (for example, online retailers, social media platforms, subscriptions to digital services, collaborative platforms).[3] What they do have in common, though, is that value creation is largely decentralized and decoupled from a "physical presence". In particular in times of intensifying international tax competition, these new business models reveal possible weaknesses in the current international direct tax framework, which was originally designed for "brick and mortar" businesses.

Policymakers have been trying to "find solutions which would ensure fair and effective taxation as the digital transformation of the economy accelerates".[4] They argue that nothing less than "[e]conomic efficiency is at stake, as well as tax fairness and sovereignty".[5] Debates regarding the "fitness" or the "outdatedness" of the international tax system for the digital age also overlap with discussions of the tax avoidance and tax planning practices of well-known IT corporations.[6] More generally, reports from the OECD and the European Union have impressively outlined the various new business models, their growth, their size and their impact on the global economy, as well as the difference in tax burden between companies that offer classical cross-border physical services and those that offer digital ones. Impressively, in 2017, for example, 9 out of the top 20 companies in terms of market capitalization were technology companies, with Apple, Alphabet, Microsoft and Amazon taking the first four spots (compared with only one technology company, i.e. Microsoft, in the top 20 in 2006), and between 2008 and 2016 revenue of the top five e-commerce retailers grew 32% per year on average (compared with 1% annual growth of the entire EU retail sector).[7] Given the increasingly pervasive nature of digitalization it would, however, be difficult, if not impossible, to "ring-fence" the digital economy from the rest of the economy for tax purposes.[8]

The current international tax framework – even following the modifications contained in OECD BEPS Action 7 – still uses physical presence, in the form of a permanent establishment (PE) in the source country, as a nexus-defining criterion (for example, article 5 of the OECD

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1. Declaration of the leaders of 27 Member States and of the European Council, the European Parliament and the European Commission, Press Release 149/17 (25 Mar. 2017), available at http://www.consilium.europa.eu/en/press/press-releases/2017/03/25-rome-declaration/.
2. For an instructive analysis, *see*, for example, OECD, *Measuring the Digital Economy – A New Perspective* (2014).
3. For the fundamentally positive approach of the European Union towards the "sharing economy", *see*, for example, G. Beretta, *The European Agenda for the Collaborative Economy and Taxation*, 56 Eur. Taxn. 9 (2016), Journals IBFD.
4. European Commission, A Fair and Efficient Tax System in the European Union for the Digital Single Market, COM(2017) 547 final (21 Sept. 2017), p. 2.
5. *See Political Statement – Joint Initiative on the Taxation of Companies Operating in the Digital Economy* (9 Sept. 2017), available at http://www.mef.gov.it/inevidenza/banner/170907_joint_initiative_digital_taxation.pdf, ch. 2.2.
6. *See*, for example, the State aid proceeding against Ireland with regard to purported tax benefits for Apple Inc. (Commission Decision (EU) 2017/1283 of 30 August 2016 on State aid SA.38373 (2014/C) (ex 2014/NN) (ex 2014/CP) implemented by Ireland to Apple (notified under document C(2017) 5605) (1), OJ L 187 (19 July 2017), available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2017:187:-FULL&from=EN and IE: ECJ, Pending Case T-778/16, *Ireland v. Commission* and IE: ECJ, Pending Case T-892/16, *Apple Sales International v. Commission*.
7. Commission Communication, *supra* n. 4, at 4.
8. *See* OECD, *Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report* (OECD 2015), International Organizations' Documentation IBFD, paras. 115 and 364.

Model (2014)).[9] While this concept has generally proven successful in the past, for reasons of (relative) clarity, certainty and enforcement, the prevalence of the digital economy has certainly raised the question of whether or not an expansion or reconsideration of this traditional concept or some other form of source taxation is warranted. Indeed, many states take the position that traditional approaches largely fail to levy a (presumed) adequate level of tax on the digital economy, and neither the OECD BEPS Project nor the recent EU Anti-Tax Avoidance Directive (2016/1164)[10] address this issue comprehensively. While some of these challenges might, in part, be addressed through adjustments or refinements to the transfer pricing framework and approaches to profit allocation in general, there is also a broader policy debate: there is a visible and increasing trend in political and technical discussions to operationalize the utility theory or to view income taxation as being connected more with the demand-component of the market jurisdiction and less with the supply-component of the residence jurisdiction.[11] This is also evidenced by the broad discussion of the idea of a destination-based corporate tax (focusing on the customer's residence)[12] and the introduction of a new distributive rule for fees for technical services in the next update to the UN Model.[13] Indeed the lines between the objects of income taxation and those of consumption taxation might become increasingly blurred. Given that this is possibly the biggest future challenge in the tax area, ideas and viewpoints on these issues are abundant[14] and political momentum has accelerated substantially over recent months.

2. State of Play

2.1. OECD and UN

At the OECD level, Action 1 of the OECD BEPS Project[15] dealt with the (tax policy) challenges of the digital economy. The corresponding Final Report also addresses the broader direct tax challenges raised by the digital economy and discusses three broad options for reform: to extend the nexus for source taxation to "significant economic presences" (i.e. "digital" or "virtual" PEs) or to introduce withholding taxes on digital transactions or equalization levies. The Final Report, however, makes no recommendations.[16] Nevertheless, the potential options identified by BEPS Action 1 dominate the current discussions and some jurisdictions have already taken unilateral action.

Despite the lack of consensus in the Action 1 2015 Final Report, the OECD's work on these issues has not been concluded. In the Final Report it already announced that "the work will continue following the completion of the other follow-up work on the BEPS Project" and that "[a] report reflecting the outcome of the continued work in relation to the digital economy should be produced by 2020".[17] Moreover, in July 2017, the G20 leaders reiterated their support for the OECD's work on taxation and digitalization,[18] which followed a request made by the G20 Finance Ministers in March 2017 that the Task Force on the Digital Economy (TFDE) deliver an interim report on the implications for taxation of digitalization to the G20 Finance Ministers by April 2018.[19] The OECD has also recently asked for public input on the tax challenges of digitalization.[20]

Taxation of the digital economy is also on the agenda of the United Nations, as "[d]eveloping countries have the most to gain from the introduction of policies to address the digital economy".[21] As a possible prelude to the cre-

9. *OECD Model Tax Convention on Income and on Capital* (26 July 2014), Models IBFD.
10. Council Directive 2016/1164 of 12 July 2016 Laying down Rules against Tax Avoidance Practices that Directly Affect the Functioning of the Internal Market, OJ L 193/1 (2016), EU Law IBFD.
11. P. Hongler & P. Pistone, *Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy*, IBFD White Paper (20 Jan. 2015), p. 15 et seq.
12. *See*, for example, A. Auerbach, M. Devereux, M. Keen & J. Vella, *Destination-Based Cash Flow Taxation*, Oxford University Centre for Business Taxation WP 17/01 (2017).
13. For discussion, *see*, for example, F. Sixdorf & S. Leitsch, *Taxation of Technical Services under the New Article 12A of the UN Model – Improved Taxation or a Step in the Wrong Direction?*, 57 Eur. Taxn. 6, p. 234 et seq. (2017), Journals IBFD.
14. For more recent discussions in the literature, *see*, for example, W. Hellerstein, *Jurisdiction to Tax in the Digital Economy: Permanent and Other Establishments*, 68 Bull. Intl. Taxn. 6/7, p. 346 et seq. (2014), Journals IBFD; Hongler & Pistone, *supra* n. 11; Y. Brauner & A. Baez, *Withholding Taxes in the Service of BEPS Action 1: Address the Tax Challenges of the Digital Economy*, IBFD White Paper (2 Feb. 2015); D.W. Blum, *Permanent Establishments and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – The Nexus Criterion Redefined?*, 69 Bull. Intl. Taxn. 6/7, p. 314 et seq. (2015), Journals IBFD; E. Lopez, *An Opportunistic, and yet Appropriate, Revision of the Source Threshold for the Twenty-First Century Tax Treaties*, 43 Intertax p. 6 et seq. (2015); M. Olbert & C. Spengel, *International Taxation in the Digital Economy: Challenge Accepted?*, 9 World Tax J. 1, p. 3 et seq. (2017), Journals IBFD; G. Kofler, G. Mayr & C. Schlager, *Digitalisierung und Betriebsstättenkonzept*, RdW, p. 368 et seq. (2017); and C. Staringer, *Virtual? Reality!*, SWI, p. 341 et seq. (2017).
15. *Supra* n. 8.
16. This non-recommendation was based on a number of reasons. First, certain BEPS measures will mitigate some aspects of the broader tax challenges, and consumption taxes will be levied effectively in the market country. Second, all of the options discussed would require substantial changes to key international tax standards and would require further work. *See supra* n. 8, Executive Summary, at p. 13, para. 243 et seq. and para. 357, which also notes that "[c]ountries could, however, introduce any of these three options in their domestic laws as additional safeguards against BEPS, provided they respect existing treaty obligations, or in their bilateral tax treaties".
17. *Supra* n. 8, at para. 361.
18. G20 Leaders' Declaration, *Shaping an interconnected world*, 450/17 (Hamburg, 7 and 8 July 2017), pp. 7-8, available at http://www.consilium.europa.eu/en/press/press-releases/2017/07/08-g20-hamburg-communique/.
19. Communiqué of the G20 Finance Ministers and Central Bank Governors (Baden Baden, 18 Mar. 2017), para. 10, available at http://www.g20.utoronto.ca/2017/170318-finance-en.html.
20. OECD, *OECD invites public input on the tax challenges of digitalization* (22 Sept. 2017), available at http://www.oecd.org/tax/beps/oecd-invites-public-input-on-the-tax-challenges-of-digitalisation.htm.
21. *See* Committee of Experts on International Cooperation in Tax Matters, *The digitalized economy: selected issues of potential relevance to developing countries*, E/C.18/2017/6 (8 Aug. 2017), para. 5, available at http://www.un.org/ga/search/view_doc.asp?symbol=E/C.18/2017/6. For broader analysis see also *Tax Challenges in the Digitalized Economy: Selected Issues for Possible Committee Consideration*, E/C.18/2017/CRP.22 (11 October 2017), available at http://www.un.org/esa/ffd/wp-content/uploads/2017/10/15STM_CRP22_-Digital-Economy.pdf.

ation of a "digital permanent establishment", the UN Model (2017) will introduce a new distributive rule for fees for technical services, a provision that allocates taxing rights to the source state irrespective of whether any physical presence exists therein.[22]

2.2. European Union

At the EU level, the 2014 report of the Commission Expert Group on Taxation of the Digital Economy advocated improving the tax environment for young innovative companies, especially digital companies, while speaking out against a new concept of a "digital taxable presence", noting that it had "extensively considered this question and has come to the conclusion that there is currently no valid justification for such a fundamental change specifically for digital activities".[23]

The call for new taxation approaches to the digital economy, however, has gained enormous political momentum in the last couple of months: The Estonian Presidency has put tax issues regarding the digital economy on the forefront of its tax agenda and Austria has already announced a push for the introduction of a digital PE concept during its Presidency in the second half of 2018.[24] In addition, the European Parliament is exercising significant political pressure in respect of this issue.[25] Moreover, France, Germany, Italy and Spain have called for the introduction of an equalization levy based on turnover generated in Europe by digital companies as a "quick fix" (without ruling out other long-term solutions)[26] and six more Member States agreed to this approach at the informal ECOFIN meeting in Tallinn on 16 September 2017.[27] At that meeting, some Member States expressed strong opposition or concerns regarding changing the tax framework for the digital economy, while other Member States would prefer to strive for a comprehensive and robust approach to taxation of the digital economy, one that is based on the time-tested rules of the current international corporate tax framework:[28] this would require a (general) recalibration of the nexus that is required for the source state to tax and would entail modifying the PE concept (and the rules for attributing profits that reflect value creation) as an amendment to the established international tax framework.[29] Such a "digital business establishment" could (also) be included in the common (consolidated) corporate tax base (C(C)CTB),[30] and more concrete proposals that are based on the findings of Action 1 have already been put forward by the European Parliament this year for inclusion in the CCCTB.[31] Furthermore, ideas have been put forward to revise article 5 of the OECD Model.[32]

At the informal ECOFIN meeting in Tallinn, the ministers agreed to "move forward swiftly and to reach a common understanding at the Ecofin Council in December".[33] Meanwhile, on 21 September 2017, the Commission issued a Communication on "A Fair and Efficient Tax System in the European Union for the Digital Single Market",[34] discussing background issues, objectives and – on a rather abstract level – various options for the long and short term. It eventually called "for a strong and ambitious EU position on taxing the digital economy", either feeding into ongoing international work or within the EU Single Market.

2.3. Unilateral action

While the OECD and the European Union – together with the G20 – strive for a multilateral solution,[35] preferably a global one (perhaps using the Multilateral Instrument (MLI)[36] as a tool for implementation at the treaty level with a harmonized EU position), a number of states have already taken unilateral action.[37] The Indian 6% "equalization levy" on payments to foreign companies for online

22. For discussion, *see*, for example, Sixdorf & Leitsch, *supra* n. 13, at 234 et seq., and more specifically in the context of the digital economy, the Secretariat Paper for the Committee of Experts on International Cooperation in Tax Matters, Tax consequences of the digitalized economy – The taxation of fees for technical, managerial and consultancy services in the digital economy with respect to Art 12A of the 2017 UN Model, E/C.18/2017/CRP.23 (10 Oct. 2017), para. 80 et seq., available at http://www.un.org/esa/ffd/wp-content/uploads/2017/10/15STM_CRP23_Technical-Services.pdf.
23. *See* Commission Expert Group on Taxation of the Digital Economy, *Report* (28 May 2014), at 47, which recommended instead that revenue concerns be countered through the VAT system.
24. *See Schelling-Plan zur Schließung der internationalen Steuerflucht-Routen* (10 July 2017), available at https://www.bmf.gv.at/presse/Schelling-Plan.html.
25. *See*, for example, P. Tang & H. Bussink, *EU Tax Revenue Loss from Google and Facebook* (Sept. 2017), available at https://paultang.pvda.nl/wp-content/uploads/sites/424/2017/09/EU-Tax-Revenue-Loss-from-Google-and-Facebook.pdf.
26. *See supra* n. 5.
27. These include Austria, Bulgaria, Greece, Portugal, Romania and Slovenia.
28. Presidency Issues Note for the informal ECOFIN Tallinn, 16 Sept. 2017 – Discussion on corporate taxation challenges of the digital economy, para. 10 et seq., available at https://www.eu2017.ee/political-meetings/ecofin.
29. *See* ECOFIN Press Release, *EU finance ministers agreed to develop new digital taxation rules* (16 Sept. 2017), available at https://www.eu2017.ee/news/press-releases/eu-finance-ministers-agreed-develop-new-digital-taxation-rules, noting that "Estonia is of the opinion that when bringing the tax rules up to date, it is important to abandon the requirement that companies have to be physically present in a country or own assets there, and replace this with the concept of a virtual permanent establishment".
30. Proposal for a Council Directive on a Common Consolidated Corporate Tax Base, COM(2016) 683 final (25 Oct. 2016), EU Law IBFD [the Proposed CCCTB Directive] and Proposal for a Council Directive on a Common Corporate Tax Base, COM(2016) 685 final (25 Oct. 2016), EU Law IBFD [the Proposed CCTB Directive].
31. *See* Amendments 9, 19, 36, 37 and 38 in the Draft Report on the proposal for a Council directive on a Common Corporate Tax Base, PE 608.050v01-00 (13 July 2017) and Amendments 6, 12, 15, 16, 19, 26 in the Opinion of the Committee on Legal Affairs for the Committee on Economic and Monetary Affairs on the proposal for a Council directive on a Common Corporate Tax Base, PE 602.948v03-00 (19 Sept. 2017), available at http://www.europarl.europa.eu/committees/en/JURI/opinions.html.
32. Tang & Bussink, *supra* n. 25, at 11.
33. *See supra* n. 29.
34. Commission Communication, *supra* n. 4.
35. *See*, for example, the opening remarks by OECD Secretary-General A. Gurria at the ECOFIN meeting on 16 Sept. 2017 in Tallinn, available at http://www.oecd.org/about/secretary-general/ecofin-international-taxation-opening-remarks.htm.
36. *Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting* (24 Nov. 2016), Treaties IBFD, signed in Paris on 7 June 2017.
37. For a brief overview of unilateral action taken by Australia, China, France, India, Israel, Italy and the United Kingdom, *see supra* n. 21.

advertising services[38] and Australia's[39] and the United Kingdom's[40] diverted profits tax (DPT) for "avoided permanent establishments"[41] are probably the most prominent examples, with Italy currently pushing to introduce a withholding tax on digital transactions and modify the nexus required for source taxation.[42] Moreover, some unilateral measures for certain transactions or branches of the digital economy are common features of existing tax systems; many countries, for example, already levy taxes on online gambling and betting or employ special tax rules for the sharing economy (for example, to collect tourist taxes).[43] Such – narrow or broad – unilateral actions, however, might not be sensible for all states, depending on their legal structure, for example, their tax treaty obligations, or their economic situation.[44] Moreover, from an EU perspective, "[d]ivergent national approaches within the EU can fragment the Single Market, increase tax uncertainty, destabilise the level playing field and open new loopholes for tax abuse".[45]

3. New Business Models: Are They Different Enough?

3.1. "Prototypes" of the new business models

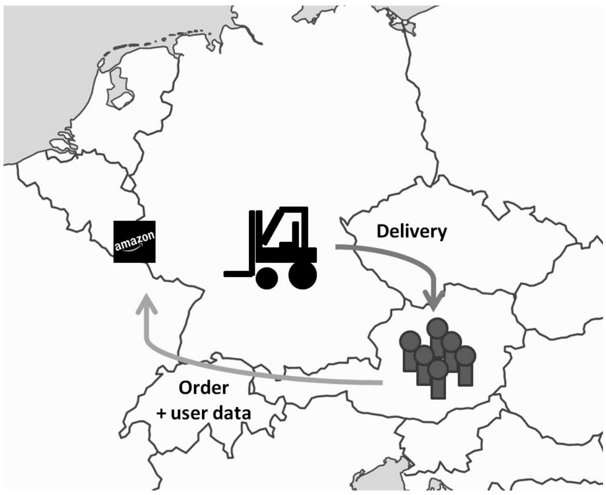
Before the possible solutions to the taxation of digital economy profits proposed by the OECD and taken on by ECOFIN are discussed in greater detail, certain case examples should be addressed. The OECD's Action 1 Final Report provides an overview of the various business models and analyses four typical structures: online retailing, internet advertising, cloud computing and internet app stores.[46] For the purposes of this article, the authors focus on certain aspects of the business models of Amazon and Google as "prototypes".[47]

3.2. Online retailer (Amazon)

Amazon is the best known online retailer in North America and Europe. Although Amazon offers a wide range of goods and services, in particular "Amazon Web Services" (AWS),[48] a look at current company sales data shows that the sale of physical goods to consumers (i.e. the mail order business) constitutes the most important segment,[49] and Amazon's long-term strategy[50] aims to make the mail order business more profitable. This article focuses on this core activity of Amazon. This is not a new business model that first arose in the context of digitization, but is a refined form of the traditional mail order business model pursuant to which goods are presented, contracts are concluded and payments are made over the Internet. The physical goods continue to be delivered in the traditional way (for example, by parcel post) – as was the case with the precursor to this online mail order business, the "catalogue mail order business".

Focusing on taxation in the source country, the details of the tax-optimized US structure are less relevant in this regard than implementation of the business model in Europe, where consumers generally conclude a mail order contract with the Amazon distribution company in Luxembourg. This is important from a tax perspective, since, with regard to direct sales, only the company's residence state is entitled to tax the enterprise's profits, unless a PE exists in the other state. The actual delivery is then made by one of Amazon's logistics centres; Amazon currently operates 31 such logistics centres in Europe in seven different countries. For example, Austrian consumers order goods via "amazon.de", which is operated by Amazon Luxembourg. The goods are usually delivered by one of the logistics centres operated by Amazon in Germany.

Diagram 1: Amazon's retail business model from an Austrian perspective



38. *See* the detailed discussion by S. Wagh, *The Taxation of Digital Transactions in India: The New Equalization Levy*, 70 Bull. Intl. Taxn. 9, p. 543 et seq. (2016), Journals IBFD.
39. *See* UK: Tax Laws Amendment (Combating Multinational Tax Avoidance) Act 2015, No. 170, 2015.
40. *See* UK: Finance Act 2015, sec. 77 et seq. and the detailed Guidance of the HMRC, available at https://www.gov.uk/government/publications/diverted-profits-tax-guidance.
41. It should be noted that the latter rules do not cover cases where a physical presence neither exists nor is necessary. *See also*, for example, L. Cerioni, *The New "Google Tax": The "Beginning of the End" for Tax Residence as a Connecting Factor for Tax Jurisdiction?*, 55 Eur. Taxn. 5, pp. 186 et seq. and 191 (2015), Journals IBFD and Kofler, Mayr & Schlager, *supra* n. 14, at 376.
42. For the various attempts and approaches taken in Italy, *see* M. Allena, *The Web Tax and Taxation of the Sharing Economy: Challenges for Italy*, 57 Eur. Taxn. 7, p. 304 et seq. (2017), Journals IBFD.
43. For an overview, *see* Commission Staff Working Paper, *European agenda for the collaborative economy – supporting analysis*, SWD(2016) 184 final (2 June 2016), at p. 41 et seq.; *see also* G. Beretta, *The European Agenda for the Collaborative Economy and Taxation*, 56 Eur. Taxn. 9 (2016), Journals IBFD.
44. *See*, for Austria, for example, Kofler, Mayr & Schlager, *supra* n. 14, at 376 et seq. and Staringer, *supra* n. 14, at 343.
45. *See* European Commission Fact Sheet, *Questions and Answers on the Communication on a Fair and Efficient Tax System in the EU for the Digital Single Market*, MEMO/17/3341 (21 Sept. 2017), available at http://europa.eu/rapid/press-release_MEMO-17-3341_en.htm.
46. *Supra* n. 8, at 51 et seq. with a summary in box 4.1, at 64.
47. Those business models have already been subject to intense discussion in the literature. *See*, for example, R. Pinkernell, *Internationale Steuergestaltung in Electronic Commerce*, ifst-Schrift 494, at p. 131 et seq. (2014).
48. Specifically, e-books, audiobooks, digital videos and music and subscriptions (Amazon Prime) and services for third parties (Amazon Marketplace).
49. *See* Annual Report 2016 of Amazon.com, available at http://phx.corporate-ir.net/phoenix.zhtml?c=97664&p=irol-reportsannual (26 Sept. 2017), at 67.
50. Pinkernell, *supra* n. 47, at 138-139.

Under current tax treaty rules, the focus of income taxation is on the logistics centres: if such centres do constitute PEs within the meaning of article 5 of the OECD Model, the source state would be entitled to tax the profit attributable to such centres. Even large warehouses, etc. are, however, deemed not to create a PE if they fall under one of the explicit exceptions in article 5(4) of the OECD Model, for example, the exception for "the use of facilities solely for the purpose of storage, display or delivery of goods or merchandise belonging to the enterprise". The scope of these exceptions was, however, explicitly addressed in Action 7 of the OECD BEPS Project and article 13 of the MLI, which many countries have adopted: under this new approach, the PE exceptions in article 5(4) will no longer apply if the operation of logistics centres is a core function of the company. In such an instance, profits have to be allocated to that delivery centre, and the OECD's recent discussion draft on the attribution of profits to such PEs demonstrates some of the difficulties in doing so.[51]

If, however, logistics centres are organized as local subsidiaries,[52] the actual core question is shifted away from the presence of a (warehouse) PE to the question of an appropriate transfer pricing arrangement between the Luxembourg distribution company, which organizes sales and purchases, utilizing intellectual property, and the local logistics centres, which are responsible for the actual distribution. With Amazon, transfer pricing must include the fact that rapid and reliable distribution in the mail order business is one of the company's central functions, which must therefore be appropriately valued from the perspective of value creation. The following question demonstrates the importance of distribution: How competitive would the online mail order business be if goods could not be delivered in a timely and reliable manner?

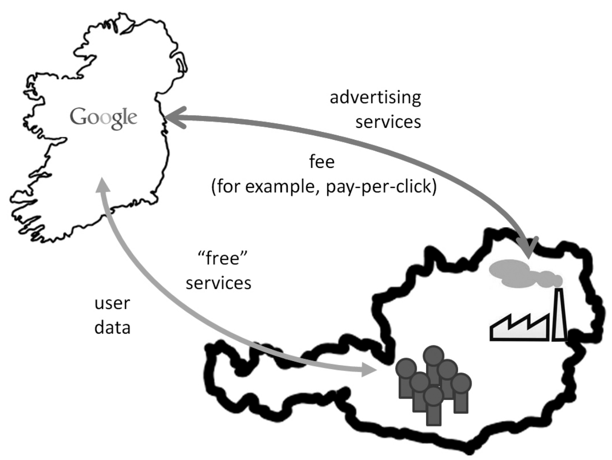
Where, however, online mail order sellers, such as Amazon, supply customers without logistics centres or warehouses in the market jurisdiction (for example, Austria) from (neighbouring) foreign countries, the traditional set-up of the international corporate tax system does not allow for the market jurisdiction to tax the retailer's profits (but it may, of course, levy VAT). It is in this area that the question of a new approach to the taxation of the digital economy arises. This scenario also exemplifies that "digital" B2C transactions must be viewed in the context of similar transactions in the "classical" economy, for example, conventional mail order sales, and hence with regard to the competitive environment, including taxation. It also raises the question as to whether or not selling goods (for example, physical books, clothing, computer hardware, etc.) via a website, makes the company a "digital company".

3.3. Internet advertising (Google)

A consumer's first thought is of Google's search engine. Google, however, is much more and – as in the past – generates most of its sales revenues from automated advertising services. In addition, Google offers a series of goods and services.[53] Google uses its free search engine and other well-known useful programmes to create an appropriately large target audience, whose (search) behaviour is analysed so it can be used in targeted advertising. Its income, however, is not directly generated from the search engine's target audience, but through the use of the search engine and other websites, including third-party websites, as advertising space for advertisers. Google's two main products are "AdWords" and "AdSense".[54]

In the European market, Google is structured such that the local Google companies merely provide support services for the local market: promotion, marketing, etc., while customers generally conclude advertising contracts directly with an Irish subsidiary of the US parent. As regards Austria, Google's business activities can be illustrated in Diagram 2.

Diagram 2: Google's search engine business model from an Austrian perspective



This tax-optimized structure only works if the local company does not establish an agency PE for the Irish subsidiary and if the actual functions of the local company are not so involved that the chosen transfer pricing structure (usually compensation on a cost-plus basis) can be questioned. As for the former issue, Action 7 of the OECD BEPS Project[55] and article 12 of the MLI have addressed agency PEs, broadening their scope to include activities of an intermediary in a country that are intended to result in the regular conclusion of contracts to be performed by a foreign enterprise (for example, commissionaire arrange-

51. *See* OECD, *Public Discussion Draft – BEPS Action 7: Additional Guidance on Attribution of Profits to Permanent Establishments* para. 36 et seq. (22 June 2017), International Organizations' Documentation IBFD.
52. As Pinkernell examined in 2012 with regard to Germany; *see* Pinkernell, *supra* n. 47, at 141-142.
53. *See* Annual Report 2016 of Alphabet Inc., available at https://abc.xyz/investor/pdf/20161231_alphabet_10K.pdf (Sept. 2017).
54. *See* R. Pinkernell, *Ein Musterfall zur internationalen Steuerminimierung durch US-Konzerne*, 89 StuW, p. 370 (2012).
55. OECD, *Preventing the Artificial Avoidance of Permanent Establishment Status – Action 7: 2015 Final Report* (OECD 2015), International Organizations' Documentation IBFD.

ments and similar strategies). It could, however, be argued that the above-described Google structure would not create an agency PE under either the pre- or post-BEPS framework.[56]

Hence, under tax treaties patterned after the OECD Model the market jurisdiction, i.e. the state where the targets of the advertisement and oftentimes also the advertisers are resident, is generally barred from taxing the foreign enterprise on any profits. Again, a new framework for taxation of the digital economy would have to establish the respective nexus to and identify the value created in the market jurisdiction. In the area of B2B transactions, where the supply and the demand side have a strong connection to the market jurisdiction, this analysis might be quite different than it would be in the context of "simple" cross-border B2C transactions.

4. Possible Approaches and Their Strengths and Weaknesses

4.1. Overview

As exemplified by the different business models applicable to online retailers versus internet advertising enterprises, any redefinition of nexus (from the perspective of domestic law, as well as tax treaty law) will face the question of what level of domestic value creation or market participation must exist to conclude that taxation at source, i.e. in the market jurisdiction, is justified. Hence, if profits are to be taxed where value is created, one needs to identify what that value is, how to measure it and where it is created. The OECD addressed these points in its Action 1 Final Report[57] in 2015 – particularly with regard to the concept of a "significant digital presence". The Action 1 Final Report discusses three possibilities to cover "digital added value" based on the characteristic challenges of the digital economy: conceptualizing a "significant economic presence",[58] creating a withholding tax for digital transactions[59] or introducing equalization levies.[60] The OECD did not issue a recommendation on any such measure, but rather left it to the states to take unilateral measures if treaty law obligations are met (which they would usually not be in respect of "virtual" PEs and withholding taxes on digital transactions).

Along these lines, the Commission's Communication of September 2017[61] raises two questions: first, the question of nexus, i.e. "how to establish and protect taxing rights in a country where businesses can provide services digitally with little or no physical presence despite having a commercial presence" ("where to tax?") and, second, the question of value creation, i.e. "how to attribute profit in new digitalized business models driven by intangible assets, data and knowledge" ("what to tax?").[62] The Commission seems to prefer a solution that embeds the taxation of the digital economy in the general international corporate tax framework by reforming the rules on PEs to include a significant economic presence (possibly within the framework of the CCCTB); it does not, however, exclude more immediate, supplementary and short-term measures (for example, an equalization tax on turnover of digitalized companies, a withholding tax on digital transactions, or levies on revenue from the provision of digital services or advertising activities).[63] All these short-term solutions have their advantages and disadvantages and also require examination in light of the existing legal framework.[64]

4.2. Significant economic presence: "Virtual" PEs

Detecting a "digital" presence is, as a first step, about finding a "new nexus based on the concept of significant economic presence" for net-basis taxation, such that a company that, for instance, offers "fully dematerialized digital activities", can be taxed in the state where it has a significant digital presence. Whether a digital presence is "significant" could then be determined based on several factors or indicators (for example, country-specific turnover from digital transactions, "digital" factors, such as a local domain name, a local digital platform, local payment options, or user-based factors, such as active domestic monthly users of a platform). A significant digital presence would result in a virtual (digital) PE in the source country – despite the lack of a physical presence. The second step then concerns the issue of determining the value created, i.e. the allocation of profits to such a "virtual PE".[65]

Specific proposals can already be found in the literature:[66] to introduce a "virtual PE" concept in tax treaty law, Hongler and Pistone (2015)[67] propose expanding the "PE" concept to include cases in which digital services (for example, apps, databases, market places, storage, advertising services) are provided in another state on a website with more than 1,000 monthly users and a certain, yet-to-be-determined, minimum turnover is exceeded. Along similar lines, the European Parliament has included a

56. In a recent French case, the *Tribunal Administratif de Paris* (TAP) found that Google's advertising sales business carried on by Google Ireland did not have a PE (based on the equivalent of the current art. 5 of the *OECD Model*) in France; for the various aspects of the case, *see* FR: TAP, 12 July 2017, Case nos. 1505113/1-1, 1505126/1-1, 1505147/1-1, 1505165/1-1 and 1505178/1-1. The decisions are currently under appeal by the French tax administration. It is, however, unlikely that the post-BEPS rules will adequately address these issues. *See* J. Schwarz, *Permanent Establishment: La lute continue*, Kluwer International Tax Blog (24 July 2017), available at http://kluwertaxblog.com/2017/07/24/permanent-establishment-la-lutte-continue/.
57. *Supra* n. 8.
58. Id., at para. 277 et seq.
59. Id., at para. 292 et seq.
60. Id., at para. 302 et seq.
61. Commission Communication, *supra* n. 4.
62. Commission Communication, *supra* n. 4, at 7.
63. That path to a possible directive would, however, encounter numerous policy and technical questions. A directive would, however, have a double harmonizing effect: it would oblige Member States to amend their domestic laws without fragmenting the internal market and would "override" (pre-existing and new) provisions in tax treaties between Member States. *See* Y. Brauner & G. Kofler, *The Interaction of Tax Treaties with International Economic Laws* sec. 2.3.3., Global Tax Treaty Commentaries IBFD (accessed 1 Nov. 2017).
64. Indeed, the Commission Communication, *supra* n. 4, at 10, notes that "[q]uestions about the compatibility of such approaches with the double-taxation treaties, State aid rules, fundamental freedoms, and international commitments under the free trade agreements and WTO rules would need to be examined".
65. *Supra* n. 8, at paras. 278 et seq. and 284 et seq.
66. For a recent overview, *see*, for example, Olbert & Spengel, *supra* n. 14, at 12 et seq.
67. *See* Hongler & Pistone, *supra* n. 11.

definition of the concept of "digital business establishment" in its opinion on the proposals for a C(C)CTB, largely focusing on the existence of "an establishment which is specifically directed towards consumers or businesses in a Member State, with due regard to the physical locations of the consumers or users and of the suppliers of the goods and services provided".[68]

These proposals for redefining a "significant economic presence" are certainly fascinating. Attaching income taxation to (mere) virtual, digital presences, however, poses new enforcement and compliance challenges.[69] It would certainly be practical to attach importance to a tax-related threshold that is actually known by the affected (source) state, for example, domestic sales revenues that are apparent under the mini one-stop shop (MOSS). Passing this threshold could then open the door to an inquiry of other criteria, for example, monthly users, etc. Even if a "significant economic presence" is identified, the traditional attribution of profits based on functions performed, assets used and risks assumed largely misses the mark with regard to "digital" PEs. The TFDE is, therefore, considering various approaches, such as adjusting existing provisions (for example, attributing actions taken via automated systems to a "digital presence" or regarding customers as persons who perform functions for the company), moving towards formulary apportionment or focusing on – rebuttable – presumptions (for example, profits based on industry coefficients).[70] More concretely, Hongler and Pistone[71] suggest that taxation could be enforced on an extraterritorial basis under specially adopted treaties, and profits could be allocated based on a modified "profit split" "with an upfront allocation of a partial profit to the market jurisdictions".[72] These solutions should, however, be embedded in an overall concept, so they do not lead to unequal treatment in comparison to the "classical" economy.

Considerations relating to the implementation of a new nexus concept should not only be aimed at national tax law, but also at tax treaty law. Even if an expansion of the "PE" concept to cover significant economic presence did not raise obvious concerns from an EU law perspective,[73] it would not be covered by the "PE" concept in the existing network of treaties. In the absence of a "physical" PE within the meaning of article 5 of the OECD Model, taxation of a digital presence of persons covered by a treaty would (generally) be barred under treaty law in relation to the respective treaty partner state or would unilaterally only be realizable through a treaty override.

Moreover, a purely EU-internal solution might "redistribute" profits of the digital economy between EU Member States, but would not do away with tax treaties with third countries (unless the European Union wants to facilitate a massive treaty override) and might, therefore, even facilitate a relocation of digital enterprises to jurisdictions outside the European Union.[74] The appropriateness of different standards for a "significant economic presence" within and outside the European Union is, therefore, highly questionable and a uniform standard within the OECD is certainly the preferred outcome.[75]

4.3. Withholding tax for digital transactions

Another option, as noted by the OECD in its Final Report on Action 1, might be the introduction of a withholding tax on digital transactions as another income tax solution. Such a withholding tax could be structured as (1) a final gross withholding tax on certain payments ("standalone option"), i.e. as an alternative to a "virtual PE" or (2) a primary form of imposition and collection mechanism to support the net taxation of profits attributable to "virtual" PEs ("back-up mechanism").[76] The recent Commission Communication also mentions a withholding tax on digital transactions as one of the alternative options for a shorter-term solution, describing it as a "standalone gross-basis final withholding tax on certain payments made to non-resident providers of goods and services ordered online".[77]

Both variants – as a standalone tax and as a back-up mechanism – appear to be problematic. Under a withholding tax, as a "standalone option", i.e. the assessment of a uniform, final gross withholding tax, all business models in the digital economy would ultimately be "lumped together". This would disregard the fact that value creation and margins under various business models are very different, as the two case examples examined in sections 3.2. and 3.3. demonstrate. Moreover, a flat withholding tax for the various divisions of a corporate group (for example, Amazon Retail versus Amazon Web Services) would also be inappropriate. If the normal net taxation of domestic providers continued in tandem with this regime, it would result in constitutional concerns, as well as discrimination concerns, under international commerce laws (GATT, GATS) and EU law.[78] In addition, corresponding changes would have to be made to tax treaties to ensure that a withholding tax as a standalone option is not barred by treaty law.[79] Apart from certain technical questions, a withholding tax as a mere "back-up mechanism" would simply ensure flat-rate taxation as a first step. As a second step, however, it would address all the challenges

68. Opinion of the Committee on Legal Affairs for the Committee on Economic and Monetary Affairs, *supra* n. 31, Amendments 6, 12, 15, 16, 19, 26. *See also* Commission Communication, *supra* n. 4, at 9.
69. *Supra* n. 8, at 105, box 7.1.
70. *Supra* n. 8, at para. 284 et seq. and, for the proposal for a modified profit split, Hongler & Pistone, *supra* n. 11, at 32 et seq.
71. Hongler & Pistone, *supra* n. 11.
72. Id., at 32 et seq.
73. *See*, for example, J. Englisch, *BEPS Action 1: Digital economy – EU Law Implications*, BTR, pp. 285-286 (2015).
74. *See*, for example, Staringer, *supra* n. 14, at 345-346.
75. Even under a uniform standard within the OECD, however, residence states that traditionally employ the exemption method (art. 23 A *OECD Model*) for active income might nevertheless evaluate whether a move to the credit system (art. 23 A *OECD Model*) for income allocated to such "digital" PEs would serve their interests better.
76. *Supra* n. 8, at para. 292 et seq.
77. Commission Communication, *supra* n. 4, at 10.
78. *See*, for example, DE: ECJ, 12 June 2003, Case C-234/01, *Arnoud Gerritse v. Finanzamt Neukolln-Nord*, ECJ Case Law IBFD; DE: ECJ, 31 Mar. 2011, Case C-450/09, *Ulrich Schröder v. Finanzamt Hameln*, ECJ Case Law IBFD and DE: ECJ, 3 Oct. 2006, Case C-290/04, *FKP Scorpio Konzertproduktionen GmbH v. Finanzamt Hamburg-Eimsbuttel*, ECJ Case Law IBFD.
79. *See* Brauner & Baez, *supra* n. 14, at 23-24.

– including under treaty law – that emerge out of a redefined "significant economic presence" concept.

Some have attempted to find "middle ground": Brauner and Baez (2015) propose the introduction of a general 10% gross withholding tax on all deductible and hence potentially "base eroding" payments as a rough but simple solution.[80] The scope of application could then be delimited by a series of exceptions: in particular, it is only intended to affect the B2B area. Non-digital goods and services, such as rent, materials, etc. could also be exempt, as could certain other payments, in particular wages and dividends. An exception could also be provided for situations in which there is an existing registration for net taxation in the source country – under a yet-to-be-defined new nexus concept. Thus, it would be up to the company to accept a final gross withholding tax or register for purposes of net taxation. Brauner and Baez propose a higher, non-final 15% tax on payments made to unregistered recipients or to recipients in areas with no or low taxation.

As this proposal indicates, the scope of application of such a withholding tax would have to be broadly defined to prevent circumvention and qualification conflicts (for example, all online transactions for goods or services and all online sales transactions with non-residents).[81] This, in turn, raises the question of collection – particularly in the B2C area – because private customers have little experience or incentive to withhold and remit the withholding tax for non-resident businesses, and the collection of small withholding tax amounts by numerous private customers would be inefficient. Therefore, Brauner and Baez advocate imposing no withholding taxes in the B2C area,[82] also because these payments do not reduce the tax base and thus do not potentially result in "base erosion". A B2C withholding obligation would only be practical if it were shifted to intermediaries (for example, credit card companies and banks). Considering the various business models and the legal and practical limitations, it appears that a withholding tax would only be appropriate as a supplement to a new "significant economic presence" concept to ensure effective taxation in the B2B area.

4.4. Equalization levies

4.4.1. BEPS Action 1

The BEPS Action 1 Final Report furthermore mentions the introduction of "equalization levies" as a possible option.[83] These levies are special excise taxes to compensate for "lost" profit taxes, limited to taxpayers with a significant economic presence. The purpose is to place domestic and foreign providers on the same level. Presently, several countries collect excise taxes, for example, on insurance premiums paid to non-resident providers in the insurance sector that would otherwise remain untaxed; another example is the "equalization levy" on online advertising introduced by India in 2016, pursuant to which B2B payments to non-resident taxpayers for online advertising are subject to taxation at a rate of 6%.[84] The OECD notes that in the digital economy, an equalization levy is intended to serve as a way to tax a non-resident enterprise's significant economic presence in a country while avoiding the problems of profit attribution for purposes of a nexus based on a "virtual" PE concept. A significant economic presence, however, would nevertheless be required to apply an equalization tax in order to provide clarity, certainty and be equitable to all stakeholders. To avoid an undue burden on small and medium-sized enterprises, an equalization tax would be applied only in situations in which it is determined that a non-resident enterprise has a significant economic presence.[85] Hence, the baseline definition problem of when such a "significant economic presence" would exist would also arise in the context of equalization taxes. As for the potential scope of such a tax, the OECD discusses a number of variations depending on the respective policy priorities:[86] if, for example, the priority is to tax remote sales transactions with customers in a market jurisdiction, one possibility would be to apply the levy to all transactions concluded remotely with in-country customers; if, however, the policy priority is to tax the value considered to be directly contributed by customers and users, a levy could be imposed on data and other contributions gathered from in-country customers and users.

4.4.2. Quick fix in the European Union?

More recently, "equalization taxes" have gathered quite the political momentum in the European Union, at least as a short-term solution, i.e. a "quick fix". Leading up to the informal ECOFIN meeting in Tallinn on 16 September 2017, France, Germany, Italy and Spain called for the introduction of such a levy based on turnover generated in Europe by digital companies as a "quick fix",[87] and six more Member States have adopted this approach. The letter asks the Commission "to explore EU law compatible options and propose any effective solutions based on the concept establishing a so-called 'equalisation tax' on the turnover generated in Europe by the digital companies". The "amounts raised would aim to reflect some of what these companies should be paying in terms of corporate tax". The Commission has taken up this topic in its recent Communication, noting that, "[a]longside the work on this longer-term strategy, there are also more immediate, supplementary and short-term measures that should be considered to protect the direct and indirect tax bases of Member States".[88] One of these alternative options for shorter-term solutions is an "[e]qualisation tax on turnover of digitalised companies", which the Commission describes as a "tax on all untaxed or insufficiently taxed income generated from all internet-based business activities, including business-to-business and business-to-consumer, creditable against the corporate income tax or as a separate tax". A potential sub-set of such equalization

80. Id.
81. *Supra* n. 8, at para. 293 et seq.
82. *See* Brauner & Baez, *supra* n. 14, at 16 et seq.
83. *Supra* n. 8, at para. 302 et seq.
84. For an overview, *see* Wagh, *supra* n. 38, at 543 et seq.
85. *Supra* n. 8, at para. 302.
86. Id., at para. 303 et seq.
87. *See supra* n. 5.
88. Commission Communication, *supra* n. 4, at 10.

taxes could be more "targeted" levies, for example, on revenues generated from the provision of digital services or advertising activity. Such separate levies "could be applied to all transactions concluded remotely with in-country customers where a non-resident entity has a significant economic presence",[89] and might also entail what has been termed "ALES", i.e. an "alternative levy on e-sales".[90]

4.4.3. Pros and cons

Neither the letter of the Finance Ministers nor the Commission's Communication fully reveals the potential scope of an "equalization levy" or the underlying considerations. A question that arises is why and what digital companies "should" pay in the source jurisdiction, the personal and material scope, as well as rates of such a tax and what technical implementation and enforcement might look like. First, the personal and material scope of the intended equalization tax is unclear. It needs to be determined if the tax should only apply to cross-border transactions (i.e. only to non-resident enterprises) or also domestically. The former approach might raise all kinds of WTO and EU law objections, while the latter implies the necessity to mitigate double imposition of regular corporate tax and the equalization tax.[91] As to the material scope and definition of the tax base, relying on "turnover" generated in Europe by the digital companies may seem to be a rather simple starting point for taxation. It may also have the advantage of easier implementation, given existing VAT data from the MOSS. However, one needs to clearly identify the tax base and hence an accurate definition of "digital turnover".

From a political point of view, the equalization tax should comprise all payments defined as "digital" or turnover of "digitalized companies", but it is hard to find an accurate definition of digital. If the equalization tax were to comprise all Internet-based activities, including B2B and B2C,[92] the tax base would become rather wide, and possibly require limitations (for example, by introducing a "significant economic presence" as a benchmark, just as the OECD has discussed) to make it functional. Hence, defining both "digital" and "significant economic presence" poses numerous technical and policy questions.

Moreover, clarity is required on what should be taxed and to what extent. For this purpose, one should not lose sight of the very different business models – two of which have been described previously[93] – and the very different effect a turnover-based tax might have. If the equalization tax is intended to comprise all Internet-based activities, Amazon, Google, Netflix and the like would be covered. But would they also be taxed in the same way? This depends on the tax rate. If there were only one flat tax rate (for example, 6%), the different business models would all be taxed at the same turnover-based level, but the profit-based effect on typical B2B (for example, Google) and B2C (for example, Amazon, Netflix) business models would be quite different given the different margins. The various business models of Amazon, Google, Apple, Netflix and the like highlight the different approaches to equalization taxes and a new nexus based on a significant economic presence: profit allocation to a "virtual PE" based on a functional analysis allows for a clear differentiation between the various business models. This approach seems more complex and would result in fairly balanced taxation compared to turnover-based taxes.

The revenue goal of an equalization tax is to raise amounts that reflect "some of what these companies should be paying in terms of corporate tax". By using turnover as the tax base, equalization tax seems similar to VAT, even though it is an equalization payment in respect of or compensation for "lost" profit taxes. This would not raise problems with regard to the current VAT system in Europe that are not solvable. First, there are good arguments that such a tax is not covered by article 401 of the VAT Directive's (2006/112)[94] prohibition against "turnover taxes" because it would not be an all-phase, input-deduction tax that generally applies to transactions relating to goods or services.[95] Second, the prohibition, which is addressed to the Member States, would not conflict with a tax that is on the same legislative "level", i.e. secondary EU law.

One final issue, however, concerns the international "compatibility" of equalization taxes. If these were structured to raise the revenues expected, they would probably create cases of (domestic[96] and international) double or multiple taxation. Indeed, the existing equalization taxes, such as the Indian tax on online advertising, are viewed as being indirect taxes that fall squarely outside the scope of existing tax treaties.[97] Consequently, their imposition is not barred and treaty relief from double taxation remains available in the taxpayer's residence state.[98] Nevertheless, it cannot be denied that a "connection" to corporate tax exists, either because the direct tax system serves as a backstop[99] or because double taxation due to the imposition of a regular corporate tax and the equalization levy is mitigated (for example, through a credit).[100] The OECD

89. Id.
90. As briefly discussed by Pascal Saint-Amans, Director of the Centre for Tax Policy and Administration at the OECD, at the 2017 IFA congress in Rio de Janeiro during "Subject 1: Assessing BEPS: Origins, Standards, and Responses" on 28 Aug. 2017.
91. *Supra* n. 8, at para. 306.
92. *See* Commission Communication, *supra* n. 4, at 10 (option 1).
93. *See* sec. 3.
94. Council Directive 2006/112/EC of 28 November 2006 on the Common System of Value Added Tax, OJ L347 (2006), EU Law IBFD.
95. *See* specifically with regard to the Italian IRAP, IT: ECJ (Grand Chamber), 3 Oct. 2006, Case C-475/03, *Banca popolare di Cremona Soc. Coop.a.r.l v Agenzia Entrate Ufficio Cremona*, ECJ Case Law IBFD.
96. The Commission's Communication, *supra* n. 4, explicitly notes that an equalization tax might either be structured as "creditable against the corporate income tax or as a separate tax". If structured in the former way, however, this would seem to imply that the equalization tax could be credited against the domestic corporate tax, if any. That, of course, would raise a number of technical issues, for example, with regard to the cross-crediting of taxes over various entities in the group or over various activities within a single entity.
97. *See*, for India's position, for example, Wagh, *supra* n. 38, at 543 et seq.
98. *Supra* n. 8, at para. 307.
99. In India, the non-resident advertiser is the taxpayer, but the Indian client has an obligation to withhold the tax; if it violates that obligation, no direct tax deduction is allowed for the advertising expense. *See* Wagh, *supra* n. 38, at 543 et seq.
100. *Supra* n. 8, at para. 308.

addresses concerns about international double taxation by suggesting that the levy be structured "to apply only to situations in which the income would otherwise be untaxed or subject only to a very low rate of tax". The OECD, however, does not go into detail as to how such an alignment of corporate taxation and turnover taxation might be accomplished in practice.

There are, of course, also other objections to "quick fixes".[101] Such efforts might be merely piecemeal, "patching-up" individual issues without providing a reliable, long-term policy solution. With evolving modes of monetization (for example, from advertising to subscription), an equalization tax may also be a volatile source of revenue depending on its actual structure. Moreover, it is not entirely clear how beneficial equalization taxes will be for the European Union and its Member States (especially if third countries react by enacting similar taxes), and how such taxes would affect growth and investment. Finally, it is not yet clear if the economic burden of such a tax will fall on the "digital companies" or domestic consumers. A further issue is the extent to which such an equalization tax might be shifted from taxpayers, i.e. the digital companies, to European consumers, given that some players in the digital economy operate as quasi-monopolies. These questions certainly need to be explored.

101. *See also supra* n. 28, at para. 8.

5. Conclusion

Digitalization has created completely new business models and creates significant challenges for the current tax system. As a result, there is broad ongoing debate on both a political and technical level concerning the manner in which tax systems should cope with these developments. Based on the work of the OECD, the European Union has agreed to work on this topic and 10 Member States have already called for the introduction of an equalization tax as a "quick fix". An analysis of Amazon and Google's business models has shown that a differentiated approach is needed, under both of the proposed approaches, i.e. a virtual PE or an equalization tax. With regard to recent developments in the European Union, the authors have illustrated some of the pros and cons of both approaches as a starting point for future discussions.

