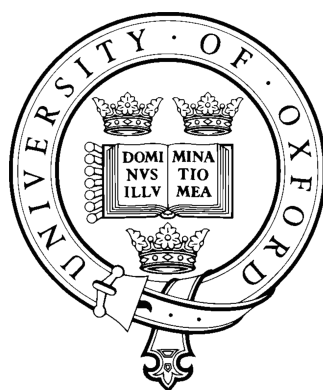


# INTERNATIONAL TAXATION OF CROSS-BORDER DIGITAL COMMERCE



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**ABSTRACT**

This thesis discusses jurisdiction to tax cross-border digital commerce. The primary objective is to consider the reasons for the erosion of jurisdictional links, or nexus, between countries and taxpayers' digital activities and evaluate possible solutions for addressing such nexus erosion. Whilst it is argued that digital commerce is impossible to ring-fence due to digital technologies transcending all industries, the main focus of this research is on automated business models as case studies for the broader tax issues applicable across the entire digital economy. Using cloud computing, online advertising and e-tailing models as examples of digital commerce in the narrow sense, this thesis demonstrates that the proxies for establishing jurisdictional nexus have become increasingly fluid, thereby challenging the traditional international tax regimes for profits and consumption taxation. Numerous policy solutions have been proposed in order to rectify nexus erosion, including global and territorial tax models. Unlike the previous research in this area, this thesis focuses on the nexus elements of such proposals and assesses their viability in the light of the wider Internet governance jurisprudence. Global tax solutions, such as global e-commerce taxes and formulary apportionment, are analysed in the context of the international governance regime for the technical Internet infrastructure. Territorial virtual tax solutions, such as virtual permanent establishments, withholding taxes and destination cash flow taxes, are considered in the light of the Internet jurisprudence on the 'effects' and 'targeting' nexus standards. It is argued that, given the lack of technical and political infrastructure, none of the proposed routes would be viable from a practical perspective in the near future. It is concluded, therefore, that a practical solution would involve retaining the traditional profits and consumption tax models, whilst testing a narrow version of the digital targeting nexus standard as a backstop anti-abuse measure. It is envisaged that the limited anti-avoidance provision would subsequently pave the way for a comprehensive long-term solution, as digitisation continues to transform global commerce.

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<b>DPT</b>	Diverted profits tax
<b>IANA</b>	Internet Assigned Numbers Authority
<b>ICANN</b>	Internet Corporation for Assigned Names and Numbers
<b>IMF</b>	International Monetary Fund
<b>ISP</b>	Internet service provider
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PE</b>	Permanent establishment
<b>SSUTA</b>	Streamlined Sales and Use Tax Agreement
<b>TCP / IP</b>	Transmission Control Protocol / Internet Protocol
<b>UN</b>	United Nations
<b>VAT</b>	Value Added Tax
<b>WB</b>	World Bank
<b>WHT</b>	Withholding tax
<b>WTO</b>	World Trade Organisation

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# INTRODUCTION

## 1. Digital revolution

The Internet and technology communications (ICT) revolution has transformed business processes through digitisation, with computer technologies now transcending all elements of business life.<sup>1</sup> Traditional businesses have adapted their business models, using the Internet to improve efficiency of supply chains and to diversify geographical presence, and now form the core of electronic commerce.<sup>2</sup>

Over time, technological developments have also spurred the emergence of more advanced business models that take the computer revolution one step further. The increasing digitisation of global commerce has resulted in the development of automated models, which rely on algorithmic processes that can reach audiences across borders.<sup>3</sup>

The pervasive utilisation of shared computer infrastructure through so-called cloud computing has also allowed businesses to grow exponentially, achieving scale economies and cutting capital investment in physical infrastructure, and hence

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<sup>1</sup> OECD, *Digital Economy Outlook 2015* (2015) 16, noting that the digital economy ‘permeates the world economy from retail (e-commerce) to transportation (automated vehicles), education (Massive Open Online Courses), health (electronic records and personalised medicine), social interactions and personal relationships (social networks). Information and Communication Technologies (ICTs) are integral to professional and personal life; individuals, businesses and governments are increasingly inter-connected via a host of devices at home and at work, in public spaces and on the move’.

<sup>2</sup> OECD, *Electronic and Mobile Commerce* (2013) 4: ‘ICTs and the Internet are leading to a structural change of commercial transactions by making them more efficient. For businesses, e-commerce improves efficiency in two keys ways, by enlarging the scope of the market and lowering operating barriers and costs’.

<sup>3</sup> Online advertising is discussed in Chapter 1 – see nn 180–181. See also OECD, *Digital Economy Outlook 2015* (n 1) 57, noting the growth of the online advertising sector as follows: ‘In 2013, revenues from online advertisement amounted to USD 117 billion and are expected to increase to over USD 190 billion by 2018, closing the gap with total TV advertisement revenues. Search accounts for the largest proportion of online advertising (USD 48 billion in 2013), followed by video and mobile advertisement with compound annual growth rates of 23.8% and 21.5% respectively’.

transforming it into immediately relievable costs.<sup>4</sup> There have also emerged new types of digital content that only exists as a code, such as entertainment content and algorithmic digital services delivered over the Internet.<sup>5</sup> Business models have emerged that heavily rely on data processing to generate economic value.<sup>6</sup> Traditional offline trade has thus gradually transformed into digital commerce.

With further development of computer technologies, which are becoming cheaper and more readily available to small businesses and private consumers, traditional bricks-and-mortar businesses may soon fully embrace digital technologies and consequently move into the realm of digital commerce.<sup>7</sup> For example, it can be expected that the ‘Internet of Things’ will occupy the business landscape, whereby not only

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<sup>4</sup> Cloud computing is considered in Chapter 1 – see nn 172–176. See also OECD, *Digital Economy Outlook 2015* (n 1) 49, discussing the uptake in cloud computing across businesses: ‘In 2014, 22% of companies relied on cloud computing services, with shares ranging from 50% in Finland to 6% in Poland’. See also European Commission, *Unleashing the Potential of Cloud Computing in Europe* (COM (2012) 529, 2012) 4: ‘The benefits of adopting cloud computing can be illustrated by a 2011 survey for the Commission which shows that as a result of the adoption of cloud computing 80% of organisations reduce costs by 10–20%. Other benefits include enhanced mobile working (46%), productivity (41%), standardisation (35%), as well as new business opportunities (33%) and markets (32%)’.

<sup>5</sup> On digital content see Chapter 1 at nn 166–171. See also OECD, *Digital Economy Outlook 2015* (n 1) 152, stating that ‘[t]he availability of digital online content and consumption continues to rise ... User-created content, notably images and video, continues to grow strongly ... Digital content is increasingly consumed and shared on mobile devices ... The above-mentioned trend adds to the ongoing migration of newspaper from print to digital ... Television is also undergoing a transformation, with delivery over the Internet targeted to individuals and increased flexibility ... Advertising ... is following suit’.

<sup>6</sup> OECD, *Digital Economy Outlook 2015* (n 1) 147, noting that many business models ‘rely on data-driven platforms that provide services based on data collection and analysis. The providers of such platforms can yield substantial profit margins by exploiting network effects and multi-sided markets’.

<sup>7</sup> OECD, *Digital Economy Outlook 2015* (n 1) 18, arguing that ‘[t]he potential is huge for increased adoption and use of ICTs and the Internet to boost growth and innovation in goods, services and business organisation, across all sectors. While most firms in OECD countries have a broadband connection – 95% of all enterprises with more than 10 employees in 2014 – few use enterprise resource planning software (31%), cloud computing services (22%) or receive electronic orders (21%). E-commerce sales account on average for just 16% of total turnover, and up to 90% of e-commerce comes from business-to-business transactions’.

people but also the majority of everyday surroundings would become part of the automated digital network of networks.<sup>8</sup>

The widespread adoption of drones, driverless vehicles and artificial intelligence in business value chains would further reduce reliance on functional connections with market countries.<sup>9</sup> The likes of Amazon will ultimately shift towards centralised warehousing and delivery facilities operated through automated software platforms without substantial human involvement.<sup>10</sup> Further, virtual showrooms accessible through virtual optical media, such as Google Glass, might soon challenge bricks-and-mortar shops.<sup>11</sup> These trends might further undermine territorial connections between online enterprises and target markets.

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<sup>8</sup> OECD, *Digital Economy Outlook 2015* (n 1) 61: ‘There have been numerous predictions about the size of the Internet of Things. The most widely cited is that of Ericsson, which stated in 2010 that there would be 50 billion connected devices by 2020 ... In 2012, the OECD produced its own estimates of IoT [Internet of Things] usage in people’s residences, to verify some of the claims ... [It is envisaged that] the number of connected devices in OECD countries would increase from over 1 billion today to 14 billion by 2022’.

<sup>9</sup> OECD, *Digital Economy Outlook 2015* (n 1) 247, noting that ‘[i]t remains unclear whether autonomous vehicles will eventually be a common sight on the roads, but industry estimates place implementation at about a decade away’; see also *ibid* 274, noting that ‘[a] number of countries and companies are actively testing driverless cars on public roads. Google in the United States is the best-known example, but every major car manufacturer has a prototype programme that deals with autonomous vehicles ... Some automobile manufacturers ... expect to bring near or fully autonomous vehicles on the market between 2017 and 2020’; *ibid* 275, noting that ‘unmanned remote-piloted aircraft systems (RPAS), also known as Unmanned Aerial Vehicles (UAV) or drones, are allowed in some OECD countries’. See generally Erik Brynjolfsson and Andrew McAfee, *Race Against the Machine: How the Digital Revolution is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy* (Digital Frontier Press 2013); Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* (WW Norton & Company 2014).

<sup>10</sup> See, for example, OECD, *Digital Economy Outlook 2015* (n 1) 274, noting that ‘a Dutch online retailer ... announced in October 2013 that it would build the world’s largest robotic distribution centre to replace its traditional warehouse ... Robots will manage the warehouse, pick goods, and move to and from picking stations, where employees will pick and pack the goods’.

<sup>11</sup> On virtual worlds see Chapter 1 at n 178. See also OECD, *Virtual Worlds: Immersive Online Platforms for Collaboration, Creativity and Learning* (OECD Digital Economy Papers No 184, 2011) 15: ‘Some businesses see virtual worlds as an additional marketing environment in which to place their brand and (digital) equivalents of their real life products (e.g. communication services, consumer electronics, cars) and some have also opened virtual shops for their virtual products ... Some firms and organisations are going further and are using virtual worlds for other activities related to their business. This includes but is not limited to hosting recruitment fairs, virtual conferences and training sessions’.

It can be envisaged that the extensive adoption of 3D printing technologies would make physical delivery of offline products obsolete in the future, potentially resulting in manufacturers and suppliers moving away from selling physical goods to providing digital product designs or licences, which would be subsequently recreated as physical goods in 3D printers.<sup>12</sup>

Overall, in the near future, the digitisation of the global economy will result in more substantial mobility of production factors and their concentration in commercially favourable locations, without, necessarily, a meaningful physical presence in market jurisdictions.<sup>13</sup> Whilst reliance on physical production factors will not disappear completely, pinpointing where exactly economic value is created within multinational groups will become increasingly challenging.

## **2. Regulatory challenges arising from the digital revolution**

While comprehensive digitisation of the world economy has occurred over the past two decades, regulatory reforms have stumbled upon the traditional territoriality of national regimes. In the narrow technical governance of the Internet, development of a global

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<sup>12</sup> On 3D printing see Chapter 1 at n 171. See European Commission, *Commission Expert Group on Taxation of the Digital Economy. Report* (28 May, 2014) 52: ‘3D printers are commonplace for designers, engineers, and architects, who use them to create product designs and prototypes, they are becoming popular for personal use (sales of personal 3D printers grew 200 to 400% per year between 2007 and 2011), and also gaining traction for direct production of tools, moulds, and even final products. Such uses could enable unprecedented levels of mass customisation, smaller and cheaper supply chains, and even the “democratisation” of manufacturing by allowing consumers or entrepreneurs to print their own products ... MGI estimates that 3D printing could generate economic impact of \$230 billion to \$550 billion per year by 2025, with the largest source of potential impact from consumer uses, followed by direct manufacturing and the use of 3D printing to create tools and moulds’.

<sup>13</sup> OECD, *Addressing the Tax Challenges of the Digital Economy, OECD / G20 Base Erosion and Profit Shifting Project* (2014) 14, stating that ‘the ability to centralise infrastructure at a distance from a market jurisdiction and conduct substantial sales of goods and services into that market from a remote location, combined with increasing ability to conduct substantial activity with minimal use of personnel, generates potential opportunities to achieve BEPS by fragmenting physical operations to avoid taxation’.

regime for managing the Internet naming and numbering system has created international tensions between the US government and the rest of the world.<sup>14</sup>

In the wider Internet regulation of online activities, nation states have struggled to develop a unified approach to applying their traditional laws to Internet activities. Criminal law has suffered from the resurgence of Internet offences benefiting from the global reach of the network.<sup>15</sup> Tort law, and libel law in particular, has seen challenges emerging from the accessibility of harmful material across the globe, with courts struggling to establish a limit to their jurisdictional reach.<sup>16</sup> Similarly, intellectual property disputes have questioned the traditional notions of territoriality in the context of trademark and copyright protection.<sup>17</sup> Consumer contracts and personal data laws

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<sup>14</sup> Discussed further in Chapter 4 at nn 454–503. See generally Milton L Mueller, *Ruling the Root: Internet Governance and the Taming of Cyberspace* (MIT Press 2002); Milton L Mueller, *Networks and States: The Global Politics of Internet Governance* (MIT Press 2010). See also Jonathan Zittrain, ‘Be Careful What You Ask For: Reconciling a Global Internet and Local Law’ in Adam Thierer and Clyde Wayne Crews Jr (eds), *Who Rules the Net?: Internet Governance and Jurisdiction* (CATO Institute 2003); Viktor Mayer-Schonberger, ‘The Shape of Governance: Analyzing the World of Internet Regulation’ (2003) 43 *Virginia Journal of International Law* 605; Jonathan Zittrain, *The Future of the Internet – And How to Stop It* (Yale University Press 2008); Lee A Bygrave and Jon Bing, *Internet Governance: Infrastructure and Institutions* (Oxford University Press 2009).

<sup>15</sup> Sarah J Summers and Christian Schwarzenegger, *The Emergence of EU Criminal Law: Cybercrime and the Regulation of the Information Society* (Hart Publishing 2014); Matthew Richardson, *Cyber Crime: Law and Practice* (Wildy, Simmonds & Hill Publishing 2014). See also Susan W Brenner and Bert Jaap-Koops, ‘Approaches to Cybercrime Jurisdiction’ (2004) 4 *Journal of High Technology Law* 1; Ellen S Podgor, ‘Cybercrime: Discretionary Jurisdiction’ (2009) 47 *University of Louisville Law Review* 727.

<sup>16</sup> Holger P Hestermeyer, ‘Personal Jurisdiction for Internet Torts: Towards an International Solution?’ (2006) 26 *Northwestern Journal of International Law and Business* 267; Uta Kohl, *Jurisdiction and the Internet: Regulatory Competence Over Online Activity* (Cambridge University Press 2007) 115–164; Matthew Collins, *The Law of Defamation and the Internet* (3rd edn, Oxford University Press 2010). See also Ronald J Krotoszynski, ‘Defamation in the Digital Age: Some Comparative Law Observations on the Difficulty of Reconciling Free Speech and Reputation in the Emerging Global Village’ (2005) 62 *Washington & Lee Law Review* 339; Anna Vamialis, ‘Online Defamation: Confronting Anonymity’ (2013) 21 *International Journal of Law & Information Technology* 31.

<sup>17</sup> Sheldon Burshtein, ‘Jurisdiction in Internet Trade-Mark and Domain Name Disputes’ (2006) 20 *Intellectual Property Journal* 1; Anita B Frohlich, ‘Copyright Infringement in the Internet Age – Primetime for Harmonized Conflict-of-Laws Rules?’ (2009) 24 *Berkeley Technology Law Journal* 851. See also Brian F Fitzgerald, ‘Software as Discourse: The Power of Intellectual Property in Digital Architecture’ in Benedict Atkinson and Brian F Fitzgerald (eds), *Copyright Law*, vol 3 (Ashgate 2011).

have had to address challenges relating to cross-border transactions.<sup>18</sup> In all these cases, countries have found it challenging to reach international consensus on common jurisdictional standards or to set a definite limit to the jurisdictional reach of their territorial regimes.<sup>19</sup>

International taxation of Internet businesses has also faced challenges arising from the ubiquitous nature of online activities. Digital enterprises have been at the forefront of recent global regulatory debates, with the likes of Amazon, Apple and Google exploring the mismatch between cyberspace and the bordered offline world of legal regulation.<sup>20</sup> The recent investigations show that, whilst state authorities have been

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<sup>18</sup> Benjamin A Spencer, 'Jurisdiction and the Internet: Returning to Traditional Principles To Analyze Network-Mediated Contacts' (2006) 2006 *University of Illinois Law Review* 71; Christopher Kuner, 'Data Protection Law and International Jurisdiction on the Internet (Part 1)' (2010) 18 *International Journal of Law & Information Technology* 176; Christopher Kuner, 'Data Protection Law and International Jurisdiction on the Internet (Part 2)' (2010) 18 *International Journal of Law & Information Technology* 227; Christopher Kuner, *Transborder Data Flows and Data Privacy Law* (Oxford University Press 2013); Paul Bernal, *Internet Privacy Rights: Rights to Protect Autonomy* (Cambridge University Press 2014).

<sup>19</sup> See generally Kohl (n 16). See also Michael A Geist, 'Is There a There There? Toward Greater Certainty for Internet Jurisdiction' (2001) 16 *Berkeley Technology Law Journal* 1345; Uta Kohl, 'The Rule of Law, Jurisdiction and the Internet' (2004) 12 *International Journal of Law & Information Technology* 365; Joel R Reidenberg, 'Technology and Internet Jurisdiction' (2005) 153 *University of Pennsylvania Law Review* 1951; Yulia A Timofeeva, 'Worldwide Prescriptive Jurisdiction in Internet Content Controversies: A Comparative Analysis' (2005) 20 *Connecticut Journal of International Law* 199; Thomas Schultz, 'Carving up the Internet: Jurisdiction, Legal Orders, and the Private/Public International Law Interface' (2008) 19 *European Journal of International Law* 799; Bernhard Maier, 'How Has the Law Attempted to Tackle the Borderless Nature of the Internet?' (2010) 18 *International Journal of Law & Information Technology* 142; Rovey A Heverley, 'Breaking the Internet: International Efforts to Play the Middle Against the Ends – A Way Forward' (2011) 42 *Georgetown Journal of International Law* 1083; Teresa Scassa and Robert J Currie, 'New First Principles? Assessing the Internet's Challenges to Jurisdiction' (2011) 42 *Georgetown Journal of International Law* 1017; Alan M Trammell and Derek E Bambauer, 'Personal Jurisdiction and the "Interwebs"' (2015) 100 *Cornell Law Review* 1129.

<sup>20</sup> These developments are discussed in the context of the functional nexus challenges in Chapter 2. See generally House of Lords, *Tackling Corporate Tax Avoidance in a Global Economy: Is a New Approach Needed? Report* (2013); on Amazon see House of Commons and Committee of Public Accounts, *HM Revenue & Customs: Annual Report and Accounts 2011–12* (Nineteenth Report of Session 2012–13, 2012) 9; on Google see House of Commons, *Tax Avoidance – Google* (Ninth Report of Session 2013–14, 2013) 9–10; discussed in Stephanie Soong Johnston, 'Report Accuses Google of "Highly Contrived" Avoidance Tactics' (2013) 70 *Tax Notes International* 1267; on Apple see United States Senate Permanent Subcommittee on Investigations, *Hearing on Offshore Profit Shifting and the US Tax Code, Part 2 (Apple Inc.): Exhibits* (2013); on Microsoft see United States Senate and Permanent Subcommittee on Investigations, *Hearing on Offshore Profit Shifting and the US Tax Code, Part 1 (Microsoft & Hewlett-Packard)* (Exhibits for 20 September Hearing, 2012); on similar issues in the non-Internet context see the Starbucks case discussed in House of Commons and Committee of Public Accounts, *PAC Report on Tax Avoidance* (n 20) 8–9;

preoccupied with reinforcing century-old laws, businesses have leapt ahead in the design of their value chains and now enjoy perfectly legitimate corporate structures with minimal taxable presence in market jurisdictions and flexible production bases in home countries, which has affected international taxation of digital commerce:

The continual increase in the potential of digital technologies and the reduced need in many cases for extensive physical presence in order to carry on business, combined with the increasing role of network effects generated by customer interactions, can raise questions as to whether the current rules to determine nexus with a jurisdiction for tax purposes are appropriate.<sup>21</sup>

One of the key issues is that the current tax models allocate taxing rights between jurisdictions using a practical compromise that relies purely on traditional concepts derived from the offline era.<sup>22</sup> According to this compromise, residence or origin states have the power to tax locally headquartered businesses, which includes enterprises that have a functional business connection with the country, based on where top management functions are carried out.<sup>23</sup> Equally, market countries assume their right to

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discussed in Edward D Kleinbard, 'Through a Latte, Darkly; Starbucks's Stateless Income Planning' USC Law Legal Studies Paper No13-10, 15 July 2013 <<http://ssrn.com/abstract=2264384>> accessed 23 August 2014.

<sup>21</sup> OECD, *Addressing the Tax Challenges of the Digital Economy, Action 1 – 2015 Final Report, OECD/G20 Base Erosion and Profit Shifting Project* (2015) 99; see also OECD, *BEPS Digital Taxation Report 2014* (n 13) 17.

<sup>22</sup> Hugh J Ault, Wolfgang Schon and Stephen E Shay, 'Base Erosion and Profit Shifting: A Roadmap for Reform' (2014) 68 *Bulletin for International Taxation* 275, 276, noting that '[t]he political "drivers" of BEPS are a symptom of deeper problems with an international income tax regime whose contours were formed in the 1920s and have not changed materially since. International tax rules were largely developed under a bilateral paradigm of a well-developed and extensive residence country taxing system and a source country which fully exercised its taxing rights ... The bilateral paradigm does not reflect the predominant reality of multinational tax planning today'. On the international tax regime and traditional allocation of taxing rights see generally Wolfgang Schon, 'Persons and Territories: On the International Allocation of Taxing Rights' (2010) 6 *British Tax Review* 554. See also Sol Picciotto, *International Business Taxation: A Study in the Internationalization of Business Regulation* (Quorum Books 1992); Reuven S Avi-Yonah, 'Structure of International Taxation: A Proposal for Simplification' (1995) 74 *Texas Law Review* 1301; Michael J Graetz, 'Taxing International Income: Inadequate Principles, Outdated Concepts, and Unsatisfactory Policies' (2001) 54 *Tax Law Review* 261; Reuven S Avi-Yonah, *International Tax as International Law: An Analysis of the International Tax Regime* (Cambridge University Press 2007).

<sup>23</sup> Residence tax issues are discussed in the context of the control nexus standard in Chapter 2 at nn 190–231. On corporate residence see generally Robert Couzin, *Corporate Residence and International Taxation* (IBFD 2002); Guglielmo Maisto (ed) *Residence of Companies under Tax Treaties and EC Law* (IBFD Publications 2009); Daniel N Shaviro, 'The David R Tillinghast

tax businesses based on where the source of income is located or where consumption takes place, which is normally established using such physical proxies as where the payer is resident for withholding tax purposes or where fixed or permanent establishments perform sufficient business functions to create taxable presence.<sup>24</sup>

The digital revolution has challenged this traditional compromise for the allocation of jurisdictional tax rights. The cross-border mobility of production factors has affected global value chains; due to flexibility in locating value-producing factors across jurisdictions, different industries have adopted novel approaches to doing business, albeit to a different extent.<sup>25</sup> This has resulted in businesses' focus shifting towards investing in dispersed high-skilled labour, decentralised decision-making and collaborative teamwork.<sup>26</sup> Nowadays, it is, therefore, largely a judgment call as to

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Lecture. The Rising Tax-Electivity of US Corporate Residence' (2011) 64 Tax Law Review 377; Aurora Ribes, 'Tax Residence and the Mobility of Companies in the European Union: The Desirable Harmonization of the Tax Connecting Factors' (2012) 40 Intertax 606; Luca Cerioni, 'Tax Residence Conflicts and Double Taxation: Possible Solutions?' (2012) 66 Bulletin for International Taxation 647; Frank Potgens and others, 'The Impact of a Corporate Governance System on the Place of Effective Management Concept in Spain, France, the United Kingdom, the Netherlands, Germany and Italy – Parts 1–2' (2014) 54 European Taxation 423.

<sup>24</sup> Source tax nexus standards discussed in Chapter 2 at nn 233–315. On source taxation see generally Klaus Vogel, 'Worldwide vs Source Taxation of Income – A Review and Re-Evaluation of Arguments (Part I)' (1988) 8–9 Intertax 216; Klaus Vogel, 'Worldwide vs Source Taxation of Income – A Review and Re-Evaluation of Arguments (Part II)' (1988) 10 Intertax 310; Klaus Vogel, 'Worldwide vs Source Taxation of Income – A Review and Re-Evaluation of Arguments (Part III)' (1988) 11 Intertax 393; Arvid A Skaar, *Permanent Establishment: Erosion of a Tax Treaty Principle* (Kluwer Law and Taxation Publishers 1991); David L Forst, 'The Continuing Vitality of Source-Based Taxation in the Electronic Age' (1997) 15 Tax Notes International 1455; Dale Pinto, *E-Commerce and Source-Based Income Taxation* (IBFD 2003); Dale Pinto, 'Exclusive Source or Residence-Based Taxation – Is a New and Simpler World Tax Order Possible?' (2007) 61 Bulletin for International Taxation 277; Schon (n 22); Michael Kobetsky, *International Taxation of Permanent Establishments: Principles and Policy* (Cambridge University Press 2011); Robert L Williams, *Fundamentals of Permanent Establishments* (Kluwer Law International 2014).

<sup>25</sup> On digital economy trends see generally Edward Malecki and Bruno Moriset, *The Digital Economy: Business Organisation, Production Processes and Regional Developments* (Routledge 2008); Brynjolfsson and McAfee (n 9); Brynjolfsson and McAfee 2014 (n 9); Viktor Mayer-Schonberger and Kenneth Cukier, *Big Data: A Revolution That Will Transform How We Live, Work, and Think* (Houghton Mifflin Harcourt 2013); OECD, *Digital Economy Outlook 2015* (n 1); UNCTAD, *Information Economy Report 2015. Unlocking the Potential of E-commerce for Developing Countries* (2015).

<sup>26</sup> Erik Brynjolfsson and Lorin M Hitt, 'Beyond Computation: Information Technology, Organizational Transformation and Business Performance' (2000) 14 Journal of Economic Perspectives 23, 24; Erik Brynjolfsson and others, 'Scale Without Mass: Business Process

where economic value is produced, which undermines the traditional regulatory systems.<sup>27</sup>

### 3. Initial policy responses

Responding to the Internet challenges to regulatory regimes, in the Internet governance context, state authorities, unable to find consensus either on a global regime for Internet technical infrastructure or on broader policy matters, have resorted to practical measures, enforcing local laws using online intermediaries and thus reinforcing territorial nexus with foreign residents.<sup>28</sup>

In the tax context, initial policy responses provided incremental solutions to e-commerce challenges.<sup>29</sup> Governments considered the implications of the globalisation

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Replication and Industry Dynamics' Harvard Business School Technology & Operations Management Unit Research Paper No 07-016 (2008) <<http://ssrn.com/abstract=980568>> accessed 20 November 2012; Chris Forman and Nicolas van Zeebroeck, 'From Wires to Partners: How the Internet Has Fostered R&D Collaborations Within Firms' <<http://www.misrc.umn.edu/workshops/2011/spring/Forman%20van%20Zeebroeck%20-%20From%20wires%20to%20partners%20-%20Minnesota.pdf>> accessed 22 July 2013.

<sup>27</sup> Michael P Devereux and John Vella, 'Are We Heading Towards a Corporate Tax System Fit for the 21st Century?' (2014) 35 *Fiscal Studies* 449, 468, arguing in the tax context that 'from a conceptual perspective, a system that seeks to align taxing rights over income with the "economic activity" that created it is questionable because it is not at all clear where such economic activity actually takes place ... Numerous factors contribute to the creation of income, including finance, research and development, head-office functions, manufacturing, marketing and sales. In the context of a multinational, these factors might be spread over a number of countries, thus making it impossible to pinpoint where the relevant "economic activities" that created the income took place'.

<sup>28</sup> Discussed in Chapter 4. See generally Jonathan Zittrain, 'Internet Points of Control' Harvard Law School Public Law Research Paper No 54 <<http://ssrn.com/paper=388860>> accessed 2 September 2014; Heverley (n 19); Schultz (n 19); Uta Kohl, 'The Rise and Rise of Online Intermediaries in the Governance of the Internet and Beyond – Connectivity Intermediaries' (2012) 26 *International Review of Law, Computers & Technology* 185; Uta Kohl, 'Google: The Rise and Rise of Online Intermediaries in the Governance of the Internet and Beyond (Part 2)' (2013) 21 *International Journal of Law & Information Technology* 187. See also OECD, *The Economic and Social Role of Internet Intermediaries* (2010).

<sup>29</sup> Arthur J Cockfield, 'BEPS and Global Digital Taxation' (2014) 75 *Tax Notes International* 933, 933, stating that '[t]he initial (and often overstated) policy concerns from the mid-1990s gave way to a more moderate response by most national tax authorities, along with a considerable amount of agreement on the underlying rules and practices that would govern cross-border e-commerce'. For discussion of early e-commerce developments see also David Tillinghast, 'The Impact of the Internet on the Taxation of International Transactions' (1996) 50 *Bulletin for International Fiscal Documentation* 524.

and e-commerce developments on domestic tax policy.<sup>30</sup> International organisations undertook a review of tax rules applicable to e-commerce.<sup>31</sup> The initial focus of the policy and academic literature was on incremental changes to the international tax regime. This involved addressing income characterisation, profit attribution and VAT collection issues relating to online trade, which resulted in the recognition of servers as PEs in certain circumstances and in the revision of royalties provisions to recognise most e-commerce payments as active business income.<sup>32</sup>

Financial trade was one of the first industries to adopt digital technologies in its operations.<sup>33</sup> Global financial trading and banking have expanded significantly as a

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<sup>30</sup> See, for example, US Treasury Department, ‘Selected Tax Policy Implications of Global Electronic Commerce’ <<http://www.treasury.gov/resource-center/tax-policy/Documents/internet.pdf>> accessed 27 April 2011; Inland Revenue, *Electronic Commerce: The UK's Taxation Agenda* (1999); National Audit Office, *HM Revenue and Customs. VAT on E-commerce* (Report by the Comptroller and Auditor General, HC 1051 Session 2005–2006, 2006).

<sup>31</sup> OECD, *Electronic Commerce: Taxation Framework Conditions* (1998) (post-Ottawa Conference deliverable, establishing principles for taxing e-commerce, including neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility); OECD, *Attribution of Profit to a Permanent Establishment Involved in Electronic Commerce Transactions* (2001) (discusses allocation of profits to server PEs of e-tailers); OECD, *Tax Treaty Characterisation Issues Arising from E-commerce* (2001) (discussing blurring of the royalty category and proposing changes to the OECD Model to extend the category of business income to capture most royalty-like payments); OECD, *The Impact of the Communications Revolution on the Application of "Place of Effective Management" as a Tie Breaker Rule* (Draft for Public Comment, February 2001, 2001) (discussing various options for reforming residence tie-breaker rules).

<sup>32</sup> These challenges were previously discussed at length in Reuven S Avi-Yonah, ‘International Taxation of Electronic Commerce’ (1997) 52 *Tax Law Review* 507; Charles E McLure Jr, ‘Taxation of Electronic Commerce: Economic Objectives, Technological Constraints, and Tax Laws’ (1997) 52 *Tax Law Review* 269; Arthur J Cockfield, ‘Balancing National Interests in the Taxation of Electronic Commerce Business Profits’ (1999) 74 *Tulane Law Review* 133; Richard L Doernberg (ed) *Electronic Commerce and Multijurisdictional Taxation* (Kluwer Law International 2001); Björn Westberg, *Cross-Border Taxation of E-commerce* (IBFD 2002); Jinyan Li, *International Taxation in the Age of Electronic Commerce* (Canadian Tax Foundation 2003); Pinto (n 24); Subhajt Basu, *Global Perspectives on E-commerce Taxation Law* (Ashgate 2007); Pernilla Rendahl, *Cross-Border Consumption Taxation of Digital Supplies* (IBFD 2009); Richard A Westin, *International Taxation of Electronic Commerce* (Kluwer Law International 2007); Arthur J Cockfield and others, *Taxing Global Digital Commerce* (Kluwer Law International 2013).

<sup>33</sup> OECD, *Electronic and Mobile Commerce* (OECD Digital Economy Papers No 228, 2013) (n 2) 6: ‘The development of e-commerce has been greatly facilitated by the development of standards and IT based instruments easing financial transactions, such as the SWIFT (Society for Worldwide Interbank Financial Communication) network, created in 1973, that allows the transmission of financial information in a standard and securitised way between institutions and introduction of secure socket layer (SSL) encryption by Netscape in 1994 to secure web traffic and support secure financial transactions over the Internet’.

result of the opportunities that the Internet has provided for trading in financial assets and liabilities in digitised form, challenging the local state authorities' ability to apply state-centric regulatory rules.<sup>34</sup> These issues may, however, be tackled if reliance is placed on key entrepreneurial risk-takers – that is, skilled bankers and other staff who manage financial risks.<sup>35</sup> Hence, a distinct set of rules on attribution of profits for banks and global traders has been designed.<sup>36</sup> These rules place more emphasis on areas in which high-skilled personnel generate value through creating financial opportunities and managing related risks.<sup>37</sup>

Another challenge brought about by the ICT revolution is the changing supply chain patterns of e-commerce enterprises selling physical goods, such as online

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<sup>34</sup> Ilan Benshalom, 'The Quest to Tax Financial Income in a Global Economy: Emerging to an Allocation Phase' (2008) 28 *Virginia Tax Review* 165, 171: '[T]echnological advancements, particularly in the fields of computers and telecommunication, have been constantly changing the platforms on which financial commercial activity takes place. This 'change in platforms' bundles together a number of different aspects. Finance activities are taking place today in international markets ... which are much more loosely regulated than traditional domestic ones ... Modern markets operate in electronic venues and are monitored by investors and issuers that reside in developed countries. Communication technologies also allowed financial intermediaries to expand and to offer a wider range of end services in numerous jurisdictions'. See also Ilan Benshalom, 'Taxing the Financial Income of Multinational Enterprises by Employing a Hybrid Formulary and Arm's Length Allocation Method' (2009) 28 *Virginia Tax Review* 619.

<sup>35</sup> OECD, *Comments Received on Public Discussion Draft BEPS Action 1: Address the Tax Challenges of the Digital Economy* (16 April, 2014) 30, noting that 'for retail banks, a significant proportion of customers now conduct consumer banking activities online. However, in virtually every case the account relationship is associated with a regulated entity ... that is located in the customer's home country ... The advent of the digital economy has not enabled banks to situate retail banking businesses away from their customers, or to do business with customers in high-tax jurisdictions remotely from a low-taxed hub; for regulatory reasons, it never will'.

<sup>36</sup> OECD, *Report on the Attribution of Profits to Permanent Establishments* (2010) parts III–IV. Discussed in Peter Randall, 'Attribution of Profits to Permanent Establishments of Financial Institutions' (2001) 10 *George Mason Law Review* 875; Michael Kobetsky, 'The Case for Unitary Taxation of International Enterprises' (2008) 62 *Bulletin for International Taxation* 201, 202–203; Benshalom (n 34) 189–193.

<sup>37</sup> The focus is on key entrepreneurial risk-takers as per OECD, *2010 Report on Attribution of Profits* (n 36) 64–107; see also OECD, *Comments on BEPS Action 1 Draft* (n 35) 30–31: 'Trades are effected automatically through the use of servers and internally-created algorithms that generate market prices. To effect trades efficiently, the technology infrastructure is typically located in close proximity to the principal financial centers around the world where the majority of trades occur, such as New York, London and Tokyo. Income derived from those activities is attributable to factors including the staff who developed the algorithms; risk managers who oversee the positions; the regulated entities that effect the transactions; and the technological infrastructure ... Those activities are situated exclusively or almost exclusively in high-tax jurisdictions'.

retailers. The key feature of so-called offline e-commerce is that it has become possible to establish customer relationships and enhance order processing using automated Internet platforms, cutting operating costs substantially.<sup>38</sup> As a result, the only connection that such enterprises have is through warehouses and marketing functions for delivering physical goods. To address these challenges, computer servers have been recognised as potentially creating taxable presence for out-of-state enterprises, if the server performs core e-tailing functions.<sup>39</sup> In addition, allocation rules for PEs have been developed that specifically focus on people-functions that a server PE can perform.<sup>40</sup>

When it comes to traditional human-intensive services, the Internet has created opportunities for rendering them without substantial face-to-face interaction with customers, and therefore the OECD has adapted the services PE threshold, stipulating that the in-country presence of personnel for a substantial period could create a PE in the source country.<sup>41</sup> Although not all countries endorse this rule, with some states choosing to impose a withholding tax on technical services at source, the location of

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<sup>38</sup> OECD, *Electronic and Mobile Commerce* (n 2) 9.

<sup>39</sup> OECD commentaries to the model convention were updated for server nexus developments in 2003, adding paras 42.1–42.10 to art 5 commentaries to explain in which circumstances a server could constitute a PE. In addition, commentaries to art 12 on royalties were updated to clarify in paras 11–11.5 and 17.1–17.4 that most payments would qualify as business income rather than royalties, unless payments are made in relation to unique intangibles. See OECD, *BEPS Digital Taxation Report 2014* (n 13) 168–176. Discussed further in Chapter 2 at nn 245–256.

<sup>40</sup> OECD, *2010 Report on Attribution of Profits* (n 36); OECD, *Report on the Attribution of Profits to Permanent Establishments* (2008).

<sup>41</sup> See update to commentaries in OECD, *The 2008 Update to the Model Tax Convention* (18 July, 2008) and generally Brian J Arnold, ‘The Taxation of Income from Services under Tax Treaties: Cleaning Up the Mess’ (2011) 65 *Bulletin for International Taxation* 59; Stefanie Steiner and Christian Wimpissinger, ‘Services and the Service PE under Treaty Law from an Austrian Perspective’ (2012) 40 *Intertax* 566; Wim Wijnen, Jan Goede de and Andrea Alessi, ‘The Treatment of Services in Tax Treaties’ (2012) 66 *Bulletin for International Taxation* 27; Wijnen, Goede de and Alessi; Philip R West and Amanda P Varma, ‘US Taxation of Cross-Border Enterprise Services’ (2012) 66 *Bulletin for International Taxation* 188.

personnel is still used as a reference point for taxing human-intensive services, albeit an increasingly difficult one to enforce.<sup>42</sup>

In the context of digital goods and services, however, the challenge is more significant, since the location of personnel and physical goods can be difficult to use as reliable nexus factors.<sup>43</sup> This is most clearly reflected in the automated trade in digital content and electronic services that are deployed via software platforms, such as online advertising, digital e-tailing and cloud computing, which, for the purposes of this thesis, constitute digital commerce in the narrow sense. In contrast to the Internet commerce in financial assets, physical goods and human-intensive services discussed above, digital commerce in the narrow sense can be completely virtual, from the process of soliciting orders to delivery, requiring only ancillary human intervention:

Prior to the widespread availability of digital networks as a channel for delivery of products direct to the consumer, many creative works and knowledge products were normally delivered on a physical medium – optical or vinyl disks, the printed page, etc. – even though what mostly counted was the content. Digital networks now enable trade in pure content – e.g. direct digital downloads of music, and electronic versions of books and periodicals. The carrier medium can be dispensed with, and no physical containers or packages need to be delivered; above all, from the governance perspective, no goods need pass across national borders and through customs clearance.<sup>44</sup>

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<sup>42</sup> See discussion in Brian J Arnold, *United Nations Committee of Experts on International Cooperation in Tax Matters. Note on the Taxation of Fees for Technical and Other Services under the United Nations Model Convention* (E/C18/2012/4, 2012); Shee Boon Law, 'Technical Services Fees in Recent Tax Treaties' (2010) 64 *Bulletin for International Taxation* 250.

<sup>43</sup> Discussed in Chapter 1 at 3. See an early discussion of 'virtual income' in the e-commerce context in Arthur J Cockfield, 'Transforming the Internet into a Taxable Forum: A Case Study in E-Commerce Taxation' (2000) 85 *Minnesota Law Review* 1171; Arthur J Cockfield, 'The Law and Economics of Digital Taxation: Challenges to Traditional Tax Laws and Principles' (2002) 56 *Bulletin for International Fiscal Documentation* 606, 608, arguing that '[t]he difficulties in determining the appropriate tax jurisdiction for income tax or consumption tax purposes become more severe with respect to information goods and income-producing information goods as a result of the global reach of the Internet and the fact that reproduction and distribution costs approach zero'.

<sup>44</sup> Antony Taubman, 'International Governance and the Internet' in Lilian Edwards and Charlotte Waelde (eds), *Law and the Internet* (3rd edn, Hart Publishing 2009) 34.

Digital commerce, thus, creates significant challenges: since it can be mostly intangible, it blurs the understanding of where enterprises generate value. In a sense, therefore, the expansion and globalisation of the Internet has caused the growth of digital commerce, where the Internet does not merely weaken the significance of physical location, but ‘destroys’ it.<sup>45</sup> Whilst purely digital transactions have become commonplace in the business world, policy developers, until recently, have not specifically focused on the tax implications of such developments.

#### **4. Further tax policy responses in the context of the BEPS project**

In order to address the challenges that the more automated and digitalised commerce has posed, national governments have recently initiated a comprehensive review of the international tax system. Under the auspices of the OECD, the international tax community is currently working on modifying the international tax regime to accommodate the recent changes in production patterns across industries and to combat tax base erosion and profit shifting (BEPS).<sup>46</sup> The overall proposed measures are aimed at revisiting the jurisdictional compromise reached in the early twentieth century and at aligning jurisdiction to tax more closely with economic substance.<sup>47</sup>

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<sup>45</sup> Stephen J Kobrin, ‘Territoriality and the Governance of Cyberspace’ (2001) 32 *Journal of International Business Studies* 687, 693.

<sup>46</sup> OECD, *Addressing Base Erosion and Profit Shifting* (2013); OECD, *Action Plan on Base Erosion and Profit Shifting* (OECD Publishing, 2013); European Commission, *EU Digital Taxation Report* (n 12); OECD, *Explanatory Statement, OECD / G20 Base Erosion and Profit Shifting Project* (2015) [‘BEPS Explanatory Statement 2015’]. BEPS papers are generally discussed in Ault, Schon and Shay (n 22); Jeffrey Owens, ‘The Taxation of Multinational Enterprises: An Elusive Balance’ (2013) 67 *Bulletin for International Taxation* 441; Yariv Brauner, ‘BEPS: An Interim Evaluation’ (2014) 6 *World Tax Journal* 1.

<sup>47</sup> OECD, *BEPS Explanatory Statement 2015* (n 46) 5: ‘The implementation of the BEPS package will better align the location of taxable profits with the *location of economic activities and value creation*, and improve the information available to tax authorities to apply their tax laws effectively’ (emphasis added); OECD, *BEPS Report 2013* (n 46) 8: ‘In order to address base erosion and profit shifting, which is fundamentally due to a large number of interacting factors, a comprehensive action plan should be developed quickly. The main purpose of that plan would be to provide countries with instruments, domestic and international, aiming at better aligning rights to tax with *real economic activity*’ (emphasis added).

The measures currently being developed include, inter alia, work on improving an understanding of modern businesses through increasing transparency in corporate tax reporting<sup>48</sup> and mandatory tax disclosures.<sup>49</sup> Additional measures are being devised to reduce the scope for tax avoidance through developing general CFC principles,<sup>50</sup> countering harmful tax competition amongst tax jurisdictions,<sup>51</sup> reducing the scope for multinationals to avoid taxes by refining anti-treaty shopping measures<sup>52</sup> and providing

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<sup>48</sup> OECD, *Transfer Pricing Documentation and Country-by-Country Reporting, Action 13 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015) (introducing a new Chapter V of the OECD Transfer Pricing Guidelines (n 258) that governs ‘master’ and ‘local’ transfer pricing documentation and country-by-country reports). See also OECD, *Discussion Draft on Transfer Pricing Documentation and CbC Reporting. Public Consultation* (30 January, 2014); OECD, *Discussion Draft on Transfer Pricing Documentation and CbC Reporting* (23 February, 2014); OECD, *Guidance on Transfer Pricing Documentation and Country-by-Country Reporting* (OECD / G20 Base Erosion and Profit Shifting Project, 2014); OECD, *Action 13: Guidance on the Implementation of Transfer Pricing Documentation and Country-by-Country Reporting* (OECD / G20 Base Erosion and Profit Shifting Project, 2015); OECD, *Action 13: Country-by-Country Reporting Implementation Package* (OECD / G20 Base Erosion and Profit Shifting Project, 2015). Discussed in Georg Kofler, ‘The BEPS Action Plan and Transfer Pricing: The Arm’s Length Standard Under Pressure?’ [2013] *British Tax Review* 646.

<sup>49</sup> OECD, *Mandatory Disclosure Rules, Action 12 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015) (suggesting a mandatory disclosure regime akin to UK DOTAS). See also OECD, *BEPS Action 12: Mandatory Disclosure Rules. Comments Received on Public Discussion Draft* (4 May, 2015); OECD, *BEPS Action 12: Mandatory Disclosure Rules* (11 May, 2015).

<sup>50</sup> OECD, *Designing Effective Controlled Foreign Company Rules, Action 3 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015) (providing recommendations on designing an effective CFC regime). See also OECD, *Strengthening CFC Rules. Public Discussion Draft* (12 May, 2015); OECD, *BEPS Action 3: Strengthening CFC Rules. Comments received on Public Discussion Draft* (5 May, 2015). Discussed in Ana Paula Dourado, ‘The Role of CFC Rules in the BEPS Initiative and in the EU’ [2015] *British Tax Review* 340.

<sup>51</sup> OECD, *Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance, Action 5 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015) (establishing the so-called ‘nexus’ principle for preferential IP regimes, such that R&D incentives available to an entity will be proportionate to its actual contribution to R&D activities). See also OECD, *Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance* (OECD / G20 Base Erosion and Profit Shifting Project, 2014); OECD, *Action 5: Agreement on Modified Nexus Approach for IP Regimes* (OECD / G20 Base Erosion and Profit Shifting Project, 2015). For the previous work on combating harmful competitions see OECD, *Harmful Tax Competition: An Emerging Global Issue* (1998).

<sup>52</sup> OECD, *Preventing the Granting of Treaty Benefits in Inappropriate Circumstances, Action 6 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015) (proposing a limitation on benefits clause, accompanied by the principal purposes test, to combat treaty shopping and replacing the default residence tie-breaker rule with a mutual agreement procedure to resolve dual residence conflicts). See also OECD, *Preventing the Granting of Treaty Benefits in Inappropriate Circumstances* (OECD / G20 Base Erosion and Profit Shifting Project, 2014); OECD, *BEPS Action 6: Preventing the Granting of Treaty Benefits in Inappropriate Circumstances. Comments Received on Public Discussion Draft* (11 April 2014); OECD, *BEPS Action 6: Preventing the Granting of Treaty Benefits in Inappropriate Circumstances. Public Discussion*

common ground for treatment of hybrid instruments<sup>53</sup> and base-eroding finance payments.<sup>54</sup>

To update profit allocation techniques, work is being undertaken to revise taxable presence rules for permanent establishments<sup>55</sup> and increase efficiency of profit allocation to such nexus points through aligning transfer pricing rules with the location

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*Draft* (14 March 2014–9 April 2014, 2014); OECD, *Follow-up Work on BEPS Action 6: Prevent Treaty Abuse. Comments Received on Revised Public Discussion Draft* (June, 2015); OECD, *BEPS Action 6: Prevent Treaty Abuse. Revised Discussion Draft* (22 May–17 June, 2015). Discussed in Miranda Stewart, ‘Abuse and Economic Substance in a Digital BEPS World’ (2015) 69 *Bulletin for International Taxation* 399; Carlos Palao Taboada, ‘OECD Base Erosion and Profit Shifting Action 6: The General Anti-Abuse Rule’ (2015) 69 *Bulletin for International Taxation* (forthcoming).

<sup>53</sup> On measures restricting deductions for payments related to hybrid financial instruments used for avoidance purposes see OECD, *Neutralising the Effects of Hybrid Mismatch Arrangements, Action 2 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015). See also OECD, *Neutralising the Effects of Hybrid Mismatch Arrangements* (OECD / G20 Base Erosion and Profit Shifting Project, 2014); OECD, *BEPS Action 2: Neutralise the Effects of Hybrid Mismatch Arrangements. Comments Received on Public Discussion Drafts* (7 May, 2014); OECD, *BEPS Action 2: Neutralise the Effects of Hybrid Mismatch Arrangements (Recommendations for Domestic Laws). Public Discussion Draft* (19 March 2014 – 2 May 2014, 2014); OECD, *BEPS Action 2. Neutralise the Effects of Hybrid Mismatch Arrangements (Treaty Issues). Public Discussion Draft* (19 March 2014 – 2 May 2014, 2014). For a critical review of the anti-hybrid measures see Graeme S Cooper, ‘Some Thoughts on the OECD’s Recommendations on Hybrid Mismatches’ (2015) 69 *Bulletin for International Taxation* 334. See also Evgenia Kokolia and Evgenia Chatziioakeimidou, ‘BEPS Impact on EU Law: Hybrid Payments and Abusive Tax Behaviour’ (2015) 55 *European Taxation* 149.

<sup>54</sup> On the proposed cap on interest deductions see OECD, *Limiting Base Erosion Involving Interest Deductions and Other Financial Payments, Action 4 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015). See also OECD, *BEPS Action 4: Interest Deductions and Other Financial Payments. Public Discussion Draft* (18 December 2014 – 6 February 2015, 2015); OECD, *BEPS Action 4: Interest Deductions and Other Financial Payments. Comments Received on Public Discussion Draft* (11 February, 2015). Discussed in Jan Vleggeert, ‘Public Discussion Draft on Interest Deductions Proposes Worldwide Interest Allocation Rules’ (2015) 69 *Bulletin for International Taxation* 297; Chloe Burnett, ‘Interest Deductions and Multinational Enterprises: Goldilocks and the Brave New World’ (2015) 69 *Bulletin for International Taxation* 326; David G Duff, ‘Action 4 of the OECD Action Plan on Base Erosion and Profit Shifting Initiative: Interest and Base-Eroding Payments – Insights from the Canadian Experience’ (2015) 69 *Bulletin For International Taxation* 350.

<sup>55</sup> See OECD, *Preventing the Artificial Avoidance of Permanent Establishment Status, Action 7 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015) (proposing more relaxed nexus rules governing dependent agent PEs and limiting the scope of exemptions for business activities listed in art 5 as ancillary). See also OECD, *BEPS Action 7: Preventing the Artificial Avoidance of PE Status. Public Discussion Draft* (31 October 2014 – 9 January 2015, 2014); OECD, *BEPS Action 7: Prevent the Artificial Avoidance of PE Status. Comments Received on Public Discussion Draft* (1 January, 2015); OECD, *BEPS Action 7: Preventing the Artificial Avoidance of PE Status. Revised Discussion Draft* (15 May – 12 June, 2015); OECD, *BEPS Action 7: Prevent the Artificial Avoidance of PE Status. Comments Received on Revised Discussion Draft* (15 June, 2015); discussed in Daniel W Blum, ‘Permanent Establishments and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – the Nexus Criterion Redefined?’ (2015) 69 *Bulletin for International Taxation* 314.

of core production factors, including appropriately rewarding people-functions and risks relating to hard-to-value intangibles, intangibles created through cost-sharing agreements, low-value-adding intragroup services, and using profit splits methods instead of the default arm's length principle.<sup>56</sup>

Finally, in a sign of increased international cooperation, it is envisaged that all the new measures, where appropriate, will be implemented using a comprehensive multilateral tax instrument.<sup>57</sup> Equally, on the consumption taxation front, the OECD is developing a set of international guidelines on the application of VAT and GST, which would codify the global principles underlying indirect taxation.<sup>58</sup>

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<sup>56</sup> OECD, *Aligning Transfer Pricing Outcomes with Value Creation, Actions 8–10 – 2015 Final Reports, OECD / G20 Base Erosion and Profit Shifting Project* (2015) (suggesting transition towards economic, instead of legal ownership, nexus for intangibles). Discussed, for example, in Carlo Garbarino and D'Avossa Mario, 'The OECD Intangibles Project and the Concept of "Intangible Related Return"' (2015) 55 *European Taxation* 12; Yariv Brauner, 'Transfer Pricing in BEPS: First Round – Business Interests Win (But, Not in Knock-Out)' (2015) 43 *Intertax* 72; Vikram Chand and Sagar Wagh, 'The Profit Split Method: Status Quo and Outlook in Light of the BEPS Action Plan' (2014) 21 *International Transfer Pricing Journal* 402; Robert Robillard, 'BEPS: Is the OECD Now at the Gates of Global Formulary Apportionment?' (2015) 43 *Intertax* 447. On intangibles transfer pricing see also OECD, *Revised Discussion Draft on Transfer Pricing Aspects of Intangibles* (30 July, 2013); OECD, *Guidance on Transfer Pricing Aspects of Intangibles* (OECD / G20 Base Erosion and Profit Shifting Project, 2014). On hard-to-value intangibles see also OECD, *BEPS Action 8: Hard-to-Value Intangibles. Public Discussion Draft* (4 June – 18 June, 2015); OECD, *BEPS Action 8: Hard-to-Value Intangibles. Comments Received on Public Discussion Draft* (19 June, 2015).

On cost-contribution arrangements see also OECD, *BEPS Action 8: Revisions to Chapter VIII of the Transfer Pricing Guidelines on Cost Contribution Arrangements (CCAs). Public Discussion Draft* (29 April – 29 May, 2015); OECD, *BEPS Action 8: Revisions to Chapter VIII of the Transfer Pricing Guidelines on Cost Contribution Arrangements (CCAs)* (1 June, 2015).

On low value-adding intragroup services see also OECD, *BEPS Action 10: Proposed Modifications to Chapter VII of the Transfer Pricing Guidelines Relating to Low Value-Adding Intra-Group Services. Public Discussion Draft* (3 November 2014 – 14 January 2015, 2014).

On transactional profit splits see also OECD, *BEPS Action 10: Discussion Draft on the Use of Profit Splits in the Context of Global Value Chains* (16 December 2014 – 6 February 2015, 2015); OECD, *BEPS Action 10: Use of Profit Splits in the Context of Global Value Chains. Comments Received on Public Discussion Draft* (10 February 2015, 2015).

<sup>57</sup> OECD, *Developing a Multilateral Instrument to Modify Bilateral Tax Treaties, Action 15 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015); OECD, *Developing a Multilateral Instrument to Modify Bilateral Tax Treaties* (OECD/G20 Base Erosion and Profit Shifting Project, 2014); discussed in Angharad Miller and Alan Kirkpatrick, 'The Use of Multilateral Instruments to Achieve the BEPS Action Plan Agenda' [2013] *British Tax Review* 682.

<sup>58</sup> OECD, *International VAT/GST Guidelines* (2014); OECD, *International VAT/GST Guidelines. Guidelines on Place of Taxation for Business-to-Consumer Supplies of Services and Intangibles. Provisions on Supporting the Guidelines in Practice. Comments Received on Public Discussion Drafts* (25 February, 2015).

Whilst the international tax community has rejected a transformational tax reform as an improbable scenario, in the context of digital commerce specifically, however, it has been noted that governments are ‘particularly concerned about the out-of-date tax frameworks covering international Internet-based commerce which rely on a fully automated process’.<sup>59</sup> National governments, therefore, express concerns that the current tax regime is not fit for purpose and as such should be updated to enable governments to tax digital commerce where economic value is produced:

The digital economy is characterised by an unparalleled reliance on intangible assets, the massive use of data (notably personal data), the widespread adoption of multi-sided business models capturing value from externalities generated by free products, and the difficulty of determining the jurisdiction in which value creation occurs. This raises fundamental questions as to how enterprises in the digital economy add value and make their profits, and how the digital economy relates to the concepts of source and residence or the characterisation of income for tax purposes.<sup>60</sup>

In this regard, a revision of rules in the context of the wider digital economy has been initiated.<sup>61</sup> One of the major concerns raised in this context is whether digital commerce can be ring-fenced from the rest of the economy using a distinct set of rules. It has been argued in this regard that electronic commerce not only facilitates existing forms of trade but also ‘includes a new category of trade altogether’, which ‘is the most interesting component of electronic commerce: the emergence of the digital product, or

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<sup>59</sup> House of Commons, *Tax Avoidance – Google* (n 20) para 3.

<sup>60</sup> OECD, *BEPS Action Plan* (n 46) 10.

<sup>61</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21). See also OECD, *Request for Input Regarding Work on Tax Challenges of the Digital Economy* (November, 2013); OECD, *Compilation of Comments Received in Response to Request for Input on Tax Challenges of the Digital Economy* (13 January, 2014); OECD, *BEPS Action 1: Address the Tax Challenges of the Digital Economy. Public Discussion Draft* (24 March 2014 – 14 April 2014, 2014); OECD, *Comments on BEPS Action 1 Draft* (n 35); OECD, *BEPS Digital Taxation Report 2014* (n 13). Discussed in Cockfield (n 29); Björn Westberg, ‘Taxation of the Digital Economy – An EU Perspective’ (2014) 54 *European Taxation* 541.

digitised product – the growing trade in “bits”<sup>62</sup>. Broadly, three distinct responses to the emergence of this ‘trade in bits’ have been developed.

It appears that the official international approach would involve adapting the current system of territorial taxation to the digital realities, but only using the commonly accepted elements of profits and consumption taxation.<sup>63</sup> These proposals assume that digital commerce is economy itself and thus does not warrant a complete overhaul of the international tax regime in the short term.<sup>64</sup> Under the official approach, source taxation rules would be relaxed through lowering the PE threshold,<sup>65</sup> readjusting profit attribution rules using control nexus<sup>66</sup> and strengthening corporate residency rules using anti-abuse measures,<sup>67</sup> whilst focusing on reinforcing consumption taxation mechanics in market countries to ensure an uninterrupted flow of tax revenue.<sup>68</sup>

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<sup>62</sup> Taubman (n 44) 33. See Nicholas Negroponte, ‘Internet Governance: A Bits and Atoms Story’ (2004) 1 *Information Technologies & International Development* 71.

<sup>63</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 12: ‘It is expected that the implementation of these [PE, TP and CFC-related] measures, as well as the other measures developed in the BEPS Project (e.g. minimum standard to address treaty shopping arrangements, best practices in the design of domestic rules on interest and other deductible financial payments, application to IP regimes of a substantial activity requirement with a “nexus approach”), will substantially address the BEPS issues exacerbated by the digital economy at the level of both the market jurisdiction and the jurisdiction of the ultimate parent company, with the aim of putting an end to the phenomenon of so-called stateless income’. See also Cockfield (n 29) 936, noting that ‘[w]hile the BEPS actions reveal a few new approaches, such as country-by-country reporting, the reform efforts generally focus on bolstering the current environment through specific antiavoidance rules, general antiavoidance rules, and other traditional mechanisms’.

<sup>64</sup> See, for example, OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 11, arguing that ‘[b]ecause the digital economy is increasingly becoming the economy itself, it would be difficult, if not impossible, to ring-fence the digital economy from the rest of the economy for tax purposes’.

<sup>65</sup> As per the OECD work on PE abuse – see n 55.

<sup>66</sup> Transfer pricing work on intangibles would still look at the traditional allocation keys, albeit with more emphasis on substance requirements and control nexus – see OECD, *OECD TP of Intangibles* (n 56) para 6.42 in Chapter VI. Discussed further in Chapter 2 at nn 256–286.

<sup>67</sup> OECD, *BEPS Digital Taxation Report 2014* (n 13) 16, suggesting that ‘[i]n developing recommendations regarding the design of CFC rules, consideration should be given to CFC rules that target income typically earned in the digital economy, such as income earned from the remote sale of digital goods and services’. On the CFC work and anti-abuse measures see n 50.

<sup>68</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 13: ‘The collection of VAT/GST on cross-border transactions, particularly those between businesses and consumers, is an important issue. Countries are thus recommended to apply the principles of the International VAT/GST

A contrasting approach suggests that the globalisation of economy has reached a point where a global solution would be essential for capturing the economic value that multinational enterprises generate. In this regard, a comprehensive international solution applicable across all sectors of the economy, including digital commerce, has been suggested within the framework of global unitary taxation combined with formulary apportionment.<sup>69</sup> In the same vein, albeit with a focus on e-commerce specifically, a special global set of rules designed for e-commerce enterprises has been proposed, which would be enforceable through an international tax organisation.<sup>70</sup>

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Guidelines and consider the introduction of the collection mechanisms included therein'; OECD, *BEPS Digital Taxation Report 2014* (n 13) 16, stating that '[t]he implementation of Guidelines 2 and 4 of the OECD's International VAT/GST Guidelines on place of taxation for B2B supplies of services and intangibles will minimise BEPS opportunities for supplies of remotely delivered services made to exempt businesses, including exempt entities that operate through establishments ("branches") in multiple jurisdictions'. On the current international VAT work see n 58 above.

<sup>69</sup> On unitary taxation proposals see, for example, Kobetsky (n 36); Walter Hellerstein and Charles E McLure Jr, 'The European Commission's Report on Company Income Taxation: What the EU Can Learn from the Experience of the US States' (2004) 11 *International Tax and Public Finance* 199; Reuven S Avi-Yonah and Kimberly A Clausing, 'Reforming Corporate Taxation in a Global Economy: A Proposal to Adopt Formulary Apportionment' *The Brookings Institution* 2007 <[http://www.hamiltonproject.org/files/downloads\\_and\\_links/Reforming\\_Corporate\\_Taxation\\_in\\_a\\_Global\\_Economy\\_-\\_A\\_Proposal\\_to\\_Adopt\\_Formulary\\_Apportionment.pdf](http://www.hamiltonproject.org/files/downloads_and_links/Reforming_Corporate_Taxation_in_a_Global_Economy_-_A_Proposal_to_Adopt_Formulary_Apportionment.pdf)> accessed 8 April 2012; Wolfgang Schon, 'Group Taxation and the CCCTB' (2007) 48 *Tax Notes International* 1063; Jaap W Bellingwout, 'Blueprint for a New Common Corporate Tax Base' (2015) 55 *European Taxation* 3; Jinyan Li, 'Global Profit Split' (2002) 50 *Canadian Tax Journal* 823.

<sup>70</sup> On global e-commerce taxes and enforcement see Rifat Azam, 'Global Taxation of Cross-border E-commerce Income' (2012) 31 *Virginia Tax Review* 639 664; Rifat Azam, 'The Political Feasibility of a Global E-Commerce Tax' (2013) 43 *University of Memphis Law Review* 711. Discussion of the OECD as an international tax organisation: Adrian J Sawyer, *Developing a World Tax Organization: The Way Forward* (Fiscal Publications 2009); Arthur J Cockfield, 'The Rise of the OECD as Informal "World Tax Organization" Through National Responses to E-Commerce Tax Challenges' (2006) 8 *Yale Journal of Law & Technology* 136; UN as an international tax organisation: Thomas Rixen, 'Tax Competition and Inequality: The Case for Global Tax Governance' (2011) 17 *Global Governance: A Review of Multilateralism and International Organizations* 447; on discussion of G20 v OECD see Allison Christians, 'Taxation in a Time of Crisis: Policy Leadership from the OECD to the G20' (2010) 5 *Northwestern Journal of Law & Social Policy* 19; WTO as an international organisation: Reuven S Avi-Yonah, 'Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State' (2000) 113 *Harvard Law Review* 1573 1670–1674. For a general overview of the international tax infrastructure see Jan Wouters and Katrien Meuwissen, 'Global Tax Governance: Work in Progress?' *Leuven Centre for Global Governance Studies Working Paper No 59* <<http://ssrn.com/abstract=1766436>> accessed 22 August 2015; Frances M Horner, 'Do We Need an International Tax Organization?' (2001) 93 *Tax Notes* 709; Vito Tanzi, 'The Impact of Economic Globalization on Taxation' (1998) 8/9 *Bulletin for International Fiscal Documentation* 338.

Those in the middle ground propose tax models that would maintain the status quo using traditional tax concepts but would, nonetheless, adopt incremental changes to meet the digital commerce standards. Accordingly, various modifications of virtual PEs<sup>71</sup> and e-commerce withholding tax<sup>72</sup> proposals have been developed that would target digital commerce specifically. The more radical models that would impose new taxes, such as bit taxes or data taxes, specifically aimed at data-intensive digital enterprises would also fit into this category of proposals.<sup>73</sup>

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<sup>71</sup> The virtual PE model has been proposed in Luc Hinnekens, 'Looking for an Appropriate Jurisdictional Framework for Source-State Taxation of International Electronic Commerce in the Twenty-First Century' (1998) 26 *Intertax* 192, 195–199 and is generally discussed in Doernberg (n 32) 351–354; Pinto (n 24) 191–205; OECD, *BEPS Digital Taxation Report 2014* (n 13) 143–146, 167–168; OECD, *Are the Current Treaty Rules for Taxing Business Profits Appropriate for E-Commerce? Final Report* (2005) (n 71) 65–72. A gross sales virtual PE has been proposed in Avi-Yonah (n 32) 535–537; Arthur J Cockfield, 'Reforming the Permanent Establishment Principle Through a Quantitative Economic Presence Test' (2004) 33 *Tax Notes International* 643, 650–654. A force of attraction PE discussed in Walter Hellerstein, 'Jurisdiction to Tax in the Digital Economy: Permanent and Other Establishments' (2014) 68 *Bulletin for International Taxation* 346. A virtual digital PE has been proposed in Peter Hongler and Pasquale Pistone, *Blueprints for a New PE Nexus to Tax Business Income in the Era of Digital Economy* (IBFD Working Paper, 20 January, 2015); Pierre Collin and Nicolas Colin, *Report to the Minister for the Economy and Finance, the Minister for Industrial Recovery, the Minister Delegate for the Budget and the Minister Delegate for Small and Medium-Sized Enterprises, Innovation and the Digital Economy* (2013, 2013).

<sup>72</sup> For a comprehensive overview of withholding taxes on e-commerce see Yariv Brauner and Andres Baez, *Withholding Taxes in the Service of BEPS Action 1: Address the Tax Challenges of the Digital Economy* (IBFD, 2 February, 2015); a low-rate refundable WHT on e-commerce has been proposed in Pinto (n 24) 207–231; discussed in OECD, *E-Commerce Report 2005* (n 71) 51; a WHT on e-commerce imposed at a corporate tax rate has been proposed in Avi-Yonah (n 32); a low rate (eg 3%) base erosion WHT has been proposed in Richard L Doernberg, 'Electronic Commerce and International Tax Sharing' (1998) 16 *Tax Notes International* 1016; discussed in Pinto (n 24) ch 6; OECD, *E-Commerce Report 2005* (n 71) 54; OECD, *BEPS Digital Taxation Report 2014* (n 13) 146; a 5% WHT on e-commerce has been proposed in Cockfield 1999 (n 32) 198–205; a withholding tax on digital services proposed in Yansheng Zhu, *Proposed Changes to the UN Model Tax Convention Dealing with the Cyber-Based Services* (Note to the UN Committee of Experts on International Cooperation in Tax Matters E/C18/2014/CRP9, 2014).

<sup>73</sup> Data taxes and bit taxes proposals – see the French Collin–Colin report at n 71; discussed in Noah Gaoua, 'Taxation of the Digital Economy: French Reflections' (2013) 54 *European Taxation* 10; Lee A Sheppard, 'The Digital Economy and Permanent Establishment' (2013) 70 *Tax Notes International* 297, 300; see also a data processing element of PE in Hongler and Pistone, *Blueprints for a New PE Nexus* (n 71). The idea of a bit tax was introduced in the 1994 Report of the Club of Rome. Cordell and Ide proposed that model in a paper 'The New Wealth of Nations' as noted in Arthur J Cordell, *The New Wealth of Nations: Taxing Cyberspace* (Between The Lines 1997). Discussed in Doernberg (n 108) 384. See also Luc Soete and Karin Kamp, 'The "BIT TAX": The Case for Further Research' <[www.merit.unu.edu/publications/rmpdf/1996/rm1996-019.pdf](http://www.merit.unu.edu/publications/rmpdf/1996/rm1996-019.pdf)> accessed 12 August 2014.

Whilst the above models deal with a different range of tax design issues, the fundamental question underlying each proposal is how to determine jurisdictional tax nexus so that national governments could exercise their tax powers over digital enterprises. Although the issue of nexus erosion is not new and has occurred in the context of all major technology revolutions, no consensus has been reached so far as to what would constitute the most acceptable approach from a practical perspective.<sup>74</sup>

Despite this lack of comprehensive agreement on nexus standards in relation to digital commerce, the OECD has suggested that nation states could still implement digital nexus standards unilaterally ‘as additional safeguards against BEPS’.<sup>75</sup> In this regard, it has been suggested that adoption of novel digital solutions ‘as domestic law measures would require further calibration of the options in order to provide additional clarity about the details, as well as some adaptation to ensure consistency with existing international legal commitments’.<sup>76</sup>

Hence, the question of establishing jurisdictional nexus, closely related to other issues of income characterisation and tax enforcement, remains unresolved in respect of the digital economy and requires further consideration:

The digital economy also raises broader tax challenges for policy makers. These challenges relate in particular to nexus, data, and characterisation for direct tax purposes ... These challenges ... raise questions regarding the paradigm used to determine where economic activities are carried out and value is generated for tax purposes, which is based on an analysis of the functions, assets and risks involved. At the same time, when these challenges create opportunities for achieving double non-taxation, for example due to the lack of nexus in the

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<sup>74</sup> Nexus and jurisdiction to tax were previously discussed in Rutsel Silvestre J Martha and Chester Peterson, *The Jurisdiction to Tax in International Law: Theory and Practice of Legislative Fiscal Jurisdiction* (Kluwer Law and Taxation Publishers 1989); Walter Hellerstein, ‘Jurisdiction to Tax Income and Consumption in the New Economy: A Theoretical and Comparative Perspective’ (2003) 38 Georgia Law Review 1; Arthur J Cockfield, ‘Jurisdiction to Tax: A Law and Technology Perspective’ (2003) 38 Georgia Law Review 85.

<sup>75</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 13.

<sup>76</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 13.

market country under current rules coupled with lack of taxation in the jurisdiction of the income recipient and of that of the ultimate parent company, they also generate BEPS issues.<sup>77</sup>

Equally, nexus issues remain on the agenda in the area of wider Internet regulation, which looks at the jurisdictional reach of national regimes in relation to online activities.<sup>78</sup> When the two perspectives on Internet jurisdiction are combined, it can be noticed that little attention has been paid to assessing how the proposed tax models and the associated nexus standards would fit the dematerialising global economy, particularly in the light of wider Internet governance developments.<sup>79</sup>

## **5. Objectives of the present research and scope limitations**

This thesis fills this gap in the academic literature on the international taxation of digital commerce by focusing on discussion of the nexus elements of the global and territorial tax proposals. This thesis considers these nexus standards in the light of broader Internet jurisprudence, as this may provide insights into the viability of the proposed tax solutions:

[T]he study of the ‘Internet governance’ at the international level may turn out to be more valuable for the insights it offers into the nature of international governance in general, into the character of international regulatory institutions, international legal structures and doctrines, as they come under increasing conceptual, political and technological pressure from the growth of the Internet; and also for insights into the limits of international law and intergovernmental

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<sup>77</sup> OECD, *BEPS Digital Taxation Report 2014* (n 13) 17; OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 99.

<sup>78</sup> See text to n 19.

<sup>79</sup> Tax and Internet governance discussions were previously attempted in Arthur J Cockfield, ‘Designing Tax Policy for the Digital Biosphere: How the Internet is Changing Tax Laws’ (2002) 34 *Connecticut Law Review* 333 (discussing the interplay between technology law and taxation); Cockfield 2000 (n 43) (arguing for an international clearing house solution on the basis of the general Internet governance literature which justifies a global governance approach to the Internet regulation); Rifat Azam, ‘E-Commerce Taxation and Cyberspace Law: The Integrative Adaptation Model’ (2007) 12 *Virginia Journal of Law & Technology* 1 (arguing for a case-law approach to establishing the source of income on the basis of the Internet governance developments); Azam 2013 (n 70); Azam 2012 (n 70) (suggesting a global e-commerce tax payable to and enforceable through a global tax fund).

institutions, and how they interplay with domestic law and national regulatory authorities.<sup>80</sup>

Assuming that the compromise view on digital commerce would prevail, whereby it would not be ring-fenced from the wider global economy, this thesis considers the practical solutions to establishing nexus in relation to digital enterprises. Discussion is based particularly on illustrations from the so-called ‘dematerialised’ digital models, such as cloud computing, online advertising and digital retail, which for the purposes of this thesis constitute digital commerce in the narrow sense. The objective of this research is to test the viability of the nexus elements underlying the proposed global and territorial tax models. This thesis approaches the task from an interdisciplinary perspective by considering tax nexus using illustrations from the area of Internet governance, which has attempted to address the issue of jurisdictional nexus erosion from a broader regulatory perspective.<sup>81</sup>

This thesis does not engage in a detailed discussion of Internet governance models per se, a topic that has been extensively considered elsewhere in the literature, and instead focuses on considering the proposed tax solutions in view of similar issues arising in Internet jurisprudence.<sup>82</sup> What follows is by no means a comprehensive discussion of all possible principles underlying Internet and tax jurisdiction.<sup>83</sup> This thesis does not consider the effect of such design issues as the choice of an optimal tax base and tax incidence on corporations and individuals.<sup>84</sup> Given that nexus issues

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<sup>80</sup> Taubman (n 44) 5.

<sup>81</sup> See n 19.

<sup>82</sup> See n 14.

<sup>83</sup> See references at nn 15–18 above.

<sup>84</sup> See, for example, Alan Auerbach, Michael P Devereux and Helen Simpson, ‘Taxing Corporate Income’ in Institute for Fiscal Studies (ed), *Dimensions of Tax Design: The Mirrlees Review* (Oxford University Press 2010); James Mirrlees and others, *Tax by Design* (Oxford University Press 2011) ch 17; Malcolm Gammie, ‘Taxing Corporate Profits in a Global Economy’ [2013] *British Tax Review* 42. From a US perspective, see also Daniel N Shaviro, *Decoding the US Corporate Tax*

naturally span all current and proposed systems of direct and indirect taxation, this thesis, therefore, focuses on assessing the practical viability of tax nexus standards, taking into account lessons learned in building the system of Internet regulation.

## **6. Thesis structure**

Discussion of jurisdictional nexus issues begins with an overview of the effects that the ICT revolution has had on the global economy generally and tax jurisdiction specifically.

In *Chapter 1*, it is explained that the digitisation and computerisation of business processes has affected all industries. It is argued that modern digital commerce, when compared with the pre-ICT offline trade in physical goods and human-intensive services, requires less reliance on statically located personnel or physical assets in target markets. Instead, digital commerce places more focus on highly mobile computer code, which creates issues for establishing jurisdictional nexus. Given that the non-territorial nature of digital commerce is the defining feature of the global economy itself, it is concluded that it may be necessary to assess the digital economy as a whole when redesigning nexus policy standards, albeit with a focus on dematerialised digital models as a case study for the short term.

The subsequent two chapters explore how the present international tax system, including profits and consumption tax models, struggles to accommodate the changes that the digital commerce presents.

*Chapter 2* argues that the functional nexus standards adopted in residence and source tax models create jurisdictional challenges for the tax systems operating in the

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(The Urban Institute 2009) 3–14. For a discussion of these matters in the context of BEPS see Richard Vann, ‘Policy Forum: The Policy Underpinnings of the BEPS Project – Preserving the International Corporate Income Tax?’ (2014) 62 *Canadian Tax Journal* 433. See also Richard Bird, ‘Why Tax Corporations?’ (2002) 56 *Bulletin for International Taxation* 194.

digital economy. Under most traditional tax regimes, functional nexus rest on highly mobile proxies, which rely on the functions that equipment and personnel perform. These functions, in turn, hinge on the control nexus, which encompasses the ‘central management and control’ test for the purposes of residence taxation and the ‘control over risks’ test for profit allocation purposes. In an ideal world, the location of personnel and other production factors should reflect where the real value-generating activities take place. It is argued, however, that overreliance on control proxies for establishing jurisdiction to tax generates opportunities for tax arbitrage, particularly due to the mobility of intangible assets lying at the core of digital enterprises.

*Chapter 3* considers sales nexus challenges arising in the context of the current consumption tax models. It demonstrates how the US sales tax and EU VAT systems have struggled to apply physical proxies for determining the destination of digital sales. In the US, the constitutional constraints on reforming sales nexus have forced some states to develop novel click-through and affiliate nexus solutions. These solutions, however, have been restricted in practice due to the prevalence of the overarching physical nexus standard. In the EU, the use of fixed establishments as consumption proxies for business-to-business (B2B) supplies has also created opportunities for sales diversion. In respect of consumer supplies, the application of the billing address proxy, without an automated collection mechanism, has created compliance issues relating to overseas digital enterprises.

Overall, it is concluded that functional nexus factors, such as people, assets, and risks, have challenged both profits and consumption tax systems, making it difficult to enforce the traditional compromise on the allocation of jurisdictional rights, which is based on physical proxies. Even if taxable value is provisionally allocated to one of

such physical nexus points, it is typically difficult to measure profits that primarily relate to intangible assets.

Various global and territorial tax solutions to taxing electronic commerce have been proposed. Subsequent chapters discuss the nexus elements of these proposals in the context of the wider Internet governance jurisprudence and consider the ramifications of shifting towards less tangible nexus standards, ranging from global nexus models to destination-based virtual nexus.

*Chapter 4* discusses global tax solutions. It is argued that, although a global tax regime may appear to be a suitable model for the non-territorial Internet, difficulties would arise in reaching consensus on a uniform set of global rules. This contention is illustrated using the example of an international governance regime for the Internet infrastructure operating under the auspices of the Internet Corporation for Assigned Names and Numbers (ICANN). It is explained that developing global tax solutions, such as unitary tax models and global e-commerce taxes, would be improbable in the short to medium term because national governments and international organisations would lack the necessary substantive and enforcement infrastructure to implement such regimes.

*Chapter 5* discusses territorial tax policy responses to the erosion of physical nexus standards, in the light of wider Internet jurisprudence. Using examples from different areas of Internet-related case law, it is demonstrated that Internet jurisprudence is yet to develop a consistent set of proxies for the less tangible targeting nexus that would provide sufficient certainty. It is, therefore, concluded that shifting towards destination-based targeting models, such as virtual PEs, withholding taxes on e-commerce, or a destination-based cash flow tax would be improbable in the near future.

However, a limited application of the targeting standard should be possible, but only as a backstop solution.

In *Chapter 6*, it is argued that a more appropriate measure would be to retain the current physical nexus standards but, at the same time, introduce a backstop anti-abuse measure using the digital targeting nexus. If a less tangible nexus standard were to be implemented, the digital targeting nexus would be integrated within profits, consumption or cash flow tax models as a backstop option for determining jurisdictional nexus. The digital targeting nexus standard would determine jurisdiction to tax based on where digital enterprises actively direct their activities, which would be established using specific digital proxies. This would help stop nexus erosion in market countries where digital businesses may have significant commercial presence without maintaining a physical base.

In the long term, it is envisaged that a more comprehensive targeting nexus standard could be developed but only based on a technology solution, which should be developed in conjunction with online intermediaries and digital businesses. Given that this appears to be more in the nature of a long-term reform, it is concluded that in the short run traditional physical nexus standards, coupled with carefully crafted anti-avoidance provisions, would remain the backbone of the international tax regime.

# **PART I. JURISDICTIONAL CHALLENGES RELATING TO DIGITAL COMMERCE**

## **CHAPTER 1. TRADITIONAL JURISDICTION AND DIGITAL COMMERCE**

### **Introduction**

This chapter introduces the main issues arising from the mismatch between territorial jurisdiction to tax and digital businesses. It is explained that, although the concept of territoriality defines state regulation across the whole spectrum of business activities, the ICT revolution has created challenges for state-centric regulation, as it has become difficult to establish meaningful taxable connections, or nexus, with highly fluid digital activities.

It is argued below that nexus erosion has occurred mainly because of the current legal rules using tangible proxies for establishing state jurisdiction to tax. Due to the overall digitisation of the global economy, physical connections have become increasingly mobile, resulting in conflicts of interest between state governments in relation to sources of taxable revenue. Such jurisdictional competition may be difficult to resolve using traditional theories for the allocation of jurisdictional rights, including economic allegiance, benefits principles or fairness, as these models do not provide a definitive answer as to where exactly economic value is generated.

It is also argued that nexus challenges, albeit most visible in the context of the more advanced business models, such as online advertising and cloud computing, are not unique and hence apply across the whole range of industries. It is, therefore, concluded that, although it may be possible to design a solution for a specific business model in the short term, attempts to ring-fence digital commerce per se may be futile, especially when designing a longer-term tax solution.

Given the globalised nature of the modern digital economy, it is further suggested in this chapter that nexus solutions should not be considered in isolation from other areas of Internet regulation, which can provide useful insights into the practical viability of the proposed tax models. It is concluded, therefore, that tax nexus models affecting digital commerce should be assessed in the light of broader Internet jurisprudence. Subsequent chapters develop the suggested framework and appraise the global and territorial nexus solutions through the lens of Internet regulation.

### **1. Physical nexus as a traditional basis for state jurisdiction to tax**

Historically, the political power of states to regulate social activities has been based on the notion of territorial sovereignty, defined as the supremacy of governments within state boundaries and in external relations.<sup>85</sup> Sovereignty typically manifests through state jurisdiction, which includes power to prescribe (prescriptive or substantive jurisdiction) and enforce legal rules (enforcement jurisdiction).<sup>86</sup> Given that jurisdiction is an aspect of territorial sovereignty and is limited by it, ‘in assessing the extent of jurisdiction the starting point must necessarily be its territoriality’.<sup>87</sup>

For substantive rules to be effective, there must be a justifiable territorial boundary that should be based on the principles of non-intervention and territorial integrity, prohibiting the exercise of jurisdiction extraterritorially, unless explicit

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<sup>85</sup> On jurisdiction generally see Cedric Ryngaert, *Jurisdiction in International Law* (Oxford University Press 2008). See also Frederick A Mann, *The Doctrine of Jurisdiction in International Law* (Collected Courses of the Hague Academy of International Law 111. Martinus Nijhoff Publishers 1964); Michael Akehurst, ‘Jurisdiction in International Law’ (1972–1973) 46 *British Year Book of International Law* 145; DW Bowett, ‘Jurisdiction: Changing Patterns of Authority over Activities and Resources’ (1982) 53 *British Year Book of International Law* 1; Frederick A Mann, *The Doctrine of International Jurisdiction Revisited After Twenty Years* (Collected Courses of the Hague Academy of International Law 186. Martinus Nijhoff Publishers. 1984).

<sup>86</sup> Vaughan Lowe, ‘Jurisdiction’ in Malcolm Evans (ed), *International Law* (3rd edn, Oxford University Press 2010) 313.

<sup>87</sup> Mann 1984 (n 85) 20.

permission is granted in treaty or domestic law of a partner state.<sup>88</sup> The general principle is that ‘there may be a prescriptive jurisdiction without the possibility of an enforcement jurisdiction’ but ‘there can be no enforcement jurisdiction unless there is prescriptive jurisdiction’, which means that ‘jurisdiction hinges, fundamentally, on the power to prescribe’.<sup>89</sup>

In establishing the power to prescribe legal rules, it is normally necessary to ascertain whether an element of conduct has taken place in the territory of the state that is asserting jurisdiction. If such an element is identified, the application of legal rules to such conduct may be justifiable under objective or subjective jurisdictional standards. Objective territorial jurisdiction involves a state exercising its prescriptive power over an incident that started outside the state's territory but is completed within its territory.<sup>90</sup> Conversely, subjective territorial jurisdiction refers to the exercise of prescriptive jurisdiction in circumstances where an activity started within the state's territory but finished outside it.<sup>91</sup> In both cases there must be a substantial link, or nexus, between the territory and the activity under jurisdiction.

Tax law follows the same jurisdictional principles and relies on the concepts of territorial sovereignty.<sup>92</sup> Designing tax rules involves establishing a prescriptive jurisdictional nexus and ensuring that there is an enforcement mechanism to implement

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<sup>88</sup> Bowett (n 85) 16–17.

<sup>89</sup> Bowett (n 85) 1.

<sup>90</sup> Lowe (n 86) 321–322.

<sup>91</sup> Lowe (n 86) 321.

<sup>92</sup> See Mann 1964 (n 85) 109–119. On jurisdiction to tax generally see references at n 74 above.

it.<sup>93</sup> However, in order to create a justifiable right to tax, the primary focus in international taxation is on prescriptive jurisdiction:

The enforcement limitation as the criterion for a state's right to assert tax jurisdiction still has considerable support from authors in the judicial fiscal doctrine, while the position of other authors has been that a certain reasonable or genuine connection is required between the taxpayer (or his income) and the country in question beyond the mere possibility to enforce taxation. If not coherent, this view is at least more consistent with the position in economic fiscal doctrine since the end of the last century, arguing that international taxation should be based on political, residential or economic allegiance between the taxpayer and the taxing state.<sup>94</sup>

Generally, taxpayers' political, residential or economic allegiance constitutes nexus, which is a substantial connection that determines the taxing rights of state jurisdictions.<sup>95</sup> In other words, jurisdiction to tax utilises the principle of territorial sovereignty, which requires justifiable links with a state, nexus, which empower a sovereign to exercise its prescriptive and enforcement tax jurisdiction.<sup>96</sup> As outlined below, these jurisdictional links vary in detail across different tax models but, broadly, follow a similar framework, utilising physical proxies across direct and indirect tax systems.

### 1.1. Direct tax nexus

In international taxation, direct tax principles apply physical nexus standards when determining jurisdiction to tax.<sup>97</sup> Historically, jurisdiction to tax businesses has been

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<sup>93</sup> Hellerstein (n 74) 3–4.

<sup>94</sup> Skaar (n 24) 22.

<sup>95</sup> Eric CCM Kemmeren, 'Source of Income in Globalizing Economies: Overview of the Issues and a Plea for an Origin-Based Approach' (2006) 60 Bulletin for International Taxation 430, 431, noting that 'in general, a sufficient relationship is considered to exist on the basis of e.g. citizenship, incorporation of a company under national law, domicile, residence, statutory seat of a company, place of effective management of an enterprise, permanent establishment, situs of land, and place of labour. *A relationship can, therefore, reveal itself through a political and / or economic connection with the state concerned*' (emphasis added).

<sup>96</sup> Rutsel Silvestre J Martha, 'Extraterritorial Taxation in International Law' in Karl Matthias Meessen (ed), *Extraterritorial Jurisdiction in Theory and Practice* (Martinus Nijhoff Publishers 1996) 22.

<sup>97</sup> On traditional allocation of taxing rights see Kobetsky (n 24) 106–150; Skaar (n 24) 71–101; Picciotto (n 22) chs 1–2; Michael J Graetz and Michael M O'Hear, 'The "Original Intent" of US

determined based on a schedular system, whereby some form of a substantial tangible connection between a taxpayer and a taxing state is required, albeit one that varies with the type of income in question.<sup>98</sup> This principle for the allocation of taxing rights reflects a compromise, which satisfied major developed countries at the time when traditional businesses were increasingly expanding overseas. In response to this expansion, major industrial countries agreed at the beginning of the twentieth century to reallocate taxing rights, giving source countries a primary right to tax businesses as summarised below:

In 1928, the League of Nations issued drafts of model bilateral income tax treaties for the reciprocal relief of double taxation of international income. These models, as modified from time to time, have served as the common basis for ... bilateral income tax treaties now in force throughout the world. The system for taxing international income produced in that decade – often referred to in the literature as the 1920s compromise – is routinely characterized as allocating the taxation of business income to the country of its source and the taxation of portfolio income to the country of the capital supplier's residence.<sup>99</sup>

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International Taxation' (1997) 46 Duke Law Journal 1021; John F Avery Jones, 'The History of the United Kingdom's First Comprehensive Double Taxation Agreement' (2007) 3 British Tax Review 211.

<sup>98</sup> The classification and assignment of income method was first adopted in the 1923 League of Nations Report, which suggested that based on the economic allegiance principle one of the methods for elimination of double taxation could be the classification of income into different categories and allocation of taxing rights on the basis of this classification (League of Nations, *Report on Double Taxation Submitted to the Financial Committee by Professors Bruins, Einaudi, Seligman and Sir Josiah Stamp (Document EFS73 F19 1923)* (United States Congress, Joint Committee on Internal Revenue, Taxation, Legislative History of United States Tax Conventions, 1962) 45).

The 1925 League of Nations Report adopted this method and put forward a politically agreeable approach, according to which personal taxes (income taxes) were allocated to the residence state and impersonal taxes were allocated to the source state, which would allow source countries to have a share in income arising in their territory (League of Nations, *Double Taxation and Tax Evasion – Report and Resolutions Submitted by the Technical Experts to the Financial Committee of the League of Nations (Document F212, 1925)* (Joint Committee on Internal Revenue, Taxation, United States Congress, Legislative History of United States Tax Conventions, 1962) 15).

The 1928 League of Nations Draft incorporated the classification method and refined it by eliminating the distinction between personal and impersonal taxes and, instead, identifying specific categories of income and allocating them to either the source or residence state (League of Nations, *Double Taxation and Tax Evasion – Report Presented by the General Meeting of Government Experts on Double Taxation and Tax Evasion (Doc C.562.M.178.1928.II)* (Joint Committee on Internal Revenue, Taxation, United States Congress, Legislative History of United States Tax Conventions, 1962).

<sup>99</sup> Graetz (n 22) 262.

The above compromise is still in force.<sup>100</sup> Residence taxation is justified where taxpayers have substantial political allegiance with the state, known as tax residence, which is determined based on where an enterprise is registered or incorporated or, alternatively, where its central management and control is exercised.<sup>101</sup> Non-resident taxpayers, however, can be taxed in a foreign state but only if they have a source of income there.<sup>102</sup> In the context of business profits taxation, this source country presence must satisfy a relatively high threshold, which requires maintaining a fixed place of business – a permanent establishment (PE) – in the form of a branch, a dependent agent or service personnel.<sup>103</sup> In relation to non-business income, the compromise has been reached that source taxation using withholding taxes is justified with respect to interest,

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<sup>100</sup> Picciotto (n 22) 24, summarising the traditional compromise as follows: ‘The concept of the Permanent Establishment was the key to the compromise between the economic interests of creditor and debtor countries, as well as for an accommodation between the business tax systems of a personal character based on income and those of a real character based on sources of revenue. It established a separation between the taxation of business profits which could be attributed to a Permanent Establishment and taxed at source, and the taxation of investment profits, which could be treated as personal income and taxed in the country of residence of the investor. It also offered a basis for accommodation between debtor and creditor countries: foreign-owned branches or subsidiaries could be taxed at source, provided this was limited to the business profits of a permanent establishment; while the home country could retain the right to tax its residents (including corporate groups) on their global income, although this should be subject to a credit or exemption for business profits taxed at source’.

<sup>101</sup> Residence nexus principles are discussed in Chapter 2 at nn 190–231. See references at n 23 above. See also Hellerstein (n 74) 5–6, noting that ‘a State has power to tax the income of an individual or entity based solely on the fact that the individual or entity is a resident of that State and without regard to the source of that income. There is no single definition of residence for tax purposes ... Despite the existence of various definitions of residence for tax purposes, there is a common thread among them: the special relationship of the individual or entity to the State. Like the concept of residence for tax purposes, the concept of source for tax purposes has no single definition. Rather, it is a collection of definitions with a common theme, namely, the geographical location of property or activities that produce (or are deemed to produce) the income’.

<sup>102</sup> See discussion on source taxation in Chapter 2 at nn 233–315. See references at n 24. See also Hellerstein, ‘Jurisdiction to Tax’ (n 74) 6–8, noting that ‘a State has the power to tax the income of an individual or entity based solely on the fact that the income has its source in the State and without regard to the residence of the person with the right to the income’.

<sup>103</sup> Discussed in Chapter 2 at nn 233–244. See also Hellerstein, ‘Jurisdiction to Tax’ (n 74) 7, noting that ‘the source of income from business profits is typically considered to be the location of the activities giving rise to the business profits’.

dividends, royalties and rental income only where the source of payments is actually located in the country.<sup>104</sup>

Even in the offline world, the above compromise was considered onerous as it created overlapping jurisdictional issues.<sup>105</sup> In the digital world, the compromise has survived, and it is now generally accepted that it is dated in many respects:

It is remarkable that not only the fundamental structure of the system for taxing international income today, but also many of the core concepts used to implement that structure – concepts such as permanent establishment, corporate residence, and arm's length pricing – date from a time when airplanes were first becoming a regular means of travel, and when the 'wireless' was a relatively new instrument of communication...<sup>106</sup>

As discussed further below, the overall effect of the current nexus compromise is that source countries do not have a share in tax revenues; business profits could go untaxed at source because vendors have no physical presence there, whilst payments that could give rise to royalties would be categorised as business profits and thus escape taxation at source altogether.<sup>107</sup>

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<sup>104</sup> The 'royalties' category, which is most relevant in the context of digital commerce, was first distinguished from other types of income in the 1933 League of Nations Draft, which assigned the rights to tax royalty income to residence countries. See League of Nations, *Fiscal Committee Reports to the Council on the Work of the Committee: Fourth Session (Doc C.399.M.204.1933.II.A.)* (Joint Committee on Internal Revenue, Taxation, United States Congress, Legislative History of United States Tax Conventions, 1962) art 2(d). For a detailed discussion see, for example, Niv Tadmor, 'Source Taxation of Cross-Border Intellectual Supplies – Concepts, History and Evolution into the Digital Age' (2007) 61 *Bulletin for International Taxation* 2; Richard Vann, 'The History of Royalties in Tax Treaties 1921–61' in John F Avery Jones, Peter A Harris and David Oliver (eds), *Comparative Perspectives on Revenue Law: Essays in Honour of John Tiley* (Cambridge University Press 2008).

<sup>105</sup> Picciotto (n 22) 308.

<sup>106</sup> Graetz (n 22) 262–263.

<sup>107</sup> Consequently, many countries do not follow the OECD position regarding allocation of taxing rights in their tax treaties and, for instance, argue that any software purchase produces royalty income or that royalty income arises when less than all of the rights to software are transferred. On the historical position see, for instance, The eComTaxpert Group, *Taxation of Electronic Commerce in India* (Presented to Central Board of Direct Taxes, India in response to The Report of the High Powered Committee, 2002) 21. See also OECD, *Model Treaty Commentary* (2010) reservations on art 12 paras 1–2, which, for example, include such jurisdictions as Australia, Mexico and New Zealand.

## 1.2. Indirect tax nexus

In the area of indirect taxation, national administrations are currently facing similar issues associated with the unenforceability of domestic tax regimes with regard to cross-border digital supplies.<sup>108</sup> Indirect, or consumption, taxes typically include ‘any levy on the consumption of goods, services, and intangible property, including general sales and turnover taxes, transaction taxes, value added taxes (VATs), and retail sales taxes (RSTs)’.<sup>109</sup> It has been generally accepted that an indirect tax nexus exists wherever consumption takes place; however, there is no multilateral consensus as to what should constitute an ideal proxy for consumption.<sup>110</sup>

Generally, indirect taxation utilises either destination or origin nexus principles.<sup>111</sup> Origin-based taxes are imposed on production and are calculated and accrued in the country of suppliers, which results in taxable exports and free-of-tax imports.<sup>112</sup> In contrast, destination taxes are levied on final consumption; therefore, exports are zero-rated and imports are taxed at the rate of the countries where customers

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<sup>108</sup> Indirect tax nexus issues are discussed in Chapter 3. Except for selected nexus matters, a detailed discussion of indirect and other consumption taxes is outside the scope of the present thesis. For a detailed account of these matters see, for example, Alan Schenk and Oliver Oldman, *Value Added Tax: A Comparative Perspective* (Cambridge University Press 2007); Robert F van Brederode, *Systems of General Sales Taxation: Theory, Policy and Practice* (Wolters Kluwer Law & Business 2009); Ian Crawford, Michael Keen and Stephen Smith, ‘Value Added Tax and Excises’ in Institute for Fiscal Studies (ed), *Dimensions of Tax Design: The Mirrlees Review* (Oxford University Press 2010); Michael Lang and Ine Lejeune (eds), *VAT/GST in a Global Digital Economy* (Wolters Kluwer 2015).

<sup>109</sup> Hellerstein (n 74) 14.

<sup>110</sup> Hellerstein (n 74) 16, explaining that ‘jurisdiction to tax consumption where consumption occurs does not mean that there is an equally broad consensus as to where consumption takes place (or deemed to take place) for consumption tax purposes’. On suggested OECD guidelines on consumption proxies see nn 58 and 116.

<sup>111</sup> On origin versus destination sales taxation see, for example, Michael Keen and Walter Hellerstein, ‘Interjurisdictional Issues in the Design of a VAT’ (2010) 63 *Tax Law Review* 359, 360–366. See also Keith Kendall, ‘Using Destination and Origin Principles in Developing VAT Legislation’ (2006) 42 *Tax Notes International* 983; Rebecca Millar, ‘Jurisdictional Reach of VAT’ Sydney Law School Research Paper No 08/64 (2008) <<http://ssrn.com/abstract=1162510>> accessed 22 May 2013.

<sup>112</sup> Crawford, Keen and Smith (n 108) 331.

are located.<sup>113</sup> Since destination taxation is designed to impose taxes where products are ultimately consumed, it is more consistent with the nature of consumption taxation and, therefore, has been implemented in most European jurisdictions.<sup>114</sup>

As regards taxation of physical goods, it has been generally established that governments, through appropriate customs checks, can control the flow of tangible products, even in a digital economy, where *physical* goods are ordered over the Internet, as the application of the destination principle means that goods are taxed wherever they are actually delivered.<sup>115</sup> Similar rules have been implemented in relation to intangible supplies over the Internet, which include digitally downloaded or electronically delivered products as well as intangible services, such as advertising, performed via electronic means; the OECD guidelines on neutrality suggest that such transactions should also be taxed based on the destination principle.<sup>116</sup>

When implementing the destination principle in the digital context, however, it has been agreed that, although intangible services and digital goods can be actually

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<sup>113</sup> Crawford, Keen and Smith (n 108) 332.

<sup>114</sup> OECD, *Consumption Tax Trends 2014* (2014) 41; Crawford, Keen and Smith (n 108) 331, arguing that '[t]he international norm is for commodities to be taxed where they are consumed: the destination principle'.

<sup>115</sup> Hellerstein (n 74) 51; Millar (n 111) 185–189; OECD, *Consumption Tax Aspects of Electronic Commerce. A report from Working Party No 9 on Consumption Taxes to the Committee on Fiscal Affairs* (2001) 10. The only major issue, albeit not new, is the increased volume of small orders passing through borders, which are exempt from taxation. For instance, under the EU VAT law commercial consignments are exempt from VAT if they are worth €10 or less; Member States may grant exemption for imported goods of a total value of more than €10 but less than €22. (See Council Directive 2009/132/EC of 19 October 2009 determining the scope of Article 143(b) and (c) of Directive 2006/112/EC as regards exemption from value added tax on the final importation of certain goods OJ 2009 L292/5 art 23.) UK retailers, in particular, used to set up their subsidiaries in non-EU jurisdictions, such as Jersey or Guernsey, to sell their products to UK customers over the Internet VAT-free (see Low Value Consignment Relief <http://www.vatloophole.co.uk/> accessed 25 April 2011; Value Added Tax (Imported Goods) Relief Order 1984 SI 1984/746.) From 2013 the relief was abolished in the UK. The EU is also currently considering options for amending or abolishing the relief (see European Commission, *Assessment of the application and impact of the VAT exemption for importation of small consignments* (Specific Contract No 7 TAXUD/2013/DE/334 based on Framework Contract No Taxud/2012/CC/117, 2015).

<sup>116</sup> OECD, *International VAT/GST Guidelines* (n 58) 9–10; see Keen and Hellerstein (n 111) 375.

consumed in the place where the customer uses the services, irrespective of the contract, payment, or location of the customer at the time of the supply, using the actual consumption tests can be cumbersome.<sup>117</sup>

Due to the perceived infeasibility of the actual consumption test, it has been determined that it would be more efficient to use consumption proxies based on physical nexus. For business-to-business transactions, it has been suggested, therefore, that intangible services and goods should be treated as being consumed where the customer has its permanent business presence.<sup>118</sup> For business-to-consumer (B2C) transactions, the customer's usual country of residence has been agreed to be the most practical option.<sup>119</sup> The physical presence proxies, however, have generated multiple challenges in the context of digital supplies.<sup>120</sup>

As regards enforcement nexus mechanisms, currently, B2B cross-border supplies of intangible services and goods are taxed based on a reverse charge mechanism, whereby recipients calculate and remit VATs to the tax authorities in the sales country.<sup>121</sup> In the case of B2C transactions, destination countries, for example, tax

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<sup>117</sup> Keen and Hellerstein (n 111) 367; OECD, *International VAT/GST Guidelines* (n 58) para 3.4; OECD, *Consumption Tax Aspects of Electronic Commerce* (n 115) 11.

<sup>118</sup> OECD, *International VAT/GST Guidelines* (n 58) para 3.6; discussed in Chapter 3 at nn 390–395; see generally Herman WM van Kesteren and Madeleine MWD Merckx, 'The Concept of Taxable Persons (and Fixed Establishments) in EU VAT' in Thomas Ecker, Michael Lang and Ine Lejeune (eds), *The Future of Indirect Taxation: Recent Trends in VAT and GST Systems Around the World* (Kluwer Law International 2012).

<sup>119</sup> OECD, *Discussion Drafts for Public Consultation. International VAT/GST Guidelines. Guidelines on Place of Taxation for Business-to-Consumer Supplies of Services and Intangibles* (18 December 2014 – 20 February 2015, 2015); see generally Antonio Vazquez del Rey and Alberto Monreal Lasheras, 'The Place of Supply and Its Relevance for European VAT' in Thomas Ecker, Michael Lang and Ine Lejeune (eds), *The Future of Indirect Taxation: Recent Trends in VAT and GST Systems Around the World* (Kluwer Law International 2012).

<sup>120</sup> Discussed in Chapter 3.

<sup>121</sup> OECD, *International VAT/GST Guidelines* (n 58) para 3.44; see generally Michael Tumpel and Gustav Wurm, 'Extension of Reverse Charge: A Solution to Combat VAT Fraud?' in Thomas Ecker, Michael Lang and Ine Lejeune (eds), *The Future of Indirect Taxation: Recent Trends in VAT and GST Systems Around the World* (Kluwer Law International 2012).

suppliers using a one-stop shop operated in the EU, under which foreign suppliers register online with one of the Member States if the value of their sales exceeds a de minimis threshold.<sup>122</sup>

Hence, B2B taxation relies on self-assessment and voluntary compliance, while B2C taxation is based on an unenforceable requirement that businesses must be registered in destination countries. Overall, the substantive and enforcement nexus standards in the context of indirect taxation still rely on physical nexus standards, which has challenged indirect taxation of digital businesses.<sup>123</sup>

Equally, in the US sales tax context, proxies for the collection of in-state use taxes also rely on physical nexus standards developed as part of the US constitutional commerce clause, which prohibits overburdening interstate commerce with unjustifiable compliance obligations.<sup>124</sup> Although a number of states have attempted to shift towards less stringent nexus standards in the light of the digital commerce developments, adopting a click-through and an affiliate nexus standard, these developments did not abolish the physical nexus requirements due to the constitutional constraints and

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<sup>122</sup> The scheme applies to both non-EU and EU suppliers of electronic services and goods – see Council Implementing Regulation (EU) No 1042/2013 of 7 October 2013 amending Implementing Regulation (EU) No 282/2011 as regards the place of supply of services OJ 2013 L 284/1; European Commission, *Explanatory notes on the EU VAT changes to the place of supply of telecommunications, broadcasting and electronic services that enter into force in 2015 (Council Implementing Regulation (EU) No 1042/2013)* (2014); discussed in Chapter 3 at 412–417; see generally Marie Lamensch, ‘The 2015 Rules for Electronically Supplied Services – Compliance Issues’ (2015) 26 *International VAT Monitor* 11.

<sup>123</sup> See Chapter 3 for a more detailed discussion of the sales tax nexus challenges relating to digital commerce.

<sup>124</sup> Discussed in Chapter 3 from n 342 onwards; see generally Hellerstein (n 74) 19–21; Walter Hellerstein, ‘Consumption Taxation of Cross-border Trade in Services in an Age of Globalization’ in Arthur J Cockfield (ed), *Globalization and Its Tax Discontents: Tax Policies and International Investments: Essays in Honour of Alex Easson* (University of Toronto Press 2010).

political unwillingness to move towards intangible nexus standards.<sup>125</sup> Physical nexus issues, therefore, still remain pertinent.

## **2. Principles for the allocation of jurisdictional rights**

Even in the context of offline trade, there has been an endless search for an overarching principle that would guide the international community in resolving jurisdictional claims over cross-border activities. The theories developed over time include the principles of non-intervention, reasonableness and the ‘balancing of interests’ in international law, whilst in tax law the doctrines of equity, ability to pay, entitlement and economic allegiance have been developed, which attempt to provide a rationale for the allocation of taxing rights between jurisdictions.<sup>126</sup>

Arguably, none of these principles provides a definitive solution to the issue of concurrent jurisdictional claims. On the contrary, these doctrines are arbitrary and allow each conflicting jurisdiction to justify the exercise of power to prescribe and enforce their own legal rules.

In public international law, the principles of non-intervention and sovereign equality are generally invoked in jurisdictional conflicts, providing that it may be impermissible for one state to assert jurisdiction, which has an impact on the political, social or economic development of another state, if this would exceed the limits of propriety.<sup>127</sup> Although it is acknowledged that the principle of non-intervention is fundamental in international relations, it has been argued that ‘the application of this

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<sup>125</sup> Discussed in Chapter 3 from n 363; see generally David Gamage and Devin J Heckman, ‘A Better Way Forward For State Taxation of E-Commerce’ (2012) 92 Boston University Law Review 483; H. Beau Baez III, ‘Taxing Internet Sales: Trying to Make a Two-Thousand-Year-Old Jurisdiction Test Work in the Dot-Com Economy’ (2011) 64 Tax Lawyer 807.

<sup>126</sup> Discussed further below.

<sup>127</sup> Bowett (n 85) 16.

principle is by no means a simple matter, producing clear-cut answers'.<sup>128</sup> The problem lies in the vague and broad nature of the non-intervention concept, which requires 'a good deal of judgment and subjective interpretation'.<sup>129</sup>

It has, therefore, been suggested that the solution to jurisdictional conflicts may be found in a more 'delicate' balancing of state interests, the concept that the US courts have developed in antitrust matters.<sup>130</sup> Under this approach, courts would consider the nature and extent of the US interest in having its law applied, and the interests of the other state in not having US law applied, as well as various other factors, such as the nationalities of the parties involved and the nature of their links with the US territory. The court would then decide, on balance, whether it had a right to apply US law or to exercise judicial restraint.<sup>131</sup>

Despite the reasonableness test, it has been argued that 'cases where businesses in one State are ordered to obey the laws of another are almost certain to continue to arise', whereby 'the "home" State of the business will object to what will, in general terms, be seen as an interference in its domestic affairs'.<sup>132</sup> The general sentiment, therefore, is that it is challenging to develop a viable theory for allocating jurisdiction to regulate cross-border activities. As Lowe argues in this regard:

None of the existing approaches to the resolution of jurisdictional conflicts appears, at present, to be wholly satisfactory, because none of them is likely to produce a comprehensive, internationally acceptable, set of rules of sufficient certainty and specificity to ensure that national laws are kept within their proper

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<sup>128</sup> Bowett (n 85) 17.

<sup>129</sup> Bowett (n 85) 17.

<sup>130</sup> See *Hartford Fire Ins Co v California* 509 US 764 (1993); discussed in Andreas F Lowenfeld, 'Conflict, Balancing of Interests, and the Exercise of Jurisdiction to Prescribe: Reflections on the Insurance Antitrust Case' (1995) 89 *American Journal of International Law* 42.

<sup>131</sup> See *Timberlane Lumber Co v Bank of America, NT and SA* 549 F2d 597 (9th Cir 1976), 613–615.

<sup>132</sup> Alan V Lowe, 'The Problems of Extraterritorial Jurisdiction: Economic Sovereignty and the Search for a Solution' (1985) 34 *International & Comparative Law Quarterly* 724, 731.

limits, and to enable those who might be affected by these laws to determine their legal position in relation to them.<sup>133</sup>

In the tax context, while discussion of extraterritorial taxation is rarely based on the concepts of international law, since tax mainly uses economic considerations, economic theories for the allocation of taxing rights so far have struggled to provide a definitive solution to jurisdictional conflicts.<sup>134</sup>

One of the main reasons behind this challenge has been the vagueness of the ‘source’ concept that lies at the core of international taxation.<sup>135</sup> Whilst the ultimate goal of taxation is to capture economic value based on where the actual sources of value-producing factors are located, this may be difficult to achieve in practice due to the arbitrariness of the source concept. Source in tax law usually means the place where value-adding activities take place; however, this can cover multiple locations with differing claims with regard to income generated in those locations:

‘Source’ is unambiguous only in what it excludes: taxation based on ‘source’ is different from taxation based on residence or on citizenship. The only positive statement that can be made on the other hand is that ‘source’ refers to a state that in some way or other is connected to the *production* of the income in question, to the state where *value is added* to a good. In contrast, the *type* of connection that establishes the ‘source’ of income cannot be defined generally.<sup>136</sup>

Historically, it has been agreed that the type of economic connection justifying taxing rights would be ‘economic allegiance’, although the term has been given varying interpretations at different times.<sup>137</sup> Schanz, who coined the term, argued for giving

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<sup>133</sup> Lowe (n 132) 732.

<sup>134</sup> Martha (n 96) 21.

<sup>135</sup> On source taxation challenges generally see references at above n 24.

<sup>136</sup> Vogel Part I (n 24) 223.

<sup>137</sup> The doctrine of ‘economic allegiance’ was developed in the works of Georg von Schanz and Professor Seligman, as discussed in Skaar (n 24) 79; Vogel Part I (n 24) 219.

preference to the state where business activities take place, but, where that was impossible to establish, giving preference to a source, rather than residence, country.<sup>138</sup>

In contrast, the committee of economic experts appointed by the League of Nations argued that in determining economic allegiance tax authorities must ascertain the location of economic interests, which can be found where wealth is produced.<sup>139</sup> The economists' preference, however, was in favour of residence countries.<sup>140</sup>

Later, technical experts, who replaced the economists and designed the model tax treaty, as a matter of practical concern, reached an artificial compromise as to the allocation of allegiance based on different schedules of income.<sup>141</sup> Given the diverging interpretations, it is clear that economic allegiance does not answer the question as to where exactly taxable value should be allocated, as 'allegiance' can essentially belong anywhere.<sup>142</sup>

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<sup>138</sup> Vogel Part I (n 24) 219, noting that according to Schanz, '[e]conomic allegiance to a State can be based on mere consumption or it can be based on business activities, including investment activities ... Where a person is economically bound not only to the state of his or her residence, but also to another state through business activities or by way of income arising in the other state, Schanz deems the allegiance to this other state, the source state, to be more important'.

<sup>139</sup> League of Nations, *The 1923 League of Nations Report* (n 98) 4025: 'The three considerations of weight in economic allegiance thus really become four, namely, the acquisition of wealth, the location of wealth, the enforceability of the rights to wealth and the consumption of wealth. Corresponding to these four considerations would be the four points which become of significance in considering the proper place of taxation. The principle of acquisition corresponds to the place of (1) origin of the wealth; the principle of location to that of (2) the situs of the wealth; the principle of legal rights to the place of (3) enforcement of the rights to wealth; the principle of consumption or appropriation or disposition to the place of (4) residence or domicile'.

<sup>140</sup> Vogel Part I (n 24) 220: 'The four experts appointed by the League of Nations in 1921 to prepare a report on questions of double taxation ... adopted the term [economic allegiance], but their conclusions and recommendations were practically the opposite of those Schanz had proposed. The experts suggested that States reciprocally exempt nonresidents from income taxation so that only taxation by the State of residence prevail'.

<sup>141</sup> Vogel Part I (n 24) 220, noting that for technical experts 'worldwide taxation was not a matter of principle, it was a matter of practical expedience. Moreover, it was a legislative fact in many countries; therefore, they could not ignore it in drafting their treaty model'.

<sup>142</sup> Skaar (n 24) 24, concluding that 'the term "economic allegiance" does not solve the problem of *which* source state should be given primacy. Therefore, "economic allegiance" does not give a definitive answer to the problem of international taxing jurisdiction over business profits'.

Attempts to develop the economic allegiance principle further, by putting it in the terms of inter-nation equity, have been made under the entitlement theory, which provides that it is the ‘economic entitlement’ to receiving tax revenue that determines a country’s right to tax.<sup>143</sup> This theory further elaborates that a country may be entitled to a share of all income earned by residents, plus a share of income earned by non-residents within its borders; in other words, it can be entitled to tax the value added within its borders.<sup>144</sup>

Rather unhelpfully, however, the amount of entitlement depends on how the net value added is interpreted. Based on the supply approach, economic value is added at origin, and therefore income has its source where the production factors that generate income are located.<sup>145</sup> Conversely, according to the supply/demand approach, market value is added through the interaction of supply and demand. Under this approach, the tax base must be divided between the state where value is added and where the product is used. If demand is considered as a source of value, inclusion of sales in the

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<sup>143</sup> Peggy B Musgrave, ‘Principles for Dividing the State Corporate Tax Base’ in Peggy B Musgrave (ed), *Tax Policy in the Global Economy: Selected Essays of Peggy B Musgrave* (Edward Elgar 2002) 239–257.

<sup>144</sup> Musgrave (n 143) 241.

<sup>145</sup> Charles E McLure Jr, ‘Replacing Separate Entity Accounting and the Arm's Length Principle with Formulary Apportionment’ (2002) 56 *Bulletin for International Fiscal Documentation* 586, 593: ‘Economic theory suggests that, under the “supply” perspective, capital is the proper apportionment factor and that the user cost of capital (that is, the cost of the services of capital, essentially depreciation plus financing costs, including a normal return to equity investment), not the stock of capital, provides the most appropriate measure of where income originates. Under the “supply” view, there is little or no role for either payroll or sales in an apportionment formula intended to approximate the origin of corporate income’. See also Musgrave (n 143) 241.

entitlement category may be valid.<sup>146</sup> Whether the supply or supply/demand interpretation is preferable is, however, unclear.<sup>147</sup>

In a similar fashion, according to the benefit theory, which closely resembles the entitlement principle, a taxpayer would pay taxes proportionate to the benefit he receives through using the country's 'infrastructure', such as public goods and services, including telecommunication networks and legal protection accorded to intellectual property.<sup>148</sup> Although this theory mainly supports source taxation, again, it does not provide a definitive answer as to whether residence or source-state taxation is preferable, as both residence and source countries typically provide benefits for taxpayers.<sup>149</sup> While residence states provide public goods in the form of protection for the business environment because the enterprise is established under the laws of the country, source countries give access to market and related benefits.<sup>150</sup>

Given that neither the economic allegiance nor the entitlement principle provides an answer as to how much business profits should be taxed at source, current international tax theory has attempted to address these issues from the perspectives of economic neutrality and fairness.

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<sup>146</sup> McLure Jr (n 145) 593: 'Under the "supply/demand" view of where income originates, property and sales (at destination) would be included in the apportionment formula, but payroll would not be'. See also Musgrave (n 143) 241.

<sup>147</sup> McLure Jr (n 145) 593: 'Unfortunately, economic analysis does not indicate the proper weight to place on sales under the "supply/demand" view, much less whether the "supply" or "supply/demand" view of the origin of profits provides the better indicator of the source of income in a world of perfect competition'.

<sup>148</sup> See League of Nations, *The 1923 League of Nations Report* (n 98) 4022–4024; discussed in Skaar (n 24) 24–25.

<sup>149</sup> Skaar (n 24) 25, stating that the benefit, or equivalence, theory 'mainly supports source-state taxation' and arguing that 'it does not provide a clear preference between the two [source and residence] alternatives'.

<sup>150</sup> Skaar (n 24) 25, arguing that the benefits theory 'supports the source state's aspirations. However, the residence state also provides a part of the environment that surrounds the business activity, in particular because the enterprise is established and protected under the laws of the residence state'.

In terms of neutrality, or efficiency, diverging theories have been developed, but the choice between the theories is ultimately a futile political exercise.<sup>151</sup> Capital export neutrality (CEN) implies that investors have to be taxed on their worldwide income and receive full credit against the domestic tax liability for all taxes paid abroad so that the tax system does not provide any incentive to invest either at home or abroad.<sup>152</sup> Capital import neutrality (CIN) prevails when residence countries exempt all foreign income from domestic taxation and source countries do not practise tax discrimination based on the origin of capital.<sup>153</sup> Capital ownership neutrality (CON) takes account not only of where capital is saved and invested but also of who owns real capital, and may be achieved through the adoption by all countries of either worldwide (CEN) or territorial (CIN) taxation.<sup>154</sup> It is, however, commonly acknowledged that it is debatable whether preference should be given to one of those benchmarks, and therefore the existing practical consensus reflected in international tax treaties is that source and residence tax policies coexist.<sup>155</sup>

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<sup>151</sup> Graetz (n 22) 272, arguing that '[d]ebating CEN versus CIN as a guide to international tax policymaking is a dead end'.

<sup>152</sup> Michael P Devereux, 'Taxation of Outbound Direct Investment: Economic Principles and Tax Policy Considerations' (2008) 24 *Oxford Review of Economic Policy* 698, 701–702; Klaus Vogel, *Klaus Vogel on Double Taxation Conventions: A Commentary to the OECD-, UN-, and US Model Conventions for the Avoidance of Double Taxation on Income and Capital, with Particular Reference to German Treaty Practice* (Kluwer Law International 1997) 14; Ian Roxan, *Limits to Globalisation: Some Implications for Taxation, Tax Policy, and the Developing World* (LSE Law, Society and Economy Working Paper Series, 3/2012, 2012).

<sup>153</sup> Devereux (n 152) 701–702; Vogel (n 152) 14.

<sup>154</sup> Discussed in Mitchell A Kane, 'Ownership Neutrality, Ownership Distortions, and International Tax Welfare Benchmarks' (2006) 26 *Virginia Tax Review* 53, 55; see also Mihir A Desai and James R Hines, 'Evaluating International Tax Reform' Harvard NOM Working Paper No 03-48 <<http://ssrn.com/abstract=425943>> accessed 23 April 2011.

<sup>155</sup> Graetz (n 22) 272, arguing that '[i]t is by now known that it is impossible to achieve CEN and CIN simultaneously in the absence of either a worldwide government or identical income tax bases and rates in all nations. This means that the analyst either must choose between these conflicting norms or – since both residence and source countries exercise their rights to tax income – urge some “compromise” between them'.

Equally, fairness and inter-nation equity principles have been extensively debated in the international tax community over recent decades as possible criteria for the allocation of tax revenue across jurisdictions.<sup>156</sup> Inter-nation equity and fairness principles, however, involve substantial value judgments and, therefore, require extensive dialogue between nations in order to achieve consensus as to what level of taxation would be permissible at source, be it economic rents or proportionate costs of using local infrastructure.<sup>157</sup> Overall, however, such vague principles do not provide any guidance as to how to allocate taxing rights, given that every jurisdiction can make a compelling case for exercising its power to tax.<sup>158</sup>

### **3. Further challenges arising from digital commerce**

Reliance of the traditional jurisdictional rules on physical nexus points, which lack unambiguous theoretical support from economic principles, has been further challenged by the overall digitisation of the world economy.<sup>159</sup>

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<sup>156</sup> See generally Kim Brooks, 'Inter-Nation Equity: The Development of an Important but Underappreciated International Tax Policy Objective' in John G Head and Richard E Krever (eds), *Tax Reform in the 21st Century: A Volume in Memory of Richard Musgrave* (Kluwer Law International 2009); Musgrave (n 143) 239–251; Nancy H Kaufman, 'Fairness and The Taxation of International Income' (1998) 29 *Law & Policy in International Business* 145; Graetz (n 22); Joao Dacio Rolim, *Proportionality and Fair Taxation* (Kluwer Law International 2014).

<sup>157</sup> Brooks (n 156) 492: 'That the application of a concept of inter-nation equity requires value judgements is rarely explicitly recognized in the literature, and yet the lack of traction that the concept has had for policy-makers and scholars must be at least partly explained by that realization. Unlike questions of efficiency, which seem less shot through with "value judgments", the idea of inter-nation equity is grounded on principles, but its ultimate use is predicated on explicit value judgments: just how much inter-nation equity are we willing to support?'

<sup>158</sup> See, for example, European Commission, *EU Digital Taxation Report* (n 12) 20, arguing that 'it is not easy to define what is an equitable allocation of, for example, the profit of a multinational group that operates in many producing and consuming countries'; Graetz (n 22) 306, whilst emphasising importance of fairness in international taxation, still noting that 'thinking about fairness in international taxation complicates both analysis and policymaking. It is frequently controversial even in the domestic context to achieve agreement about the appropriate level or redistributive goals of the income tax, or to assess under what circumstances equity demands equal treatment. When the relevant comparisons are between citizens, residents, and foreigners, the difficulties multiply'.

<sup>159</sup> See generally OECD, *BEPS Digital Taxation Final Report 2015* (n 21) ch 3–4; European Commission, *EU Digital Taxation Report* (n 12) 11–17.

As discussed below, the emergence of computer technology and the Internet is an essential part of the ICT revolution, which has been a new major link in the chain of industrial revolutions that have triggered substantial economic changes over the past century. It shares most of the key features that all these industrial revolutions have developed. As noted below, as a general-purpose technology, the Internet has substantially changed all industries, providing scale economies, redistributing physical production factors across jurisdictions and boosting intangible value of enterprises.

As part of the industrial revolutions of the past, the adoption of general-purpose technologies has normally reduced production costs and enabled enterprises to carry out organisational changes that boost group synergies.<sup>160</sup> Further, general-purpose technologies have led to significant improvements in production efficiency, with such inventions as the telegraph, steam engine and electric motor revolutionising business processes and sparking the emergence of geographically dispersed businesses.<sup>161</sup> Because of these changes, businesses have developed innovative products or improved the brand image of their existing ones, boosting the market value of firms, with intangible assets particularly contributing towards businesses' value.<sup>162</sup>

Similar effects can be observed in the context of the recent ICT revolution. Although binary code existed in the offline mathematical world long ago, the Internet

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<sup>160</sup> Brynjolfsson and Hitt 2000 (n 26), 24; Robert D. Atkinson, *The Past And Future Of America's Economy: Long Waves Of Innovation That Power Cycles Of Growth* (Edward Elgar 2004); Robert D Atkinson, 'Globalisation, New Technology and Economic Transformation' in Olaf Cramme and Patrick Diamond (eds), *Social Justice in a Global Age* (Polity 2009) 157–158. On synergy intangibles within groups see Mitchell A Kane, 'Transfer Pricing, Integration and Synergy Intangibles: A Consensus Approach to the Arm's Length Standard' (2014) 6 *World Tax Journal* 282.

<sup>161</sup> Brynjolfsson and Hitt (n 26) 24–25.

<sup>162</sup> Erik Brynjolfsson, Lorin M Hitt and Shinkyu Yang, 'Intangible Assets: How the Interaction of Computers and Organizational Structure Affects Stock Market Valuations' <<http://ebusiness.mit.edu/erik/itqo%20final-7-00.pdf>> accessed 22 July 2013, 4.

has enabled transmission of the code in the form of electronic signals across borders.<sup>163</sup>

The Internet is a set of protocols that help transmit data across networked devices.<sup>164</sup> In essence, being non-physical, the network creates a virtual space that does not always have common ground with territorial jurisdictional rules:

The Internet's methods of establishing communication are nonterritorial. This is one of the most critical principles ... Internet names and addresses create a virtual space that is often independent of geography. Its routing structure is also independent of political jurisdictions, and the costs of routing packets are insensitive to distance. This has created a nonterritorial arena for human interaction and thus for policy and governance.<sup>165</sup>

Overall, the development of computer technologies and the Internet has enabled firms to present complex objects in a binary code comprised of strings of 1s and 0s, bits, and transmit them across borders using the Internet. This has had a dramatic effect on businesses, with the emergence of new business models and products that challenge traditional territorial understanding of regulation. These developments have contributed to digitisation and dematerialisation of the main sectors of economy discussed below, which in turn has affected regulation across different legal areas.

### **3.1. Development of infinitely expansible and aspatial digital content**

One of the defining features of the new economy is that digitised intangible products are characterised by high development but low reproduction costs, which makes them

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<sup>163</sup> On digitisation in the global economy see, for example, Hal R Varian, Joseph Farrell and Carl Shapiro, *The Economics of Information Technology: An Introduction* (Cambridge University Press 2005). See also Andrew B Whinston, Choi Soon-Yong and Dale O Stahl, *The Economics of Electronic Commerce* (Macmillan Technical Publishing 1997); Danny Quah, *Digital Goods and the New Economy* (LSE Discussion Paper No 3846, 2003) 10–12; Doernberg (n 108) 11–16.

<sup>164</sup> The Internet is fundamentally a set of protocols for sending data over networks and a global set of unique IP addresses created so that the data could be sent around those networks. Transmission of data is performed using Internet protocols that give addresses and names to computers and provide instructions on how to use them to deliver data. Information is sent via a transport protocol, such as TCP, which breaks data into units and keeps track of them, while the IP protocol performs the actual delivery – see Milton Mueller, John Mathiason and Hans Klein, 'The Internet and Global Governance: Principles and Norms for a New Regime' (2007) 13 *Global Governance* 237, 244. See also Dan Jerker B Svantesson, 'The Characteristics Making Internet Communication Challenge Traditional Models of Regulation — What Every International Jurist Should Know About the Internet' (2005) 13 *International Journal of Law & Information Technology* 39.

<sup>165</sup> Mueller, Mathiason and Klein (n 164) 248.

infinitely expandable, since additional copies can be created inexpensively.<sup>166</sup> In addition, due to their digitised format such products are considered aspatial, meaning that they can be offered independently of physical media and provided via a communications network.<sup>167</sup>

The availability of digital technologies, cheap digital transportation and low production costs has sparked a rise in the availability of new digital content, including digital music, films, news and software, which can be stored, downloaded or streamed in any location.<sup>168</sup> In this regard, it has been noted that the overall landscape of content provision has changed significantly:

The dynamic nature of the Internet has transformed the ways in which companies provide new products, services and applications to consumers. As new distribution channels are created, firms need to innovate and modify their traditional business models in order to participate in this new and ever-changing economic environment. Innovation brings new products and services to consumers who now have a wide range of content to choose from, often at lower cost ... In June 2011, spending on digital platforms accounted for 26% of all spending on entertainment and media, and was expected to increase to nearly 34% by 2015, as a result of growing access by consumers to online content from smart devices.<sup>169</sup>

A further step in the development of dematerialised digital products is that of virtual goods, which have zero marginal costs and are sold within virtual worlds and online games environments, thereby having no connection with the offline world whatsoever.<sup>170</sup> Zero marginal costs and the aspatial nature of digital content also

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<sup>166</sup> Quah, *Digital Goods* (n 163) 13: 'A good is infinitely expandable when its quantity can be made arbitrarily large arbitrarily quickly at no cost. Infinite expandability is why media companies fear that digital music and images – costly for them to produce but distributed freely over the Internet – will proliferate without bound'.

<sup>167</sup> Quah, *Digital Goods* (n 163) 18.

<sup>168</sup> See OECD, *Internet Economy Outlook* (2012) 159; OECD, *The Development and Diffusion of Digital Content* (OECD Digital Economy Papers No 213, 2012).

<sup>169</sup> OECD, *Internet Economy Outlook* (n 168) 163.

<sup>170</sup> Michael A Cusumano and Goeldi Andreas, 'New Businesses and New Business Models' in William H Dutton (ed), *The Oxford Handbook of Internet Studies* (Oxford University Press 2013) 254–255. See also n 178 below.

promotes a more widespread adoption of 3D printing technology, which means that in the long term digital designs and products rather than physical goods will be moved across borders and subsequently recreated in 3D printers, denoting a shift towards purely digitised commerce in the future.<sup>171</sup>

### **3.2. Development of non-subtractive digital products**

Digital products are also non-rival, in the sense that their use by one agent does not diminish their value to other agents, and non-subtractive, meaning that they are not subject to wearing out from usage.<sup>172</sup> This ability of digital products to be enjoyed simultaneously by multiple users without diminution in value has required more extensive data storage solutions and hence has given rise to the rapid deployment of new business models.

For example, cloud computing has emerged, and constitutes ‘a service model for computing services based on a set of computing resources that can be accessed in a flexible, elastic, on-demand way with low management effort’.<sup>173</sup> Cloud providers render a wide variety of services, ranging from the provision of computing infrastructure, such as data capacity with basic supporting instruments, to fully fledged

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<sup>171</sup> See generally Hod Lipson and Melba Kurman, *Fabricated: The New World of 3D Printing* (1st edn, John Wiley & Sons 2013); OECD, *BEPS Digital Taxation Report 2014* (n 13) 132, noting in the context of 3D printing that income characterisation issues will arise, as, ‘if direct manufacturing for delivery evolves into a license of designs for remote printing directly by purchasers, questions may arise as to whether and under what circumstances payments by purchasers may be classified as royalties rather than as business profits, or may be treated as fees for technical services’.

<sup>172</sup> Quah, *Digital Goods* (n 163) 13.

<sup>173</sup> OECD, *Cloud Computing: The Concept, Impacts and the Role of Government Policy* (OECD Digital Economy Papers No 240, 2014) 8. See also Michael Armbrust and others, ‘Above the Clouds: A Berkeley View of Cloud Computing’ UC Berkeley Reliable Adaptive Distributed Systems Laboratory, 10 February 2009 <<http://www.eecs.berkeley.edu/Pubs/TechRpts/2009/EECS-2009-28.pdf>> accessed 12 April 2015, 2; Nick Antonopoulos and Lee Gillam, *Cloud Computing: Principles, Systems and Applications* (London: Springer 2010); Rajkumar Buyya, James Broberg and Andrzej M Goscinski (eds), *Cloud Computing: Principles and Paradigms* (Wiley-Blackwell 2010); Simon Bradshaw, Christopher Millard and Ian Walden, ‘Contracts for Clouds: Comparison and Analysis of the Terms and Conditions of Cloud Computing Services’ (2011) 19 *International Journal of Law & Information Technology* 187; European Parliament, *Cloud Computing: Study* (May 2012); European Commission, *Unleashing the Potential of Cloud Computing in Europe* (n 4).

electronic platforms that other businesses can use to develop, test and run their own digital products.<sup>174</sup>

The resulting scale economy transforms cloud providers into the equivalents of traditional utility providers, which relieve businesses of the need to develop their own computing infrastructure.<sup>175</sup> Furthermore, the development of the ‘cloud of clouds’, a network of IT providers, means that businesses use multiple computer servers for storing and utilising data, since major cloud providers typically have subcontractors that ensure constant access to sufficient data capacity, shifting data between servers located in different countries.<sup>176</sup> All this facilitates cost savings for digital service and product providers but, at the same time, creates issues for regulators, as territorial boundaries are being blurred through the use of cross-border outsourcing and international sub-contractual relationships.

### **3.3. Experience products generating value through interaction with consumers**

Additionally, digitised intangibles are mostly experience products.<sup>177</sup> Unlike a physical item that can be examined before purchase, an experience product requires that the

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<sup>174</sup> Armbrust and others (n 173) 11; OECD, *Cloud Computing: The Concept, Impacts and the Role of Government Policy* (n 173) 10–11.

<sup>175</sup> European Commission, *Unleashing the Potential of Cloud Computing in Europe* (n 4) 4, noting that ‘cloud computing represents a further industrialisation (standardisation, scaling-up, wide-spread availability) of the provision of computing power ("utility computing") in the same way as power plants industrialised the provision of electrical power ... [C]loud services offer very large economies of scale meaning that go-it-alone efforts at national level are unlikely to deliver optimal cost efficiencies’.

<sup>176</sup> Bradshaw, Millard and Walden (n 173): ‘One of the oft-cited selling points of cloud computing is that data and processing capacity can be flexed between a provider's resources, potentially on a global scale. However, this has led to one of the most frequently raised legal concerns regarding cloud computing: that a customer's data may be stored or processed in a totally different, and potentially unknown, jurisdiction’; see also OECD, *Cloud Computing: The Concept, Impacts and the Role of Government Policy* (n 173) 19–20, noting that ‘the location of the jurisdiction of the server where the data is stored is not known to the cloud user, and as a result, the customer of cloud computing services, i.e. the main person responsible for the processing of data, may have difficulties to thoroughly check and control the data handling practices and to make sure that data is handled in a lawful way’.

<sup>177</sup> Quah, *Digital Goods* (n 163) 14.

customer be exposed to the product to determine its quality. Consumers, therefore, through interaction with digital goods, contribute substantially to the generation of their economic value.

This has led to the development of the Web 2.0 phenomenon, denoting the emergence of dynamic interactive services, where consumers develop valuable content within the framework of social networking platforms, virtual worlds, search engines and digital streaming platforms.<sup>178</sup> These are typically multi-sided models, which collect personal data in various jurisdictions that helps deliver other digital services distantly in other countries.<sup>179</sup>

Advanced marketing media, including online advertising, use these platforms to exploit digitised consumer data and to enhance trade intangibles, targeting private customers in destination countries.<sup>180</sup> One of the core characteristics of online advertising as compared to traditional media is the ability to target specific audiences

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<sup>178</sup> See OECD, *Virtual Worlds: Immersive Online Platforms for Collaboration, Creativity and Learning* (n 11); Viktor Mayer-Schonberger, 'Virtual Heisenberg: The Limits of Virtual World Regulability' (2009) 66 *Washington & Lee Law Review* 1245; Clare Chambers, 'How Virtual are Virtual Economies? An Exploration Into the Legal, Social and Economic Nature of Virtual World Economies' (2011) 27 *Computer Law & Security Review* 377. For a discussion of the tax implications arising from transactions in virtual worlds see, for example, Aleksandra Bal, 'Stateless Virtual Money in the Tax System' (2013) 53 *European Taxation* 351; Aleksandra Bal, 'Taxation of Virtual Wealth' (2013) 65 *Bulletin for International Taxation* 147.

<sup>179</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 72, discussing emergence of multi-sided business models and noting in this regard that '[w]hereas many traditional multi-sided business models such as broadcasting paid for by advertising, or shopping malls were confined to a limited perimeter due to physical constraints or to regulations, over-the-top businesses in the digital economy can more easily connect two sides that are located far from one another to maximise value on each side'.

<sup>180</sup> See *Internet Advertising: Theory and Research* (David W Schumann and Esther Thorson eds, 2006); Benjamin Edelman, Michael Ostrovsky and Michael Schwarz, 'Internet Advertising and the Generalized Second Price Auction: Selling Billions of Dollars Worth of Keywords' (2007) 97 *American Economic Review* 242; David S Evans, 'The Online Advertising Industry: Economics, Evolution, and Privacy' (2009) 23 *Journal of Economic Perspectives* 37; Justin P Johnson, 'Targeted Advertising and Advertising Avoidance' (2013) 44 *The RAND Journal of Economics* 128; Catherine Tucker, 'Social Networks, Personalized Advertising, and Privacy Controls' MIT Sloan School Working Paper 4851-10 <[papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1694319](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1694319)> accessed 22 July 2013.

with precision, using online geolocation and tracking technologies such as behavioural cookies, without maintaining a physical base in destination markets.<sup>181</sup>

#### **4. Interim conclusions and framework for further analysis**

Overall, digital products and new media to promote them in target markets have produced a virtual space that comes into conflict with the territorial world of regulation, affecting all industries without exception:

Put simply, because the Internet is borderless, states are faced with the need to regulate conduct or subject matter in contexts where the territorial nexus is only partial and in some cases uncertain. This immediately represents a challenge to the Westphalian model of exclusive territorial state sovereignty under international law. As a result, many states have grappled with defining the boundaries of traditional notions of state jurisdiction in cyberspace.<sup>182</sup>

It can be concluded that economic value ‘has migrated to new proprietary applications that are not stand-alone software products, but Internet-based applications that combine executable code, dynamically updated databases, and user participation’.<sup>183</sup> It can be envisaged that the interconnected cyberspace will ultimately result in the physical world merging with the network of networks through the development of the Internet of Things, which denotes interconnectivity of all physical surroundings using the Internet.<sup>184</sup>

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<sup>181</sup> On geolocation see Tracie E Wandell, ‘Geolocation and Jurisdiction: From Purposeful Availment to Avoidance and Targeting on the Internet’ (2011) 16 *Journal of Technology Law & Policy* 275; Marketa Trimble, ‘The Future of Cybertravel: Legal Implications of the Evasion of Geolocation’ (2012) 22 *Fordham Intellectual Property, Media & Entertainment Law Journal* 567. See also Dan Jerker B Svantesson, ‘E-Commerce Tax: How The Taxman Brought Geography To The ‘Borderless’ Internet’ (2007) 17 *Revenue Law Journal*; Kevin F King, ‘Personal Jurisdiction, Internet Commerce, and Privacy: The Pervasive Legal Consequences of Modern Geolocation Technologies’ (2011) 21 *Albany Law Journal of Science & Technology* 61.

<sup>182</sup> Scassa and Currie (n 19) 1018.

<sup>183</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 41.

<sup>184</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 42–43: ‘A major feature of the Internet of Things is the widened ability to collect and share data through powerful information systems connected to a multitude of devices, sensors, and cloud computing components ... As devices increasingly transmit more detailed data, the processing of this data can be used automatically to change the behaviour of those devices in real time. It can also make training workers for skilled positions an easier and more cost-effective process. This trend, so far primarily contained in data-

Given the overall digitisation of the global economy, it may be difficult to ring-fence digital commerce from the rest of the economy in the long term.<sup>185</sup> While it is possible to study trends in digitisation and state jurisdiction using digital commerce in the narrow sense as a case study, the wider regulatory issues affecting all industries must also be considered when designing tax policy solutions. For this reason, although automated digital commerce in the narrow sense will be used for illustrative purposes to demonstrate inefficiencies in the current jurisdictional regulation, the issues discussed further in this thesis will have wider implications for tax policy design across all industries.

Further, given the lack of guidance from economic theories on where digital value should be taxed, it is reasonable to consider how the intangible and fluid nature of digital commerce has been tackled in the context of a wider range of industries that face similar jurisdictional issues. International taxation of digital commerce is part of the broader set of matters relating to the regulation of Internet activities, and therefore Internet governance could provide some useful insight into jurisdictional matters.

Internet governance may be generally understood as regulation of the Internet as a global network of networks.<sup>186</sup> Governing the Internet involves regulating both the technical and the social policy aspects of the Internet.<sup>187</sup> Internet governance in the

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intensive industries such as finance, advertising, or entertainment, is likely to penetrate more traditional industries in the future'. See generally Rolf H Weber and Romana Weber, *Internet of Things: Legal Perspectives* (Springer 2010).

<sup>185</sup> This is the consensus achieved by the international tax and business community. See OECD, *Comments on BEPS Action 1 Draft* (n 35) 46 (BIAC) noting that 'it would be difficult, if not impossible, to ring-fence the digital economy from the rest of the economy ... [I]t is equally difficult to distinguish the digital economy from the larger economy. With the ever increasing digitalization of commercial activity, it is difficult to distinguish "pure play" digital / Internet companies from other companies'.

<sup>186</sup> See Mueller 2010 (n 14) 8–11 and other references at n 14 above.

<sup>187</sup> Lawrence B Solum, 'Models of Internet Governance' in Lee A Bygrave and Jon Bing (eds), *Internet Governance: Infrastructure and Institutions* (Oxford University Press 2009) 51: 'A complete analysis of Internet governance requires that we address both narrow issues implicated by the

broad sense involves regulating policy issues relating to the Internet, such as online dissemination of obscene material, online defamation, copyright and trademark protection on the Internet, or digital product liability cases.<sup>188</sup> In the narrow sense of the term, Internet governance may be understood as regulation of the technical side of the Internet, including communication between computers through the communications protocol suite TCP/IP, the system of IP numbers that identify individual computers and servers, and the domain names system.<sup>189</sup>

Both areas of Internet governance have attempted to address the globalised nature of Internet activities. Hence, in the same way as tax administrations are currently attempting to adapt the international tax regime to accommodate Internet business, which is non-physical, state authorities have addressed similar jurisdictional issues in the context of Internet regulation. In a sense, there is a significant overlap between the principles of regulation established in the area of Internet governance generally and the principles that could apply in taxation of electronic commerce. At the core of both areas of regulation lies the global network, and states are looking for a way to re-establish jurisdictional connections with the online activity over this network.

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institutions that govern the technical infrastructure and architecture of the Internet and the broader issues that are implicated by the ways in which the Internet transforms policy questions that directly implicate applications, communication, and conduct’.

<sup>188</sup> Solum (n 187) 49, explaining that ‘[i]n the broad sense, the Internet interpenetrates a wide array of ordinary human life – commerce, communications, entertainment, intimate interpersonal relationships, and a host of other activities increasingly occurring in and through the Internet ... If the topic of Internet governance were taken as the investigation of the regulation of all these activities when they took place on (or were significantly affected by) the Internet, then “Internet governance” would be more or less equivalent to “law and politics” at least in the “wired” and “wireless” nations’.

<sup>189</sup> Solum (n 187) 50, explaining that ‘the narrow answer to the question “What is Internet governance?” is regulation of Internet infrastructure, its current operation, and the processes by which it develops and changes over time. In other words, the narrow focus of Internet governance is about the processes, systems, and institutions that regulate things like TCP/IP, the Domain Name System, and IP numbers. These systems are fundamental – they determine the capacities of the Internet’.

As both the Internet governance and the international tax law attempt to address similar issues, the principles of Internet governance would be used as benchmarks to inform the tax discussion on jurisdictional nexus standards for digital commerce. Subsequent chapters will, therefore, consider global and territorial nexus solutions in the light of the global and territorial theories of Internet regulation.

## **Conclusion**

In this chapter, it has been established that as part of the technological revolution the emergence of the Internet and digitisation have created new ways of conducting business on a global scale. The ICT revolution has had a significant impact on most industries, ranging from traditional manufacturers to human-intensive service providers, which have gradually shifted to automated modes of delivery that are bound to grow in scale in the future. At the same time, the ICT revolution has also sparked the emergence of new types of products and services; digitisation has ultimately resulted in the development of digital content and automated services that have very limited requirements for physical presence in destination markets.

What we are witnessing nowadays is the diminishing reliability of tangible factors that have historically contributed to the value-generating activities of multinational enterprises and, hence, were used as reference points for state regulation. Economic value, instead, is now mainly attributable to the interaction of intangibles, highly skilled and mobile engineers, and ultimate customers.

In this regard, the key issue is that intangibles can be developed and located in cloud in any part of the globe. Engineers can also be moved across countries, collaborating via shared computing facilities. Sales can be made using automated electronic platforms stored in cloud rather than in a specific country, with data often switched from server to server under sub-contractual agreements between cloud

providers. All this makes establishing the precise point where digital enterprises generate value exceptionally difficult, creating challenges for international taxation of digital commerce.

While attempts have been made to ring-fence digital commerce, it has been concluded that it may be difficult to maintain this approach when designing long-term solutions to taxing the global economy as it is moving towards comprehensive digitisation. Therefore, although automated digital commerce in the narrow sense of the term will be used to illustrate the issues relating to Internet nexus, these examples can be extrapolated onto the wider tax matters affecting the global economy.

These wider issues of nexus erosion in the context of the digital economy as a whole should be viewed in the broader Internet governance context. It has, therefore, been suggested that further analysis of the tax nexus issues should be carried out using the Internet governance framework for global and territorial regulation. Accordingly, the following two chapters consider how the current nexus standards fail to address the digitisation of global commerce. The subsequent chapters discuss the proposed global and territorial nexus solutions in the light of broader Internet governance jurisprudence.

## **PART II. CURRENT TAX NEXUS STANDARDS: DIGITAL COMMERCE CHALLENGES**

### **CHAPTER 2. FUNCTIONAL NEXUS CHALLENGES**

#### **Introduction**

It has been argued that the predominantly intangible nature of global digital commerce, both in the narrow and in the wider sense of the term, poses challenges for the international tax system. In this and the following chapter, it is demonstrated that the tax authorities struggle to apply existing tax rules to digital businesses as the current legal framework is rooted in the physical production factors that determine state jurisdiction to tax.

As discussed further below in the context of direct taxation, one of the core nexus factors is ‘business functions’ as performed by personnel or equipment. People-functions, or functional nexus through people and equipment, are at the heart of worldwide taxation based on residence, which looks at what control functions board members perform when determining where a company's corporate ‘home’ is. People-functions are also vital for source taxation, which looks at what functions ordinary personnel, higher-tier management or computer equipment performs when ascertaining whether a territorial connection, a PE, exists. Once the functional nexus is established, profits need to be apportioned, which is typically done using allocation keys that also heavily rely on functional nexus factors, which assess the level of profits that can be apportioned to people-functions and risks allocated to a jurisdiction.

It is argued that the overall mobility of personnel and equipment and related business functions misaligns the current tax principles and digital economic realities. As a result, it is becoming progressively more difficult to rely solely on the people-

functions nexus to determine jurisdiction to tax in both the residence and source tax contexts. Similar issues arise in relation to indirect taxation as discussed in the following chapter.

## **1. Worldwide taxation challenges relating to the control nexus**

Current OECD and common law standards use highly mobile proxies to determine worldwide tax liability of corporations, which is typically based on the place of incorporation or the place of central management and control, the tests that look at where people-functions are performed.<sup>190</sup> As discussed below, these nexus factors have become more mobile due to technological developments that have made the people-function test challenging to adapt to digital commerce realities.

### **1.1. Place of central management and control: general principles**

While the formal place of incorporation is a standard test for corporate residence, it can be highly elective.<sup>191</sup> Most countries, therefore, rely on a backstop control nexus to determine residence, which, however, can be even more mobile than formal ties with the home country.<sup>192</sup>

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<sup>190</sup> OECD, *Model Treaty Commentary* (n 107) art 4 para 3: ‘Generally the domestic laws of the various States impose a comprehensive liability to tax – ‘full tax liability’ – based on the taxpayers’ personal attachment to the State concerned (the “State of residence”)’. OECD, *Model Treaty Commentary* (n 107) art 4 para 21: ‘It may be rare in practice for a company ... to be subject to tax as a resident in more than one State, but it is, of course, possible if, for instance, one State attaches importance to the registration and the other State to the place of effective management’.

<sup>191</sup> As has been established, about 6% of multinationals relocated their headquarters to another country in the 1997–2007 period – see Johannes Voget, ‘Relocation of Headquarters and International Taxation’ (2011) 95 *Journal of Public Economics* 1067. See also Omri Marian, ‘Jurisdiction to Tax Corporations’ (2013) 54 *Boston College Law Review* 1613 1624: ‘To summarize, supporters of POI [place of incorporation] as the preferred model of corporate tax residence base their arguments on efficiency as a desirable normative value. This makes little sense in the context of corporate taxation because corporate taxes are apparently designed to achieve purposes other than efficiency’. Similar mobility issues in the context of PEs are discussed further in this chapter from n 233.

<sup>192</sup> Daniel N Shaviro, *Fixing US International Taxation* (Oxford University Press 2014) 34, arguing that ‘[i]n countries using headquarters rules, changing the parent’s residence is relatively straightforward. At worst, if the country engages in a meaningful “real seat” inquiry rather than just looking at where annual meetings are held, it may require that enough of the company’s high-level managers be willing to relocate abroad. The threat of such headquarters expatriations appears to have significantly influenced the U.K. government’s recent decision to shift to a more territorial international tax regime for its resident companies’.

The control nexus is enshrined in the place of effective management test that acts as a tie-breaker rule within the framework of the OECD Model.<sup>193</sup> The OECD Model Treaty does not define the place of effective management, while the Commentary provides that it is necessary to determine the place where key management and commercial decisions that are necessary for the conduct of the entity's business are in substance made.<sup>194</sup> Given that determining the place of effective management involves significant judgment, the OECD Model Treaty Commentary also elaborates that 'some countries also consider that ... a case-by-case approach is the best way to deal with the difficulties in determining the place of effective management of a legal person that may arise from the use of new communication technologies'.<sup>195</sup> It therefore states that such

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<sup>193</sup> In this respect, the OECD Model Treaty Commentary explains that '[i]t would not be an adequate solution to attach importance to a purely formal criterion like registration' when resolving residence–residence conflicts, and therefore the preferred tie-breaker rule 'attaches importance to the place where the company ... is actually managed' (OECD, *Model Treaty Commentary* (n 107) art 4 para 22). Similarly see United Nations, *Commentary to the Model Double Taxation Convention between Developed and Developing Countries* (2011) art 4 para 1, confirming that 'Article 4 of the United Nations Model Convention reproduces Article 4 of the OECD Model Convention with one adjustment, namely, the addition in 1999 of the criterion "place of incorporation" to the list of criteria' that can determine residence based on domestic laws of countries.

<sup>194</sup> OECD, *Model Treaty Commentary* (n 107) Article 4 paras 23–24, noting that '[t]he formulation of the preference criterion in the case of persons other than individuals was considered in particular in connection with the taxation of income from shipping, inland waterways transport and air transport. A number of conventions for the avoidance of double taxation on such income accord the taxing power to the State in which the "place of management" of the enterprise is situated; other conventions attach importance to its "place of effective management" ...'. For these reasons 'the "place of effective management" has been adopted as the preference criterion for persons other than individuals', which is defined as 'the place where key management and commercial decisions that are necessary for the conduct of the entity's business as a whole are in substance made'. In this context, it has been further clarified that 'all relevant facts and circumstances must be examined to determine the place of effective management. An entity may have more than one place of management, but it can have only one place of effective management at any one time'.

<sup>195</sup> Instead of including the tie-breaker rules in their bilateral treaties, under the OECD Model Treaty countries have an option to use a mutual agreement procedure by, essentially, resorting to consultation procedures. See OECD, *Model Treaty Commentary* (n 107) art 4 para 24.1.

countries ‘are free to leave the question of the residence of these persons to be settled by the competent authorities’.<sup>196</sup>

While there is some scope for different interpretations of residence principles, the guidance still focuses primarily on people-functions as the core tie-breaker rule behind the concept of effective management. In this regard, the OECD provides a non-exhaustive list of factors, which includes such functional criteria as ‘where the meetings of [the person’s] board of directors or an equivalent body are usually held, where the chief executive officer and other senior executives usually carry on their activities, where the senior day-to-day management of the person is carried on, where the person’s headquarters are located’.<sup>197</sup>

The common law test of the place of central management and control provides some further guidance on how to establish residence; it is based, however, on the same principles that require assessment of relevant people-functions.<sup>198</sup> In particular, the English case law is premised on the idea that the place of central management and control is where the real business is carried on.<sup>199</sup> It is further elaborated that ‘the real

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<sup>196</sup> OECD, *Model Treaty Commentary* (n 107) art 4 para 24.1. The UN acknowledges the list – see United Nations, *UN Model Treaty Commentary* (n 193) art 4 para 10, adding that ‘when establishing the “place of effective management”, circumstances which may, inter alia, be taken into account are the place where a company is actually managed and controlled, the place where the decision-making at the highest level on the important policies essential for the management of the company takes place, the place that plays a leading part in the management of a company from an economic and functional point of view and the place where the most important accounting books are kept’.

<sup>197</sup> OECD, *Model Treaty Commentary* (n 107) art 4 para 24.1.

<sup>198</sup> See generally David Hughes, *Corporate Residence* (Bloomsbury Professional 2013). See also OECD, *The Impact of the Communications Revolution on the Application of 'Place of Effective Management' as a Tie Breaker Rule* (2001) 5; Philip Owen, ‘Can Effective Management be Distinguished from Central Management and Control?’ [2003] *British Tax Review* 296; John F Avery Jones, ‘Corporate Residence in Common Law: The Origins and Current Issues’ in Guglielmo Maisto (ed), *Residence of Companies under Tax Treaties and EC Law* (IBFD 2009).

<sup>199</sup> *De Beers Consolidated Mines v Howe* (1906) 5 TC 198 (HL), 458: ‘In applying the conception of residence to a company, we ought, I think, to proceed as nearly as we can upon the analogy of an individual. A company cannot eat or sleep, but it can keep house and do business. We ought, therefore, to see where it really keeps house and does business’. In establishing this principle the

business is carried on where the central management and control actually abides', which is 'a pure question of fact to be determined ... upon a scrutiny of the course of business and trading'.<sup>200</sup>

Leaving details aside, however, the test that the courts have developed over time looks, in essence, at where directors' perform their control and management functions by holding board meetings.<sup>201</sup> Despite some uncertainty regarding the meaning of the effective and central place of control, key people-functions form the basis for assessing where both are located, with subsequent cases merely clarifying and fine-tuning the nuances of the test.<sup>202</sup> In particular, in recent cases it was explained that, when identifying the place of central management and control, it is necessary to consider the whole picture and analyse the role of outsiders that may have usurped the decision-making functions of the board.<sup>203</sup> It is also necessary to ensure that there is real

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court relied on previous case law, providing that these cases 'involved the principle that a company resides for purposes of income tax where its real business is carried on' (*De Beers* 458).

<sup>200</sup> *De Beers* (n 199) 458.

<sup>201</sup> *De Beers* (n 199) 459.

<sup>202</sup> On the offline definitional issues see discussion concerning place of effective management versus place of central management in Owen (n 198); Jacques Sasseville, 'The Meaning of "Place of Effective Management"' in Guglielmo Maisto (ed), *Residence of Companies under Tax Treaties and EC Law* (IBFD 2009). A good illustration of the vagueness of these concepts is confusion as to the relationship between the concepts of effective management and control and central management and control. HMRC suggests that the case law test of central management and control is directed at the highest level of control as opposed to the place of effective management, which is located where the main operations of a business are found. In particular, HMRC offer the following interpretation in their statement of practice SP1/90, commenting on possibility to split different functional locations: 'It is now considered that effective management may, in some cases, be found at a place different from the place of central management and control. This could happen, for example, where executives based abroad run a company, but the final directing power rests with non-executive directors who meet in the UK. In such circumstances the company's place of effective management might well be abroad but, depending on the precise powers of the non-executive directors, it might be centrally managed and controlled ... in the UK'. Conversely, in a more recent case of *Laerstate* the court distinguished the place of central management and control from the place of effective management in a different fashion. The court stated that the place of effective management meant the place where 'real' management and control was exercised, ignored the director's decisions and concluded that the ultimate shareholder's activities constituted the real management. See *Laerstate BV v Revenue and Customs Commissioners* [2009] UKFTT 209 (TC); noted in Sara Luder and Philip Higha, 'Who Decides?' [2009] Tax Journal 5.

<sup>203</sup> *Wood and another v Holden* [2006] EWCA Civ 26; discussed in Philip Owen, 'Wood v Holden: Establishing Residence' [2005] British Tax Review 390. The court laid down the principle that it

substance to the decision-making process, with directors making informed decisions and possessing at least the minimum required information to do so.<sup>204</sup>

Overall, however, the test still involves identifying the place of central management and control, which is typically located where real business is carried on, i.e. where key business decisions are made, with courts focusing on the functions that directors perform when making informed decisions, unless control is fully surrendered to an outsider. Such a heavy reliance on people-functions challenges all the residence tests that comprise the control nexus standard.

## 1.2. Control nexus issues

The main issue with the place of management and control, no matter whether it is looked at in the prism of effective or central management, is that it is still based on a highly mobile factor, people, who can be relocated due to advancements in communication technologies.<sup>205</sup> The fact that the test follows location of people-

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was necessary to look at the role of ‘outsiders’ that could either influence the directors or dictate their decisions. It was held that “[i]n seeking to determine where “central management and control” of a company incorporated outside the United Kingdom lies, it is essential to recognise the distinction between cases where management and control of the company is exercised through its own constitutional organs (the board of directors or the general meeting) and cases where the functions of those constitutional organs are “usurped” – in the sense that management and control is exercised independently of, or without regard to, those constitutional organs. And, in cases which fall within the former class, it is essential to recognise the distinction (in concept, at least) between the role of an “outsider” in proposing, advising and influencing the decisions which the constitutional organs take in fulfilling their functions and the role of an outsider who dictates the decisions which are to be taken’ (*Wood v Holden*, 1411).

<sup>204</sup> See *Laerstate* (n 202); *Re the Trevor Smallwood Trust; Smallwood and another v Revenue and Customs Commissioners* [2008] STC (SCD) 629; discussed in Geoffrey Loomer, ‘Smallwood Settlement v HMRC: Trust Residence for Treaty Purposes Located Wherever and Whenever the Trustees Take Decisions’ [2009] British Tax Review 378. The Special Commissioners’ decision was sustained by the Court of Appeal in *HM Revenue and Customs v Smallwood & Anor* [2010] EWCA Civ 778.

<sup>205</sup> OECD, *E-commerce Residence Report* (n 31) para 37, noting that ‘the availability of advanced and evolving communications technology such as videoconferencing or electronic discussion group applications via the Internet means that it is no longer necessary for a group of persons to be physically located or meet in one place to hold discussions and make decisions. In a modern environment, application of the traditional approach can produce results which do not reflect the intention of the tie-breaker rule’.

functions makes it less certain, since it is possible to show that the required functional personnel make fully informed and well-documented decisions in desirable locations.<sup>206</sup>

The recent case of technology companies creating ‘nowhere’ companies by manipulating the location of management and control illustrates how corporate residence can become elective. US-based technology company Apple Inc. has exploited this test by establishing subsidiaries in Ireland, whilst retaining control over its Irish companies in the US, thereby avoiding the central management and control nexus applied in Ireland and circumventing the incorporation test implemented in the US.<sup>207</sup>

Arguably, the taxpayer could achieve this tax position due to the mobility of key personnel, who could be located in a desirable jurisdiction for the purposes of providing substance to control functions.<sup>208</sup> The mismatches between the incorporation and management tests have generated the so-called phenomenon of ‘stateless income’, denoting a situation where corporate profits, especially those generated by digital

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<sup>206</sup> OECD, *E-commerce Residence Report* (n 31) para 44, stating that ‘a board of directors may arrange to meet in different places throughout the year. For example, the board of a multinational enterprise may agree to meet at the offices of the enterprise around the globe on a rotational basis. This can also lead to an enterprise having a mobile place of effective management’.

<sup>207</sup> See United States Senate Permanent Subcommittee on Investigations, *US Senate Apple Report* (n 20) 17–40 and in particular 21–25. Discussed in Antony Ting, ‘iTax – Apple's International Tax Structure and the Double Non-Taxation Issue’ [2014] *British Tax Review* 40. For example, it was established that one of Apple’s subsidiaries, Apple Operations International, had been set up in Ireland in the 1980s. Its two directors and a sole officer operated from California whilst one director was resident in Ireland but only participated in some meetings by teleconference. Almost all board meetings had taken place in California since the company’s inception (*Apple Report* (n 20) 22). Although AOI’s net income constituted 30% of Apple’s total worldwide net profits for 2009–2011, Apple did not declare residency in Ireland or any other country and did not pay any corporate tax to any national government (*Apple Report* (n 20) 22–23). It was explained that Apple exploited a difference between Irish and US tax residency rules, as Ireland used a management and control test whilst US determined tax residency on the basis of incorporation test (*Apple Report* (n 20) 23).

<sup>208</sup> United States Senate Permanent Subcommittee on Investigations, *US Senate Apple Report* (n 20) 24, noting in relation to mobility of personnel in respect of one of Apple’s subsidiaries in Ireland that ‘[i]n 2012, as a result of Apple’s restructuring of its Irish subsidiaries, ASI was assigned 250 employees who used to work for its parent, AOE. Despite acquiring those new employees, ASI maintains that its management and control is located outside of Ireland and continues to claim it has no tax residency in either Ireland or the United States’.

enterprises, are booked in an offshore company, which is resident ‘nowhere’, and remain untaxed until repatriated to the US.<sup>209</sup>

These issues can be addressed if residence jurisdictions adopt strict policies on determining nexus and enforce them consistently, which would, however, shift matters into the political rather than the legal realm.<sup>210</sup> In this context, Ireland changed its rules for determining corporate residence and introduced a UK-style test, which looks at both the incorporation test and the place of central management control as a backstop solution, but introduced a substantial transitional period.<sup>211</sup> Equally, the US government has proposed new rules whereby foreign income would be taxable in the US even if it remains booked outside the US territory, in a move to combat residence avoidance and raise tax revenue, but no progress has been made yet, presumably because reforms would have stalled competitiveness of US corporations overseas.<sup>212</sup>

Although the electivity of corporate residence can be combated through CFC regimes, which have traditionally attributed ‘tainted’ profits of offshore subsidiaries to home countries, for political reasons their application has also been restricted across

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<sup>209</sup> See Edward D Kleinbard, ‘Stateless Income’ (2011) 11 Florida Tax Review 699; Edward D Kleinbard, ‘The Lessons of Stateless Income’ (2011) 65 Tax Law Review 99.

<sup>210</sup> Ting (n 207) 71, arguing that a radical reform is unlikely in the future and noting that ‘the US Government has knowingly and willingly facilitated its MNEs in avoiding foreign income tax, thus creating double non-taxation. If history is a guide, this “accommodating” attitude is unlikely to change in the near future’.

<sup>211</sup> Finance Act 2014 No 37 s 43, although the grandfathering provisions allow companies incorporated in Ireland pre-1 January 2015 to enjoy the benefit of the old residence rules until 31 December 2020. See David D Stewart, ‘Irish Tax Change Hits Apple, But Not Google’ (2013) 72 Tax Notes International 379; Margaret Burrow, ‘Ireland to Stop New "Double Irish" Arrangements in 2015’ (2014) 76 Tax Notes International 187; Antony Ting, ‘Old Wine in a New Bottle: Ireland’s revised definition of corporate residence and the war on BEPS’ [2014] British Tax Review 237.

<sup>212</sup> See US Senate Finance Committee, *International Tax Reform Working Group: Final Report* (7 July, 2015). Reported in Andrew Velarde, ‘US Report Suggests Consensus on International Tax Reform’ (2015) 79 Tax Notes International 97. See also Ting (n 207).

major economies.<sup>213</sup> In particular, after *Cadbury Schweppes*, the CFC concept is now limited in the EU to purely artificial arrangements, with a wide range of white-listed jurisdictions that by definition will not be targeted by the CFC rules.<sup>214</sup> UK CFC rules have also been restricted in application post-*Cadbury* and now look at whether significant people-functions are performed in the UK in relation to the foreign CFC, with multiple exemptions available for white-listed countries and specific types of income, such as finance profits.<sup>215</sup> Further adoption of CFC rules in domestic legislation under the BEPS project may face issues in the EU due to the narrow interpretation of avoidance by the CJEU.<sup>216</sup> Finally, in the US the application of CFC rules is also compromised; although the rules require the attribution of foreign income to the US, it

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<sup>213</sup> See Avi-Yonah (n 72) 1665, arguing that '[s]cope, rather than enforcement, limits the effectiveness of CFC rules. Even if CFC rules were to apply to all tax havens and preferential tax regimes, they still would apply only to multinationals whose parents were residents of an OECD member ... [W]ere CFC rules significantly expanded, they would probably gradually shift their residences to Luxembourg, Switzerland, or countries entirely outside the OECD. In addition, the parent corporations of new MNEs would be incorporated or managed and controlled from outside the OECD. In particular, the headquarters tax havens of the world, many of which, such as Singapore, are outside the OECD, are likely to welcome any expansion of CFC rules by the OECD'.

<sup>214</sup> Case C-196/04 *Cadbury Schweppes plc and Cadbury Schweppes Overseas Ltd v Commissioners of Inland Revenue* [2006] ECR I-7995, [75]: 'Articles 43 EC and 48 EC must be interpreted as precluding the inclusion in the tax base of a resident company established in a Member State of profits made by a controlled foreign company in another Member State, where those profits are subject in that State to a lower level of taxation than that applicable in the first State, unless such inclusion relates only to *wholly artificial arrangements* intended to escape the national tax normally payable. Accordingly, such a tax measure must not be applied where it is proven, on the basis of objective factors which are ascertainable by third parties, that despite the existence of tax motives that controlled company is actually established in the host Member State and carries on genuine economic activities there'. Discussed, for example, in Martin Poulsen, 'Freedom of Establishment and the Balanced Allocation of Tax Jurisdiction' (2012) 40 *Intertax* 200.

<sup>215</sup> See UK CFC rules in TIOPA 2010, pt 9A. Discussed in Paul Smith, 'New UK CFC Rules' (2013) 53 *European Taxation* 127. See also on UK reaction to *Cadbury Schweppes* in David Taylor and Laurent Sykes, 'Controlled Foreign Companies and Foreign Profits' [2007] *British Tax Review* 609.

<sup>216</sup> For a critical review of the CFC initiative under BEPS see Mitchell A Kane, 'The Role of Controlled Foreign Company Legislation in the OECD Base Erosion and Profit Shifting Project' (2014) 68 *Bulletin for International Taxation* 321, arguing, in particular, that 'the case for an expansive approach and the proffering of general guidance on CFC rules is just about completely wrong' and explaining that a coordinated approach to CFC rules would present extreme challenges as in the context of CFC rules residence and source countries would have equal and opposite interests in preserving their tax bases. See also Dourado (n 50).

can be circumvented through an array of exemptions and check-the-box regulations.<sup>217</sup> This has arguably been lobbied to make US businesses more competitive in foreign markets.<sup>218</sup>

In terms of other restrictions on residence electivity, taxpayers have also adapted to the anti-inversion legislation developed in the US, aimed at preventing companies from inserting an offshore parent company into their corporate structure to relocate overseas.<sup>219</sup> US-based groups, rather than transferring US headquarters to foreign jurisdictions, have resorted to setting up offshore subsidiaries, which has completely negated the desired effect of this anti-avoidance measure.<sup>220</sup> EU restrictions on corporate migration in the form of exit taxes have also become ineffective for

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<sup>217</sup> IRC ss 951–965; summarised in United States Senate Permanent Subcommittee on Investigations, *US Senate Apple Report* (n 20) 11–12; see Kleinbard (n 209) 721–723, noting in respect of the US CFC rules contained in Subpart F that ‘over the last several years ... the scope of the subpart F system has been cut back, so that increasing amounts of U.S. firms’ foreign earnings can qualify as active business income, and therefore are eligible for “deferral.” This scaling back of the subpart F system in turn has greatly enhanced the ability of U.S. firms both to operate in a quasi-territorial environment and to generate stateless income’; see also Antony Ting, ‘The Politics of BEPS – Apple’s International Tax Structure and the US Attitude towards BEPS’ (2015) 69 *Bulletin for International Taxation* 410, 412: ‘The US CFC regime has proved ineffective to deal with Apple’s tax structure for primarily two reasons. First, the regime contains a number of exceptions that dent its application to the structure. Second, and more importantly, the check-the-box regime in the United States often effectively disables the CFC regime’.

<sup>218</sup> See Avi-Yonah (n 72) 1577, arguing in a wider context that ‘[m]ost developed countries (including the United States) do not dare impose current taxation (or, in some cases, any taxation) on the foreign source business income of their resident multinationals for fear of reducing their multinationals’ ability to compete against multinationals of other countries. If they did, new multinationals would choose to become residents of jurisdictions that do not tax such foreign source income’. See also Ting (n 207) 51, noting that ‘[a] study of the Apple story suggests that if the US regime were more robust and could capture the income booked in the Irish subsidiaries, Apple would most likely decide not to implement the iTax structure at all. It is unclear whether the OECD will achieve the objective of this action [to strengthen CFC rules], as the US has traditionally been influential in the direction of international tax rules’. See also Ting (n 207) 56, noting that ‘[i]t appears that the US Government has been turning a blind eye to the fact that US MNEs are avoiding paying foreign income taxes. In fact, some have argued that the US should cheer about the success of its US MNEs in this regard’.

<sup>219</sup> The recent attempt to curb inversions was made by the US Treasury and IRS via Notice 2014-52, 2014-42 IRB 712 as noted in Amanda Athanasiou, ‘News Analysis: Notice 2014-52 Making Waves in Cross-Border M&A’ (2015) 77 *Tax Notes International* 386. On corporate inversions generally see Bret Wells, ‘What Corporate Inversions Teach About International Tax Reform’ (2010) 127 *Tax Notes* 1345; Steven H Goldman, ‘Corporate Expatriation: A Case Analysis’ (2008) 9 *Florida Tax Review* 71.

<sup>220</sup> See Kristen A Parillo and Andrew Velarde, ‘Budget Proposes Minimum Tax, Transition Tax on Foreign Earnings’ [2015] *Tax Notes Today* February, 3.

combating tax-motivated transfers of seat, since the CJEU case of *National Grid* has laid down the rule that exit taxes must be deferred until the capital assets of a migrating company are actually realised or until the occurrence of some alternative triggering event, including payment in instalments, thereby limiting effectiveness of exit charges as a preventative measure in the EU.<sup>221</sup>

Overall, although such measures as the CFC rules, anti-inversion restrictions and exit taxes may stop relocation of key control functions and hence tax-motivated corporate migrations, they have not solved the underlying issue associated with the mobility of control functions.

### **1.3. Viability of residence nexus solutions**

In light of these complications arising from the mobility of residence factors, proposals to shift to exclusive residence taxation of digital commerce do not seem viable.<sup>222</sup> From a nexus perspective, it has been suggested that the shift towards fully fledged residence taxation would help avoid source nexus issues altogether, since it would not be necessary to establish territorial business connections and allocate profits to destination

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<sup>221</sup> See Case C-470/04 *National Grid Indus BV v Inspecteur van de Belastingdienst Rijnmond / Kantoor Rotterdam* [2011] ECR I-12273. Discussed in Erik Roder, 'Co-ordination of Corporate Exit Taxation in the Internal Market and Beyond' [2014] *British Tax Review* 574; Harm van den Broek and Gerard Meussen, 'National Grid Indus Case: Re-Thinking Exit Taxation' (2012) 52 *European Taxation* 190. See also Case C-164/12 *DMC Beteiligungsgesellschaft mbH v Finanzamt Hamburg-Mitte* (CJEU, 23 January 2014). Discussed in Michael McGowan, 'Case Comment. DMC Beteiligungsgesellschaft mbH v Finanzamt Hamburg-Mitte: A Further Pronouncement of the CJEU on Exit Taxes' [2014] *British Tax Review* 135.

<sup>222</sup> For discussion of residence-only taxation of e-commerce see Pinto (n 24) 277–284; see also John K Sweet, 'Formulating International Tax Laws in the Age of Electronic Commerce: The Possible Ascendancy of Residence-Based Taxation in an Era of Eroding Traditional Income Tax Principles' (1998) 146 *University of Pennsylvania Law Review* 1949; US Treasury Department (n 30) [7.1.5].

market countries.<sup>223</sup> This would offer simplicity, achieve capital export neutrality and impose taxation that takes into account the ability to pay principle.<sup>224</sup>

Despite the potential simplification that worldwide taxation could entail, the mobility of the residence nexus factors would make the tax model ineffective.<sup>225</sup> For this reason, proposals to look through to ultimate shareholders to determine residence have been criticised as placing too much emphasis on a highly diverse and mobile shareholder base.<sup>226</sup> Further, given different approaches to defining residence across jurisdictions, there is a risk of capital flight and the ensuing disagreement regarding the allocation of taxing rights between countries.<sup>227</sup>

In light of the residence nexus challenges, the OECD is currently looking to resort to mutual agreement procedures (MAP) to establish residence nexus issues and introduce anti-treaty shopping measures, denying treaty benefits if certain residence criteria are not met.<sup>228</sup> The measures would offer countries a choice to use MAP to solve jurisdictional conflicts, instead of relying on the place of effective management

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<sup>223</sup> Auerbach, Devereux and Simpson (n 84) 881, noting that the ‘major advantage of residence taxation is that [there is] no need to identify where profit is produced, just need to identify worldwide income of a MNE’.

<sup>224</sup> Pinto (n 24) 279–280.

<sup>225</sup> Auerbach, Devereux and Simpson (n 84) 882, suggesting that one of the key issues relating to residence taxation is ‘feasibility as a lot of subsidiaries around the world; the ultimate holding company of the group is actually mobile’.

<sup>226</sup> Discussed in OECD, *Draft Report on Place of Effective Management* (n 31) 10; Dale Pinto, ‘A New Three-Tier Proposal for Determining Corporate Residence Based Principally on Individual Residence’ (2005) 11 *Asia-Pacific Tax Bulletin* 15; Auerbach, Devereux and Simpson (n 84) 839, suggesting that ‘true residence-based taxation would have to be at the level of the individual investor; but in a globalized world, this is scarcely feasible, partly because tax authorities have no reliable way to get information about residents’ foreign income’; see also Shaviro (n 192) 33, explaining ‘the existence of cross-border shareholding weighs against basing corporate residence on the ultimate owners’ nationality, even when those from one country predominate’ because ‘the underlying reality at the ultimate owner level can be hard to discern within a complex corporate structure in which particular owners may either hold distinctive combinations of rights, or place multiple tiers of intervening legal entities between themselves and the company whose residence must be determined’. See also Marian (n 191).

<sup>227</sup> Pinto (n 24) 283–284.

<sup>228</sup> See OECD, *BEPS Treaty Abuse Final Report 2015* (n 52) 72–75.

and control.<sup>229</sup> While this development clearly acknowledges the challenges that the vagueness of the control nexus has created, it does not offer more certainty in return. It can be expected that, in dubious conflicts, jurisdictions may take substantial time to agree their position, thereby affecting the business operations of multinationals.<sup>230</sup>

To rectify this, economic nexus standards have been proposed, which look at the level of business presence in the market, such as sales, assets or personnel; these factors could be used as an alternative to determining nexus for the purposes of worldwide income taxation.<sup>231</sup> If the residence test were to be determined based on economic nexus standards, however, multinationals could inadvertently create multiple ‘homes’ in different countries as tax authorities may develop diverging interpretations of the economic presence nexus. It may, therefore, be argued that rectifying the ineffectiveness of residence nexus through adopting economic nexus standards would be associated with excessive risks of double taxation.

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<sup>229</sup> OECD, *BEPS Treaty Abuse Final Report 2015* (n 52) 72, proposing that art 4(3) of the OECD Model should be replaced with the following wording: ‘[T]he competent authorities of the Contracting States shall endeavour to determine by mutual agreement the Contracting State of which such person shall be deemed to be a resident for the purposes of the Convention, having regard to its place of effective management, the place where it is incorporated or otherwise constituted and any other relevant factors. In the absence of such agreement, such person shall not be entitled to any relief or exemption from tax provided by this Convention except to the extent and in such manner as may be agreed upon by the competent authorities of the Contracting States’.

<sup>230</sup> OECD, *BEPS Treaty Shopping Revised Comments* (n 52) 13, BIAAC arguing that ‘[d]ual residence may arise for purely commercial reasons if a legal incorporation in a country is preferred, which results in tax residency under local laws, whilst the Board meets in the country of its headquarters, for example. Any tie-breaker rule needs to provide a clear and predictable result in advance, and therefore we would recommend retaining the “effective management” test in Treaties. Furthermore, using “endeavours” of Competent Authorities to determine single residency will result in no predictable result, and perhaps no result at all, as there is currently no proposed requirement on the Competent Authorities to agree the residency’. The OECD has committed to improving the MAP procedure by 2016 but it remains to be seen whether substantial improvements can be achieved – see OECD, *Making Dispute Resolution Mechanisms More Effective, Action 14 – 2015 Final Report, OECD / G20 Base Erosion and Profit Shifting Project* (2015)

<sup>231</sup> Discussed in OECD, *E-commerce Residence Report* (n 31) 11. See also Luc Hinnekens, ‘Revised OECD – TAG definition of Place of Effective Management in Treaty Tie-Breaker Rule’ (2003) 31 *Intertax* 315.

#### **1.4. Interim conclusions**

Overall, the people-functions nexus, which lies at the heart of both the residence taxation standard under the OECD Model and the common law test, has become fluid due to the availability of technological innovations and the overall increase in international collaborative work through cloud computing. While broadening CFC rules could help to mitigate some of the complexities around mobility of key personnel across jurisdictions, digital enterprises, unlike traditional manufacturers, can structure their affairs legitimately in such a way that would enable them to locate core decision-making personnel in desirable tax jurisdictions. A digital enterprise may have few staff members but sufficient commercial presence in all its market locations, thereby slipping through the CFC net. Although using more stringent economic nexus standards for the purposes of determining corporate residence can rectify this problem, there is a risk of double taxation since economic nexus factors have been historically designed for source taxation.

Below, it is argued that territorial nexus rules suffer from similar deficiencies relating to the mobility of underlying production factors; there is significant nexus uncertainty, as territorial rules are prone to tax arbitrage due to the mobility of people-functions and intangible assets underlying territorial nexus standards.

## **2. Source taxation challenges relating to the functional nexus**

The right of source countries to tax depends on the level of business presence that overseas businesses maintain in the country. The business presence threshold for profits taxation is based on the concept of a PE, which provides that certain business functions that personnel or equipment performs may create sufficient taxable presence in the

market.<sup>232</sup> As discussed below, similarly to residence taxation, reliance of source tax principles on people-functions creates challenges for the international tax regime.

## 2.1. General PE principles

The general principle of international tax law is that a foreign enterprise may create a taxable nexus within a source country, a PE, through personnel or equipment carrying on certain business activities using a fixed place of business.<sup>233</sup> In order to determine whether a foreign enterprise carries on business in a source country, and thus whether a portion of profits should be attributable to that country, it is necessary to assess what functions the enterprise's personnel and equipment perform and, provided they exceed the required PE threshold, reward these functions with profits accordingly.<sup>234</sup>

For a PE to exist, certain conditions must be met.<sup>235</sup> An enterprise must carry on its activities wholly or partly at a fixed place on a regular basis, although some

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<sup>232</sup> See text to nn 97–107 and discussion further below.

<sup>233</sup> See references at n 24 and generally Skaar (n 24); Kobetsky (n 24); for an analysis from an EU perspective see Christiana Panayi, *European Union Corporate Tax Law* (Cambridge University Press 2013) 196–229. In the tax context, the PE concept was first introduced to prevent double taxation between Prussian municipalities in the nineteenth century and was later included in the international tax treaty between Austria-Hungary and Prussia in 1899 (Skaar (n 24) 74–75.) Acknowledging the international tax practice developed over decades, the League of Nations adopted the concept of PE and established that profits made by a foreign company could only be taxed at source if made through a PE situated within the territory of the source country (League of Nations, *The 1928 League of Nations Report* (n 98) art 5(2) of Project 1a, art 2(B)(2) of Project 1b and art 3(2) of Project 1c) The 1963 OECD Model Treaty later reaffirmed this principle and defined PE as a fixed place of business in which the business of the enterprise is wholly or partly carried on (OECD, *Draft Model Tax Convention on Income and on Capital* (1963) art 5(1).

<sup>234</sup> OECD, *Model Tax Convention on Income and on Capital* (2010) art 7(1).

<sup>235</sup> OECD, *Model Treaty* (n 234) art 5(1). The basic physical PE rule stipulates a number of criteria (OECD, *Model Treaty Commentary* (n 107) art 5 para 2). First, there must be a place of business which necessitates some physical presence in the form of any premises, facilities, installations or a certain amount of space at the disposal of the foreign enterprise, regardless of whether there is any formal legal right to use the place (OECD, *Model Treaty Commentary* (n 107) art 5 paras 4–4.2). Second, the phrase ‘through which’ applies to any business activities carried on at a particular location that is at the disposal of the enterprise (OECD, *Model Treaty Commentary* (n 107) art 5 para 4.6). Third, the place of business must be fixed in the sense that it is a distinct place that has a link with a specific geographical point or, where the activity is mobile, if the location within which the activities are moved constitutes a ‘coherent whole commercially and geographically’ (OECD, *Model Treaty Commentary* (n 107) art 5 paras 5–5.1). The location must also have some degree of permanence, which normally extends over a period of six months or less in exceptional

interruptions are permitted.<sup>236</sup> Further, business representatives can create a taxable nexus if they qualify as dependent agents that have and regularly exercise authority to conclude contracts on behalf of a foreign entity in a source state.<sup>237</sup> In contrast, an independent agent, whose functions are limited to providing services to a foreign business, would not trigger taxable presence for the foreign enterprise if the agent were acting in its ordinary course of business, i.e. providing services to other clients.<sup>238</sup>

In the context of more mobile services, the OECD Model approach provides that no taxable presence exists unless the personnel of a foreign company are present in a source country for a substantial period, rendering services on behalf of the entity to third parties rather than to the parent company's associates.<sup>239</sup> If automated equipment, such as a computer server, performs certain business functions, it may also create a PE for a non-resident enterprise in a source country, similarly to personnel, business representatives or a fixed place of business.<sup>240</sup>

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circumstances where the activity is of a recurrent nature or is carried on exclusively in one country (OECD, *Model Treaty Commentary* (n 107) art 5 para 6).

<sup>236</sup> OECD, *Model Treaty Commentary* (n 107) art 5 para 7.

<sup>237</sup> OECD, *Model Treaty* (n 234) art 5(5). OECD, *Model Treaty Commentary* (n 107) art 5 paras 31–35.

<sup>238</sup> OECD, *Model Treaty* (n 234) art 5(6). OECD, *Model Treaty Commentary* (n 107) art 5 paras 36–39.

<sup>239</sup> OECD, *Model Treaty Commentary* (n 107) art 5 paras 42.11–42.48. These provisions establish a special type of services PE that can be created if a foreign enterprise provides services to customers in another country through an individual present in that country, even if there would be no PE under the general criteria established in para 1 of art 5 of the OECD Model Treaty (OECD, *Model Treaty Commentary* (n 107) para 42.25).

<sup>240</sup> The current OECD approach establishes that a server will constitute a PE if the server: (1) performs integral aspects of business; (2) is owned or leased by the foreign company; and (3) is fixed in a particular location for a sufficient period of time (OECD, *Model Treaty Commentary* (n 107) art 5 paras 42.8, 42.4). In contrast, the rules establish that a website cannot constitute a PE (OECD, *Model Treaty Commentary* (n 107) art 5 para 42.2). Finally, it has been clarified that servers maintained by Internet Service Providers (ISPs) do not constitute PE since ISPs qualify as independent agents (OECD, *Model Treaty Commentary* (n 107) art 5 para 42.10). See Jerome Monsenego, 'May a Server Create a Permanent Establishment? Reflections on Certain Questions of Principle in Light of a Swedish Case' 21 *International Transfer Pricing Journal* 247; DA Albrecht, 'The Server as a Permanent Establishment and the Revised Commentary on Article 5 of the OECD

At the same time, if a foreign enterprise's personnel, representatives or equipment perform only preparatory and auxiliary functions, they will not create sufficient business presence for the non-resident taxpayer, even if it carries on these activities through a fixed place of business.<sup>241</sup> The list of exempt activities is non-exhaustive and covers maintenance of inventory or the use of warehousing facilities for the purpose of storage, display or delivery of goods in a source country, which would not give rise to profits taxation at source, unless these activities constituted core business functions.<sup>242</sup>

As soon as an enterprise exceeds the required PE threshold and starts performing core business functions, it is necessary to determine the type of functions it carries on and reward them with an appropriate level of profits using the authorised OECD approach, which requires assessing where personnel, assets and related risks belong on the basis of functions that each particular entity of the group performs.<sup>243</sup> These functions, in turn, are determined by analysing what personnel do. As Schon notes in this respect:

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Model Tax Treaty: Are the E-commerce Corporate Income Tax Problems Solved?' (2002) 30 Intertax 356.

<sup>241</sup> OECD, *Model Treaty* (n 234) art 5(4). OECD, *Model Treaty Commentary* (n 107) art 5 paras 21–30.

<sup>242</sup> OECD, *Model Treaty* (n 234) art 5(4).

<sup>243</sup> OECD, *2010 Report on Attribution of Profits* (n 36) para 15: 'As it is not possible to use a legal analysis as the required mechanism, another solution must be sought. After careful consideration, the OECD decided that a functional analysis should be used, as this concept underpins the application of the arm's length principle under Article 9 and there is already considerable guidance on how to conduct this analysis in the Guidelines ... Accordingly, the authorised OECD approach attributes to the PE those risks for which the significant functions relevant to the assumption and/or management (subsequent to the transfer) of risks are performed by people in the PE and also attributes to the PE economic ownership of assets for which the significant functions relevant to the economic ownership of assets are performed by people in the PE'. Generally on transfer pricing see, for example, Mirjam Koomen, 'Transfer Pricing in a BEPS Era: Rethinking the Arm's Length Principle – Part I' (2015) 22 *International Transfer Pricing Journal* 141; Mirjam Koomen, 'Transfer Pricing in a BEPS Era: Rethinking the Arm's Length Principle – Part II' (2015) 22 *International Transfer Pricing Journal* 230.

From our point of interest, it seems striking that this territorial allocation of risk to a country is finally based on the physical presence of people in the respective country. The notorious ‘key entrepreneurial risk takers’ or ‘significant people’ (who do not take any risk themselves but rather make decisions on behalf of the enterprise in respect of risk) and their local affiliation is meant to form a reliable practical basis for this assignment ... Taking a closer look this approach seems to be both misguided and unnecessary.<sup>244</sup>

As discussed below, due to mobility of personnel, these production factors create uncertainty for tax administrations and challenge source tax rules.

## **2.2. Functional nexus issues relating to digital commerce**

### ***2.2.1. Physical infrastructure as a proxy for functional nexus***

Although the tax system broadly recognises the challenges e-commerce poses, with the OECD Model Treaty providing a separate clause on server PEs, the server nexus still depends on physical equipment connections.<sup>245</sup> Arguably, such a nexus standard may only be adequate for specific business models, such as cloud computing providers heavily reliant on server farms as their core assets, which have to be located in market jurisdictions for commercial reasons.<sup>246</sup> Even for cloud businesses themselves, however,

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<sup>244</sup> Schon (n 22) 560.

<sup>245</sup> Reliance on assets is still pertinent for some of the models – see OECD, *Compilation of Comments Received in Response to Request for Input on Tax Challenges of the Digital Economy* (n 61) 34, noting that for some models, such as cloud and high-frequency trading, assets would include ‘servers, infrastructure (eg fibre optic cables), computers, and intangibles such as algorithms (which may be protected as intellectual property or business secrets in the form of know-how). Capital is also required for the trading activities. The activities are writing and developing the algorithms, writing ‘shutdown’ programmes to prevent fast-accruing losses and monitoring the operation of the algorithms for unusual activity. There will also be computer and server set up and maintenance activities. In some countries and circumstances there will need to be activities to ensure compliance with regulation, e.g. obtaining a licence for trading’).

<sup>246</sup> Coreira M, *Taxation of Corporate Groups* (Kluwer Law International 2013) 9–23; Monsenego (n 240) (discussing PE consequences for a technology business running a server in Sweden); OECD, *Compilation of Comments Received in Response to Request for Input on Tax Challenges of the Digital Economy* (n 61) 35, noting that ‘[o]ne consideration in relation to cloud computing services is the extent to which the business model requires servers to be located close to key markets, for example as a result of regulatory requirements or ensuring speed of delivery to consumers. This may, if true, mean that server location is a useful starting point for consideration of nexus and creation of a taxable presence in the local market’. See also Armbrust and others (n 173) 6, explaining that commercial factors affect location of server farms and noting that ‘the costs of electricity, cooling, labor, property purchase costs, and taxes are geographically variable, and of these costs, electricity and cooling alone can account for a third of the costs of the datacenter’.

core physical assets play only a partial role in value creation, as it is software support and know-how that generate value through utilising physical assets.<sup>247</sup>

For other businesses that utilise cloud, the availability of cloud computing has contributed to the erosion of physical nexus in destination states even further.<sup>248</sup> Using cloud, digital businesses can outsource their IT functions to a cloud provider – in other words, an independent agent that would be taxable only on its service fees. As a result, they do not have to invest in their own infrastructure that would have previously constituted reliable taxable nexus.<sup>249</sup>

Technological trade intangibles can also be located on servers outside source countries, thereby avoiding equipment nexus with the territory. For example, at the heart of Google's online advertising services lies its software platform that a subsidiary set up in Ireland owns and deploys.<sup>250</sup> Any customer can run this intangible platform

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<sup>247</sup> OECD, *Compilation of Comments Received in Response to Request for Input on Tax Challenges of the Digital Economy* (n 61) 35, noting that location of physical assets in local markets 'is likely to vary from business to business depending on factors such as volume, size and type of content being transferred, geography (e.g. countries bordering one another), legal and/or regulatory constraints and infrastructure (e.g. quality and number of fibre optic cables). Other technologies, such as content delivery networks (CDNs), may in some circumstances be used to help offset the fact that end users are not located near to the point of origin of the services. It is not possible to predict how this may change over the medium and long term as technology and infrastructure developments make transfers more straightforward'. See also Armbrust and others (n 173) 5, noting that 'a necessary but not sufficient condition for a company to become a Cloud Computing provider is that it must have existing investments not only in very large datacenters, but also in large-scale software infrastructure and operational expertise required to run them'.

<sup>248</sup> See generally Aleksandra Bal, 'Tax Implications of Cloud Computing - How Real Taxes Fit into Virtual Clouds' (2012) 66 *Bulletin for International Taxation* 335; Aleksandra Bal, 'The Sky's the Limit – Cloud-Based Services in an International Perspective' (2014) 68 *Bulletin for International Taxation* 515.

<sup>249</sup> OECD, *Cloud Computing: The Concept, Impacts and the Role of Government Policy* (n 173), noting that '[u]sers of cloud services do not have to build up their own server infrastructure, nor do they have to invest important quantities of capital in IT infrastructure and software as in the past'.

<sup>250</sup> Online advertising discussed in more detail in Chapter 1; see generally Assaf Y Prussak, 'The Income of the 21st Century: Online Advertising as a Case Study for the Implications of Technology for Source-Based Taxation' (2013) 16 *Tulane Journal of Technology and Intellectual Property* 39. On location benefits as intangibles see Scott Wilkie, 'Intangibles and Location Benefits (Customer Base)' (2014) 68 *Bulletin for International Taxation* 352. On Google's model see Evans (n 180) 41; Walter Hellerstein and Jon Sedon, 'State Taxation of Cloud Computing: A Framework for Analysis' (2012) 117 *Journal of Taxation* 11.

from a server located in a country of choice, or possibly even from a floating naval base.<sup>251</sup> Even if Google uses its own data centres in different countries, any of these countries can potentially be used at any particular moment, depending on available spare capacity.<sup>252</sup> It may, therefore, be difficult to establish where main source is located if trade intangibles are deployed interchangeably from multiple server farms.<sup>253</sup>

While measures aimed at tackling fragmentation of contracts under the BEPS initiative could help stop artificial splitting of contracts, it would not help to tackle genuine nexus erosion arising due to the mobile nature of digital commerce as these measures only look at abuse of the 12-month temporal requirement for physical presence in the country.<sup>254</sup> In particular, where functions are run outside a source country, but with sufficient commercial substance underlying such business operations, it would be difficult for the tax authorities to argue that artificial splitting of functions has occurred, even if some physical presence is maintained in the market jurisdiction.<sup>255</sup>

Overall, although for capital and asset-intensive businesses it would be reasonable to provide that jurisdictional nexus could be partly established on the basis of where technical infrastructure is located, without functional analyses, pure reliance

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<sup>251</sup> See Steven R Swanson, 'Google Sets Sail: Ocean-Based Server Farms and International Law' (2011) 43 Connecticut Law Review 709.

<sup>252</sup> OECD, *Cloud Computing: The Concept, Impacts and the Role of Government Policy* (n 173) 19–20, noting that one of the challenges of cloud computing 'results from the potential storage of data in multiple jurisdictions and their transfer from one jurisdiction to another for cloud resources management purposes. Often, the location of the jurisdiction of the server where the data is stored is not known to the cloud user, and as a result, the customer of cloud computing services, i.e. the main person responsible for the processing of data, may have difficulties to thoroughly check and control the data handling practices'.

<sup>253</sup> OECD, *Cloud Computing: The Concept, Impacts and the Role of Government Policy* (n 173) 5.

<sup>254</sup> OECD, *BEPS PE Final Report 2015* (n 55) 39–41; OECD, *BEPS PE Revised Draft* (n 55) paras 42–47.

<sup>255</sup> OECD, *BEPS PE Revised Draft Comments* (n 55) 47, noting that '[w]ithout greater clarity, the proposals will create uncertainty for non-abusive commercial arrangements. Enhanced clarity could be delivered by providing examples of business reasons for the spitting of contracts that would be considered to not represent artificial avoidance of PE status'.

on asset locations would be inefficient. For example, it may be difficult to evaluate how important research and development (R&D) lab facilities are within the value chain of an enterprise without assessing what functions personnel perform within the lab. It can be envisaged, therefore, that tangible assets will continue playing a vital role across all digital industries. However, over time, in some business models, physical assets would be gradually replaced with intangibles, whilst assets and personnel will be concentrated in a limited number of jurisdictions. As discussed below, as industries become more dependent on intangibles, source nexus challenges may be exacerbated even further.

### ***2.2.2. Intangible infrastructure as a proxy for functional nexus***

As digital businesses rely primarily on intangible assets as a main source of profits, including trade intangibles such as patents and software, and marketing intangibles, such as brands, trademarks and know-how, it would be sensible to determine nexus based on the location of these core assets. However, it may be difficult to establish where exactly intangibles are located for tax purposes and how to value them.<sup>256</sup> As assets, intangibles can belong to a number of jurisdictions, which may determine where intangible-related returns should be allocated:

The location of physical assets used to derive income is straightforward, but most of the income of international enterprises is derived from intangible assets, such as know-how, patents, copyright, and trademarks, which often have no single geographic location. Attributing a geographic location to intangible property is arbitrary.<sup>257</sup>

As a straightforward option, intangible-related returns may be allocated to where these assets enjoy legal protection or where they are assigned under contractual

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<sup>256</sup> Wolfgang Schon, 'Transfer Pricing Issues of BEPS in the Light of EU Law' [2015] British Tax Review 417: 'Intangibles combine two critical features: they are highly mobile, that is, they are easy to transfer to subsidiaries in low-tax jurisdictions, and they are hard to value, that is, MNEs enjoy a high degree of discretion both with respect to the pricing of intangibles when they are transferred to a low-tax jurisdiction and when they are licensed out to other subsidiaries in high-tax jurisdictions'.

<sup>257</sup> Kobetsky (n 24) 32.

arrangements.<sup>258</sup> Although this approach offers simplicity, as tax essentially follows legal arrangements, the issue is that legal registration of patents or contractual arrangements can be arbitrarily structured so as to locate intangibles in favourable jurisdictions.<sup>259</sup> While there are certain commercial benefits in locating intangibles in specific jurisdictions, which can provide the highest level of protection, such as the USA, multinationals are nevertheless free to choose where to book their intangibles, which may cause erosion of the source tax nexus:

MNEs' entrepreneurial flexibility provides an additional cause of fiscal and distributive concerns. This flexibility allows MNEs to arrange freely their internal cash flows and to assign ownership and leasing rights over information assets to the various entities in the jurisdictions where they operate. Moreover, it allows MNEs to contractually allocate different commercial risks to entities operating in low-tax jurisdictions ... MNEs thus have incentives to legally assign the ownership rights to the jurisdiction where they would yield the most tax-efficient results. By deploying their internal holdings in intangible assets, MNEs may not only avoid taxes on income arising from these mobile resources, but may also use the internal dealing of these resources to erode the source jurisdiction's taxation of their tangible manufacturing and merchandise activities.<sup>260</sup>

It has been argued that, if the contractual or legal location of intangibles were to be solely used to determine jurisdictional nexus, this could prompt harmful competition among jurisdictions, which would provide incentives for digital businesses to locate their intangibles in low-tax jurisdictions. This is particularly evident in the context of

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<sup>258</sup> OECD, *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations* (2010) paras 1.8, 9.11. Legal versus economic allocation of intangibles discussed in Martin Lagarden, 'Intangibles in a Transfer Pricing Context: Where Does the Road Lead?' (2014) 21 *International Transfer Pricing Journal* 331, 336–338.

<sup>259</sup> OECD, *BEPS Digital Taxation Report 2014* (n 13) 103, noting that under legal structures underlying transfers of intangibles 'there is an incentive for the affiliate in the low-tax environment to undervalue (typically at the time of the transfer) the transferred intangibles or other hard-to-value income-producing assets, while claiming that it is entitled to have large portions of the MNE group's income allocated to it on the basis of its legal ownership of the undervalued intangibles, as well as on the basis of the risks assumed and the financing it provides. Operations in higher tax jurisdictions can be contractually stripped of risk, and can avoid claiming ownership of intangibles or other valuable assets or holding the capital that funds the core profit making activities of the group'.

<sup>260</sup> Ilan Benshalom, 'Sourcing the "Unsourceable": The Cost Sharing Regulations and the Sourcing of Affiliated Intangible-Related Transactions' (2007) 26 *Virginia Tax Review* 631, 647.

the patent box legislation, where multiple countries are involved in the race to the bottom, competing for location of valuable intangibles, and hence have been required to place more emphasis on location of controlling functions and R&D personnel in source countries rather than more relaxed nexus standards.<sup>261</sup> In order to stop harmful tax competition, whereby countries attract mobile intangibles through granting incentives without requiring substantive R&D activities, it has been agreed that IP regimes would provide incentives only in relation to intangibles that have been actually developed by the taxpayer's personnel or outsourced to an independent third party.<sup>262</sup>

Overall, using legal fictions for allocating taxing rights between jurisdictions may not be an efficient solution as evidenced by company and intangible migrations. For this reason, economic, rather than legal, ownership is currently considered as a more advanced nexus principle for allocation of intangible returns. Although looking at economic ownership does away with arbitrariness of legal ownership of intangibles, further issues could arise.

In the light of the OECD development relating to harmful tax competition, one of the options for implementing economic ownership standards would be to argue that

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<sup>261</sup> See generally Adrian Gregory, Andrew Casley and Katy Naish, 'The Patent Box Regime' (2013) 20 *International Transfer Pricing Journal* 111; Lisa Evers, Helen Miller and Christoph Spengel, *Intellectual Property Box Regimes: Effective Tax Rates and Tax Policy Considerations* (ZEW Discussion Paper No 13-070, 2013); Edoardo Traversa, 'Tax Incentives and Territoriality within the European Union: Balancing the Internal Market with the Tax Sovereignty of Member States' (2014) 6 *World Tax Journal* 315; Fabian Mang, 'The (In)Compatibility of IP Box Regimes with EU Law, the Code of Conduct and the BEPS Initiatives' (2015) 55 *European Taxation* 78; Ivan Zammit, 'Centralized Intellectual Property Business Models – Tax Implications of EU Patent Box Regimes' (2015) 69 *Bulletin for International Taxation* 540.

<sup>262</sup> OECD, *BEPS Harmful Practices Report 2015* (n 51) ch 4. See also OECD, *Action 5: Agreement on Modified Nexus Approach for IP Regimes* (n 51) 3, outlining consensus achieved in relation to the patent boxed regimes and noting that the 'conceptual basis of the Modified Nexus Approach is intended to ensure that, in order for a significant proportion of IP income to qualify for benefits, a significant proportion of the actual R&D activities must have been undertaken by the qualifying taxpayer itself'. Discussed in Rafael Sanz-Gomez, *The OECD's Nexus Approach to IP Boxes: A European Union Law Perspective* (WU International Taxation Research Paper Series No 2015-12, 2015).

intangibles should belong only where R&D has taken place.<sup>263</sup> Logically, this may seem correct because it is the underlying intellectual effort that generates intangibles and hence warrants a profit share.<sup>264</sup> This approach would involve analysing where people undertook paid activities rather than where related costs were financed from or where the resulting intangible asset was legally registered or contractually assigned.<sup>265</sup> In this respect, it has been proposed that it would be necessary to consider where key personnel involved in R&D activities are located:

[E]ach jurisdiction's share in the fiscal ownership of every R&D intangible created by the MNE would be determined according to the percentage of R&D development costs incurred in that jurisdiction ... [I]n an affiliated setting R&D intangibles should be sourced according to the place where tangible R&D expenses (namely payroll) are actually spent, or, put differently, *where people actually work*.<sup>266</sup>

Whilst this approach reflects the most visible element of value-generating activities, people, the key issue is that R&D activities do not normally take place in one country.<sup>267</sup> In the context of multinationals, engineers contributing to the development of intangibles may be working in various locations around the globe.<sup>268</sup> It is common practice that 'software development work is often carried out in geographically diverse locations, and local marketing intangibles may be built on the back of established

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<sup>263</sup> Proposed in Benshalom (n 260).

<sup>264</sup> Forst (n 24) 1457: 'According to the economists, wealth originates primarily with a "community" or with "human relations", i.e. people. This is not to say that the location of the property or the business transactions that contribute to the production of wealth often do not coincide with the location of a business's human capital. But in the economists' view it would be a serious mistake not to look to the humans responsible for originating an enterprise's income'.

<sup>265</sup> Benshalom (n 260) 679–681, 682.

<sup>266</sup> Benshalom (n 260) 677.

<sup>267</sup> Hellerstein and McLure Jr (n 69) 210, arguing that 'jurisdictions where intellectual property such as patents ... and software [are] developed have a strong claim to profits associated with those intangible assets' but 'costs of creating intangible assets do not adequately capture geographic contributions to economic profits'.

<sup>268</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 172: '[D]igital economy enterprises produce their goods and services through personnel and other inputs in the same way as other enterprises. All such activities take place somewhere, even if that location is not a market jurisdiction'.

brands in other markets’, meaning that ‘it may be difficult to know the proper values to attribute to activities in various locations’.<sup>269</sup>

For example, Google employs engineers in different parts of the world, including the US and the UK, to work on their Android platform.<sup>270</sup> Although timesheets make it possible to determine how many hours each engineer spent developing a particular intangible, this does not necessarily reflect the actual original contribution each engineer makes to a patented invention recognised as an intangible. It may, therefore, be difficult to assess whether one particular employee contributed to the most valuable element of the intangible or whether the entire global team developed the solution. As can be seen in relation to Google’s Android development, it has been challenging for the tax authorities to assess where exactly value was added, which the Google inquiry clearly illustrates as follows:

Google also has at least 500 engineers in the UK that assist with the development of its products, compared to 17,000 engineers in California. Mr Brittin had told us at our November 2012 hearing that these staff were not undertaking product development and viewed its economic activity to be undertaken in the US. We heard from a whistleblower that at Google’s premises in London systems developers are working on the development of the Android telephone management system. In contrast to his evidence last November, Mr Brittin conceded that engineers in the UK are contributing to product development ... He accepted that the engineering work in the UK is creating economic value, while also stressing that the intellectual property for products is owned elsewhere, and that the Android work is led from California.<sup>271</sup>

A further issue is that, especially in large-scale R&D, it is common to enter into cost-sharing agreements where associated or independent enterprises may pool funding and facilities to collaborate on developing an intangible in return for a royalty-free

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<sup>269</sup> McLure Jr (n 145) 595.

<sup>270</sup> House of Commons, *Tax Avoidance – Google* (n 20) para 14.

<sup>271</sup> House of Commons, *Tax Avoidance – Google* (n 20) para 14.

beneficial interest in the end product.<sup>272</sup> Businesses advocate this regime as allowing the development of expensive and high-risk intangibles using pooled resources, but the practice appears controversial: ‘emphasis on financial reimbursement seems flawed because intra-MNE flows of capital do not seem to be a normative source for the way in which the value of intangible assets is formed’.<sup>273</sup> Because of the R&D activity, parties to the agreement acquire a beneficial interest in the intangible, and it may therefore be difficult to establish where exactly the cost centre should be.<sup>274</sup> Normally, this may be a different place to where the actual R&D activities were carried out:

The CSRs are ... an intangibles’ ownership migration vehicle, which allows companies from low-tax jurisdictions to ‘hire’ their American affiliates’ R&D expertise in return for transferring (partial) ownership rights in the assets produced. In the case of many intangibles, transfers are severely devalued since they include reimbursement of the ... developer only for its operational R&D costs, but deny it a premium for its expertise ... This cost-based appropriation method should be a source of concern in the case of high-value intangibles, where the compensation of the ... developer falls sharply from the market’s return to its expertise.<sup>275</sup>

Overall, the ability of research and development personnel to work across the borders makes it challenging for tax authorities to trace where taxable value has been created. This means that, if location of R&D activities were to be used as a proxy for establishing nexus or allocating profits, it would be difficult to determine where exactly

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<sup>272</sup> In the US context CSA rules are most developed – see Benschalom (n 260) 651–657; 653. See also Brandon Heriford and others, ‘US Cost Sharing: Current Issues and Court Cases’ (2013) 20 *International Transfer Pricing Journal* 203; Rezan Okten, ‘A Comparative Study of Cost Contribution Arrangements: Is Active Involvement Required to Share in the Benefits of Jointly Developed Intangible Property?’ (2013) 20 *International Transfer Pricing Journal* 3.

<sup>273</sup> Benschalom (n 260) 661.

<sup>274</sup> Benschalom (n 260) 660: ‘The US cost-sharing regime for intangible development provides that economic ownership and entitlement to intangible-related returns can be obtained in the jurisdictions that co-financed the development of the asset by hiring R&D centres located around the globe. Arguably, this creates discrepancies between the actual location of intangibles, taxation of related returns and the place where the asset was actually developed’.

<sup>275</sup> Benschalom (n 260) 660.

valuable R&D activities take place and which specific locations contribute to intangible value.<sup>276</sup>

For this reason, the current economic ownership concept is undergoing revision with a view to aligning location of intangible-related returns and real economic activity.<sup>277</sup> The OECD is looking to introduce the concept of ‘control of risks’ and thereby move away from the issues where financial costs, adjusted for unreliable future projections, create ownership rights in relation to high-value intangibles and thus justify nexus.<sup>278</sup> Hence, instead of assessing where actual pre- and post-production activities take place, it may be possible to establish where key personnel perform controlling functions over intangibles that generate significant returns.<sup>279</sup> As discussed above, the recurring theme in the proposed revision of the OECD rules on the transfer pricing of intangibles is that intangible-generated returns should be taxed where an enterprise physically develops, maintains, enhances and exploits intangibles or where these

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<sup>276</sup> Romero JS Tavares and Jeffrey Owens, ‘Human Capital in Value Creation and Post-BEPS Tax Policy: An Outlook’ (2015) 69 *Bulletin for International Taxation* (forthcoming): ‘Using general R&D workforce and activities as prevalent markers, or proxies, for value creation can be quite superficial in terms of the value created within the R&D function itself and can simply serve to legitimise post-BEPS “knowledge boxes”. Focusing on general R&D activities also fails to capture the value created by innovation. Most importantly, using such prevalent markers can be rather misleading, given that even an entire R&D function is likely to be but a fraction of the breadth and depth of an MNE’s stock of KBC [knowledge-based capital] ...’.

<sup>277</sup> OECD, *BEPS Intangibles TP Report Final 2015* (n 56) 78–80; see also OECD, *BEPS CCAs Discussion Draft* (n 56) paras 12–15, suggesting that a ‘CCA participant should have the capability to make decisions to take on the risk-bearing opportunity, to make decisions on how to respond to the risks, and to assess, monitor, and direct any outsourced measures affecting risk outcomes under the CCA’.

<sup>278</sup> See further below.

<sup>279</sup> Control nexus discussed in Wolfgang Schon, ‘International Taxation of Risk’ (2014) 68 *Bulletin for International Taxation* 280, 288–290; Pim Fris, Sebastien Gonnet and Ralph Meghames, ‘Understanding Risk in the Enterprise: The Key to Transfer Pricing for Today’s Business Models’ (2014) 21 *International Transfer Pricing Journal* 395. See OECD, *Transfer Pricing Guidelines* (n 258) para 9.23, stating in the context of transfer pricing of business restructurings that “‘control” should be understood as the capacity to make decisions to take on the risk (decision to put the capital at risk) and decisions on whether and how to manage the risk, internally or using an external provider. This would require the company to have people – employees or directors – who have the authority to, and effectively do, perform these control functions’.

activities are ultimately controlled.<sup>280</sup> The main idea behind this proposal is to prevent businesses from divorcing risks from intangible assets, which can be achieved by acquiring economic ownership of intangibles through investment, without any meaningful involvement in the decision-making process regarding the development of the intangible asset.<sup>281</sup> Therefore, it has been argued that more focus should be placed on key entrepreneurial risk-takers who control intangible-related functions.<sup>282</sup>

Arguably, it is unlikely that focusing on control functions would provide more certainty when determining where generation of taxable value takes place.<sup>283</sup> If the OECD control model were implemented, the rules would still be looking to tax profits where people carry out control over intangible-related risks and activities.<sup>284</sup> As discussed earlier in the context of residence nexus tests, control functions manifest themselves through the people-function proxy, which is a highly ambiguous factor to

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<sup>280</sup> OECD, *BEPS Intangibles TP Report Final 2015* (n 56) 76, adding para 6.40 to Chapter VI of the OECD Transfer Pricing Guidelines (n 258), which states that '[i]f no legal owner of the intangible is identified under applicable law or governing contracts, then the member of the MNE group that, based on the facts and circumstances, controls decisions concerning the exploitation of the intangible and has the practical capacity to restrict others from using the intangible will be considered the legal owner of the intangible for transfer pricing purposes'. See also new para 6.48, which provides that 'it is ... necessary to determine, by means of a functional analysis, which member(s) perform and exercise control over development, enhancement, maintenance, protection, and exploitation functions, which member(s) provide necessary funding and other assets, and which member(s) control and bear the various risks associated with the intangible. Of course, in each of these areas, this may or may not be the legal owner of the intangible'.

<sup>281</sup> Discussed in Garbarino and Mario (n 56) 15; Schon (n 279); Loek Helderma and others, 'A New Era in Determining Arm's Length Compensation for Intangibles? A Comparative Overview of Existing and Possible Future Transfer Pricing Principles' (2013) 20 *International Transfer Pricing Journal* 359.

<sup>282</sup> Tavares and Owens (n 276), arguing that 'human capital decision-making and KERT [key entrepreneurial risk-taking] functions are less mobile compared to financial capital and beneficial ownership of assets and, in this age of knowledge in which data is king and the economy is digital, such functions appear to be the key to value creation, as complex to ascertain as they may be'.

<sup>283</sup> Schon (n 279) 290.

<sup>284</sup> On the substance of control nexus see Jerome Monsenego, 'The Substance Requirement in the OECD Transfer Pricing Guidelines: What Is the Substance of the Substance Requirement?' (2014) 21 *International Transfer Pricing Journal* 9, 11–18.

take into account in the context of allocating intangible value.<sup>285</sup> Given that personnel are a highly mobile factor, multinationals would have less certainty as to whether the location of their key decision-makers throughout global offices would give rise to an overlapping tax liability across jurisdictions.<sup>286</sup>

### **2.2.3. *Technical infrastructure as a proxy for functional nexus***

Digital enterprises may also establish a tangible connection with source countries through the so-called dependent agents, such as local personnel or equipment performing core business functions.<sup>287</sup> However, the issue is that the timing threshold may be difficult to satisfy, since it is normal practice for cloud providers to enter into subcontracts for capacity provision, which enable them to use storage space on other providers' servers located in different countries. Under these contracts, data may be shifted from server to server, making it particularly challenging to prove that a digital enterprise regularly carries on its business activities using a specific server:

A cloud service provider may subcontract parts of the services, and this subcontracting will usually be invisible to the buyer. This raises issues and potential disputes that are a problem of complex subcontracting agreements in other industries ... The first is that the choice of subcontractor might be changed hourly according to availability and price ... To complicate matters, the new subcontractor may be in a different country from the old one, with the result that different laws may apply.<sup>288</sup>

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<sup>285</sup> Schon (n 279) 290, arguing that the notion of control exercised by people 'puts a lot of weight on the physical presence of persons and their role within the organizational framework of a firm' where actually 'people who decide on the assumption of risk do not bear these risks themselves' and therefore 'any income allocation on the basis of decision-making people leads to arbitrary results'.

<sup>286</sup> Schon (n 279) 290, concluding that unless formulary allocation is adopted "'ownership", "funding" and "contractual risk allocation" under private law remain the most relevant factors as they delineate the economic outcome of risky activities for the entities involved. The notions of "decision-making", "control", or "activity" are of secondary importance for the allocation of this residual profit'.

<sup>287</sup> See text to n 238.

<sup>288</sup> Miranda Mowbray, 'The Fog over the Grimpen Mire: Cloud Computing and the Law' (2009) 6 SCRIPTed 129. See also text to nn 175–176.

As this is standard practice, which has a justifiable commercial rationale, anti-avoidance provisions will not catch it.<sup>289</sup> Similarly, allocation of profits with reference to personnel who perform post-production functions may not adequately reflect the location of dependent agents. The challenge stems from the fact that digital enterprises are able to use automated software platforms to render electronic services, avoiding reliance on personnel or equipment in destination markets.

For example, in the context of online advertising, the actual deployment of a software platform would only require ancillary maintenance and support, which does not require significant involvement of personnel in the actual provision of value-adding services.<sup>290</sup> At the same time, the software platform itself, which performs core business functions, can be located anywhere, with the platform using complex algorithms to render online advertising services that do not require any human involvement.<sup>291</sup> Both the highly automated nature of services and the limited involvement of personnel in core business functions would make it challenging to use functional nexus factors for attributing profits.

Equally, when allocating profits to sales and marketing nexus points for businesses that use online advertising, it may be noted that these functions do not require substantial presence in destination countries. As discussed earlier, digital enterprises can enjoy the benefits of online automated advertising without having to

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<sup>289</sup> Dependent agency reforms under the OECD BEPS project are discussed further below at n 321.

<sup>290</sup> See nn 180–181 above.

<sup>291</sup> House of Commons, *Tax Avoidance – Google* (n 20) Ev3 Q16: ‘First, the rights to what we sell – the rights to what is sold – are owned by Google Ireland. We are not talking about products on a shelf; we are talking about buying advertising on a technology platform called AdWords, which is built in the US – 17,000 of our global engineers are in the US, and AdWords was invented there. They buy advertising from a platform that is built outside the UK, and because 90% of the money they spend is on an auction basis, the prices are set by the platform. Nobody here can agree a price and nobody here can agree any volume discount, because it is an auction-based process. The people here can only encourage that to happen; they can’t sell what they don’t own’.

maintain a substantial sales task force in source countries.<sup>292</sup> For example, Google communicates with the majority of its advertising clients via its automated software platform without any involvement from the sales team, as noted in the Google report in this respect:

[O]ver 90% of the money that is spent with Google by UK companies is spent on an auction basis ... The auction sets the price. When you search for tartan on Google and somebody wants to advertise against tartan, there is an auction that happens as the search page loads. So, the price is set by the competition in the auction, not by our teams ... Equally, there is no volume discount to be negotiated ... There is no transaction that can be executed by the people in the UK, because the transaction is executed with the system in a live auction.<sup>293</sup>

Although maintaining client relationships may still require a dedicated sales team within destination countries, their significance may be gradually reducing due to improvements in distant communication technologies.<sup>294</sup> While some form of business presence may be retained at the post-production stage, it would not be sufficient to serve as a key nexus point for value-producing activities.

#### **2.2.4. Nexus valuation issues**

Another issue with nexus factors is that assigning a value to a nexus point can be arbitrary.<sup>295</sup> If intangibles are considered through the prism of business assets, it may be

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<sup>292</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 58: ‘Online advertising uses the Internet as a medium to target and deliver marketing messages to customers. Internet advertising offers a number of advantages over traditional advertising. For example, many Internet advertisers have developed sophisticated methods for segmenting consumers in order to allow more precise targeting of ads’.

<sup>293</sup> House of Commons, *Tax Avoidance – Google* (n 20) Ev2 Q11.

<sup>294</sup> House of Commons, *Tax Avoidance – Google* (n 20) para 10, noting that ‘Google Ltd’s UK staff do not have the right to sell Google products, as the rights are owned by Google Ireland ... [A]round 99 per cent of companies in the UK that spend money with Google do so without talking to Google Ltd’s staff as they conduct their transaction online, through an automatic auction’.

<sup>295</sup> For a comprehensive summary see Benschalom (n 260). See also Gordon V Smith and Russell L Parr, *Valuation of Intellectual Property and Intangible Assets* (Wiley 2000); Baruch Lev, *Intangibles: Management, Measurement, and Reporting* (Brookings Institution Press 2001); Farok J Contractor, ‘Intangible Assets and Principles for Their Valuation’ in Farok J Contractor (ed), *Valuation of Intangible Assets in Global Operations* (Greenwood Publishing Group 2001); John RM Hand and Baruch Lev, *Intangible Assets: Values, Measures and Risks* (Oxford University Press 2003); Michelle Markham, *The Transfer Pricing of Intangibles* (Kluwer Law International 2005); Monica Boos, *International Transfer Pricing: The Valuation of Intangible Assets* (Kluwer Law

necessary to determine their value to account for them or to determine a transfer price when they are used by or transferred to connected enterprises. There are a number of valuation methods but, arguably, none of them would produce a reliable result for the purposes of establishing nexus.

Market prices used in comparable uncontrolled transactions can be used to determine the value of intangibles for transfer pricing purposes.<sup>296</sup> This may be suitable for standard non-unique intangibles that are easily traded in the market.<sup>297</sup> However, it is generally acknowledged that with unique intangibles it is impossible to find comparables in the market.<sup>298</sup> Overall, although fair market valuation would be preferable from an international accounting perspective, this method would not provide sufficient certainty for tax purposes, and therefore other, more objective, methods need to be considered.

Instead of relying on subjective market value, another option could be to use cost methods for valuing intangibles. One option would involve using objective historic costs, such as R&D expenses, to establish value and depreciate it over the estimated

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International 2003); Yariv Brauner, 'Value in the Eye of the Beholder: The Valuation of Intangibles for Transfer Pricing Purposes' (2008) 28 *Virginia Tax Review* 79; Andreas Oestreicher, 'Valuation Issues in Transfer Pricing of Intangibles: Comments on the Scoping of an OECD Project' (2011) 39 *Intertax* 126.

<sup>296</sup> See generally Gordon V Smith and Russell L Parr, *Intellectual Property: Valuation, Exploitation, and Infringement Damages* (4th edn, Wiley 2005) ch 9.

<sup>297</sup> Brauner (n 295) 106: 'The market approach to valuation is appropriate when an active and extensive market for transactions identical (or very similar) to the tested transaction exists. Its primary advantage is its reliance on markets that seem objective'.

<sup>298</sup> Benschalom (n 260) 649: 'Affiliated transactions related to intangible assets are difficult to appraise in accordance with an arm's-length standard because of several inherent characteristics of these assets. First, transactions related to intangible assets often lack market comparables. Second, intangibles also have (1) a high-risk nature, which essentially means that their value and correlative risks cannot be accurately inferred from the costs incurred in their creation, and (2) an enormous value variation to users operating in different jurisdictions and economic environments. Additionally, there is no market for many information assets. Accordingly, the value of many intangible assets, especially those inchoate and untested assets that are still in the process of formation, cannot be appreciated with precision even by MNEs' insiders'.

useful life of assets.<sup>299</sup> The downside is that they do not necessarily reflect the ultimate market value of intangibles, which may only be visible at the final sales stages when intangible assets are exploited to provide digital goods and services.<sup>300</sup> For this reason, the historic cost approach is not normally considered suitable for the purposes of valuing unique intangibles.<sup>301</sup>

An alternative cost approach that could be used to establish intangible value is the replacement cost technique, which asks ‘what one would need to spend now ... in order to replace, manufacture or reproduce the valuated asset’.<sup>302</sup> Although this method takes into account market and technological advancements as well as inflation, it may also not be suitable for unique intangibles.<sup>303</sup> Furthermore, in cost-sharing agreements, related costs may be borne by different parties but every single one of them would be entitled to use the intangible asset. In that case, using only a fraction of costs may not be a fair representation of the value of intangibles. Hence, it is usually considered that costs methods are more suitable as secondary methods that should be used in support of other, more advanced, techniques, such as NPV calculations.<sup>304</sup>

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<sup>299</sup> Brauner (n 295) 111–112.

<sup>300</sup> Brauner (n 295) 112, arguing that ‘in some cases very valuable assets are given relatively low valuation by this approach, and in other cases worthless assets ... are still considered valuable since they were costly to develop. Such divorce between the valuation and the economic reality results from the failure of the cost approach to take into account any factors that are external or later in time to the development process’.

<sup>301</sup> Brauner (n 295) 113: ‘Naturally, the cost approach is best used closest in time to the launch of the product and in simple cases. Once data on income potential is available, its reliability fades since it does not reflect this potential. This is why the historical costs version is often considered inappropriate in our context’.

<sup>302</sup> Brauner (n 295) 112.

<sup>303</sup> Brauner (n 295) 113: ‘The replacement costs version does not fare better because of the uniqueness of intangibles, and the fact that many intangibles are very asset or business specific. This means that they may have little value in circumstances other than the one in which they are used. Any functional replacement may represent significant deviation from the real value of the intangible to the taxpayer who owns it’.

<sup>304</sup> Smith and Parr (n 296) 168.

Instead of performing valuation based on inputs, another suggested method is to assess potential income that can be earned. As part of this method, net present value of future cash flows is calculated by discounting future cash inflows, adjusting the discount rate for the timing of expected income and risks associated with realising this value in the future.<sup>305</sup> In other words, once an intangible is identified, the question to ask is what the royalty rate would apply if the taxpayer were to license the intangible.<sup>306</sup>

However, this method also has its flaws. Despite being the preferred financial management method, computations involved in this valuation technique are relatively arbitrary and do not provide sufficient certainty for tax purposes.<sup>307</sup> This technique relies on ‘either market comparables or rules of thumb and industry standards to establish the appropriate royalty rate, which exposes it to all the difficulties that the market approach faces’.<sup>308</sup> Furthermore, in the context of some intangibles, it may be difficult to distinguish their contribution from another income stream or the firm’s general market value, as a number of intangible assets interact with each other to produce the ultimate economic output.<sup>309</sup> Other intangibles may produce unusually high profits for a certain period, which may be difficult to predict in current markets.<sup>310</sup>

The main difficulty, however, lies in valuing intangibles at an early stage of their exploitation since ‘the valuation of such assets for transfer pricing purposes must rely

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<sup>305</sup> Smith and Parr (n 296) 185.

<sup>306</sup> Brauner (n 295) 117.

<sup>307</sup> Benshalom (n 260) 650: ‘The income method requires ex post facto determinations to be made. This method presents an oddity in the transfer pricing paradigm because it does not even attempt to emulate transactions between unrelated parties. Upon entering a sale contract, unrelated parties determine the price of the transaction based upon future projections, rather than upon actual performances of the intangible assets in question’.

<sup>308</sup> Brauner (n 295) 119.

<sup>309</sup> Brauner (n 295) 117.

<sup>310</sup> Brauner (n 295) 115.

on relatively uncertain projections with little or no actual data on the income generated by such assets'.<sup>311</sup> Valuation techniques may therefore produce diverging results, depending on the slightest changes in circumstances, which may affect the discount rate and timing used in estimating the present value of the future taxable income streams.<sup>312</sup> One of the options to correct the divergence may be to use hindsight, by correcting valuation in the future, once intangibles are used in value-producing activities.<sup>313</sup> However, this may be unfair to taxpayers, who may not necessarily be able to predict how beneficial an intangible would be in the future.<sup>314</sup>

Overall, although the location of intangibles as core digital commerce assets could be indicative of where value is created, it may be challenging to identify which specific intangibles should be singled out as the most valuable nexus points that should

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<sup>311</sup> Brauner (n 295) 115.

<sup>312</sup> Brauner (n 295) 118: 'The difficulty with the timing element is similar in all valuations ... It requires determination of the economic life of the tested asset. This determination is, again, particularly difficult and subjective when intangibles are considered. One reason is the uniqueness of intangibles, which makes analogies to economic life of similar assets problematic. Another reason is the constant change in this area and, moreover, the constant increase in the pace of change ... Subjective judgment calls and sophisticated modelling help, yet they increase the level of uncertainty and "inaccuracy" ... The final component, the risk, is accounted for in the discount rate used, which, similar to economic life, requires subjective judgment calls, expertise, and a variety of optional models'.

<sup>313</sup> OECD, *BEPS Final CbC Report 2015* (n 48) 109–112, which would add ss D3–D4 to ch VI of the OECD Transfer Pricing Guidelines (n 258), providing for the use of hindsight when assessing returns on hard-to-value intangibles at a post-development stage.

<sup>314</sup> Schon (n 279) 293: 'In practice, it simply cannot be determined whether the eventually successful launch of a new pharmaceutical product is due to a "hidden value" which existed when the underlying IP right was transferred to a low-tax subsidiary or whether it is generated by value-increasing expenditure incurred after the transfer (like marketing efforts) or whether it is simply due to a "lucky" beneficial market situation'. See also OECD, *BEPS Comments Hard-to-Value Intangibles*, criticising hindsight in valuation and arguing that '[t]he commercial world is littered with examples of where companies have invested poorly in intangibles and also where things have performed well (but not in a way the companies had anticipated) and adding value to the group. In both cases it would be unacceptable for a group to be penalized where a tax authority were to take financial data and try to connect the dots looking backwards in order to ascertain value and estimate how much an arm's length rate would be based upon this (new) information'.

attract most of the related returns, especially given that intangible valuation is largely arbitrary.<sup>315</sup>

## **2.3. Assessment of the proposed physical nexus solutions**

### **2.3.1. Restriction of exemptions for ancillary activities**

One of the solutions to determining PE thresholds in relation to digital enterprises would entail abolishing exemptions for ancillary activities, making such operations as warehousing, collection of data and solicitation of clients taxable at source.<sup>316</sup> It has been argued that these measures would help to capture the value-generating activities of digital enterprises, making it more difficult for them to avoid taxable presence in destination countries. It has also been suggested that this measure would be effective in relation to most digital enterprises since they, despite dependence on core intangible assets, still normally choose to establish physical presence in source countries for commercial reasons.<sup>317</sup>

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<sup>315</sup> Schon (n 69) 1079: '[T]he territorial apportionment of value-driving factors proves to be problematic when it comes to the paramount intangibles and the value-increasing economies of scope. Ultimately difficult to deal with are the problems regarding the valuation of this attribution factor. If one takes the book value of the assets as a basis, high-value production factors such as self-created intangible assets can disappear from view ... If one takes the current market price of all tangible and intangible assets as a basis, this requires a continuous value adjustment for the purpose of factor apportionment. Relief can perhaps be derived from the reference to 'fair values' from commercial law IAS/IFRS balance sheets, but the legal and factual bases are still evolving in this area'.

<sup>316</sup> See OECD, *BEPS PE Final Report 2015* (n 55) 28–38, which makes all PE exemptions subject to a condition that exempt activities should constitute ancillary rather than core business function to be able to enjoy tax exempt status. In this regard, it has been proposed, for example, that para 22 would be added to commentaries to art 5: 'Where, for example, an enterprise of State R maintains in State S a very large warehouse in which a significant number of employees work for the main purpose of storing and delivering goods owned by the enterprise that the enterprise sells online to customers in State S, paragraph 4 will not apply to that warehouse since the storage and delivery activities that are performed through that warehouse, which represents an important asset and requires a number of employees, constitute an essential part of the enterprise's sale/distribution business and do not have, therefore, a preparatory or auxiliary character'. On ancillary activities see generally Jean Schaffner, *How Fixed is a Permanent Establishment?* (Kluwer Law International 2013) (n 316) ch 6.

<sup>317</sup> OECD, *BEPS Digital Taxation Report 2014* (n 13) 129, noting that 'another specific issue raised by the changing ways in which businesses are conducted is whether certain activities that were previously considered preparatory or auxiliary (and hence benefit from the exceptions to the definition of PE) may be increasingly significant components of businesses in the digital economy'.

There is a risk, however, that in response to lower physical PE thresholds digital enterprises may surrender their substantial physical presence in market jurisdictions altogether and relocate to more favourable jurisdictions, making the updated physical PE standards redundant.<sup>318</sup> It seems, therefore, that merely readjusting the physical nexus PE may produce little positive effect on digital business taxation, since digital firms may not necessarily retain physical presence in destination countries.

For example, foreign digital retailers may not have to employ in-country sales agents due to the rise of online marketing intermediaries, such as Google. These online intermediaries provide automated solutions for soliciting customers on the Internet. Google is essentially told what audience to target, and how often and where to show advertisements, thereby replacing physical marketing agents.<sup>319</sup> In addition, Google uses Google AdWords to display targeted online advertising and Google Analytics to track down statistics, including geolocation of consumers.<sup>320</sup> This equips digital businesses with online intermediary tools that redirect online customers to retailers completing the sale, without the need for any physical presence in a targeted country whatsoever.

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<sup>318</sup> OECD, *BEPS PE Comments on Original Draft* (n 55) 103, arguing that in response to lowering PE thresholds '[b]usinesses may decide that an investment is not worth the administrative and tax cost, and take additional steps to limit PE exposure ... Decisions to limit PE Exposure will reduce the global footprint of a business, which would impact local employment and investment. For each individual company, these decisions may not have a significant impact, but replicated globally, such decisions in the aggregate, could have an important, negative impact on cross-border trade and investment'.

<sup>319</sup> See House of Commons, *Tax Avoidance – Google* (n 20) Ev11 Q85: 'The piece that takes place in the UK could be that we might come and meet with you and talk to you about how many people are searching for your product or category on Google; we might tell you, typically, how much might it cost to show up and pick up clicks on those words; we might talk to you about how profitable that could be, given how well your website converts that into sales for you; and our team could help you to understand what features of the Google products might help you to be effective. Many of the larger customers would then have a media agency who look after all of their advertising spend across TV and print and online. Many of them would then ask that media agency to execute a plan bringing together Google and all the other products that they could buy, and at that point they would be dealing with Google Ireland in terms of setting up any accounts, which they can do either themselves, through our interface, or through experts in Dublin'.

<sup>320</sup> Discussed in Prussak (n 250) 68.

### 2.3.2. *Restriction on dependent agency PE rules*

Another measure approved by the OECD would broaden the agency PE rules, whereby companies would not be considered independent agents where they act mainly for connected enterprises.<sup>321</sup> Equally, commissionaire structure, where local conclusion or negotiation of contracts is conducted such that only formal approval takes place overseas, would be considered as creating taxable nexus in source countries.<sup>322</sup> Whilst these measures would help to address nexus erosion in relation to enterprises that have some sort of physical presence in source jurisdictions, they would not be of substantial relevance to dematerialised intangible corporations that may not have any tangible presence in source countries, whilst creating uncertainties for businesses that rely on physical presence in market jurisdictions.<sup>323</sup>

In the long term, it can be expected that further adoption of 3D printing technologies may exacerbate the erosion of physical nexus standards, gradually

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<sup>321</sup> OECD, *BEPS PE Final Report 2015* (n 55) 13–23 as per the new version of commentaries to para 5 of art 5 of the OECD Model, the draft would interpret dependent agents under commissionaire structures as creating a PE if such agents are not independent agents, are not covered by ancillary activities exemptions, but at the same time are engaged in ‘habitually concluding contracts or habitually negotiating the material elements of contracts that are in the name of the enterprise or that are to be performed by the enterprise’. Discussed in Arthur Pleijsier, ‘The Agency Permanent Establishment in BEPS Action 7: Treaty Abuse or Business Abuse?’ (43) *Intertax* 147. On agency PE see generally Schaffner (n 316) ch 7.

<sup>322</sup> OECD, *BEPS PE Final Report 2015* (n 55) 23–27, inserting a new version of commentaries to para 6 of art 5 of the OECD Model, which would provide that an independent agent PE exemption would not apply where the agent acts exclusively or almost exclusively for the overseas enterprise. Discussed in Richard Collier, ‘BEPS Action Plan, Action 7: Preventing the Artificial Avoidance of PE Status’ [2013] *British Tax Review* 638. On the long-standing issues and case law relating to dependent agents and commissionaire structures see Thor Leegard, ‘Supreme Court Holds that Commissionaire Structure Does not Amount to a Permanent Establishment’ (2012) 52 *European Taxation* 317.

<sup>323</sup> OECD, *BEPS PE Comments on Original Draft* (n 55) 90: ‘The relatively limited nature of the proposals in this discussion draft means that significant work would remain. Such work should clearly extend to the field of services, since digitalisation has greatly expanded the ability of companies to provide cross-border services without the physical presence needed for a PE’. See also OECD, *BEPS PE Comments on Original Draft* (n 55) 56, arguing in the context of insurance companies that ‘sales via agents and brokers are not “put in place primarily in order to erode the taxable base of the State where the sales took place” but are due to both commercial and regulatory reasons. Therefore, there should be no overriding BEPS concern with insurance operations undertaking sales via agents and brokers’.

transforming e-commerce in physical goods into digital trade.<sup>324</sup> Manufacturers will no longer have to maintain a physical base in a destination country if they wanted to sell their product. Instead, they would sell a digital design that could be 3D printed using a local third-party provider with which the customer would engage. Although the mass adoption of this technology is unlikely in the short term, it illustrates the current trend towards erosion of physical nexus, which will be exacerbated in the future.

### ***2.3.3. Anti-abuse solutions and a diverted profits tax***

Given the difficulties with defining the functional nexus standards in relation to digital activities, some countries have been tempted to introduce unilateral anti-abuse measures. Instead of waiting for the outcome of the BEPS project on anti-treaty shopping provisions and general anti-avoidance rules, the UK introduced a new diverted profits tax (DPT) and Australia has recently followed suit.<sup>325</sup> The UK DPT applies at a punitive 25% rate to the profits, which are deemed to have been diverted from the UK.<sup>326</sup> The main purpose behind the measure is to stop functional nexus erosion and allocation issues when a tax avoidance motive or lack of economic substance is in point.

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<sup>324</sup> As discussed at nn 12, 170.

<sup>325</sup> Finance Act 2015 [‘FA 2015’], pt 3 ‘Diverted Profits Tax’, ss 77–116; see Dan Neidle, ‘The Diverted Profits Tax: Flawed by Design?’ [2015] *British Tax Review* 147, 148, noting that ‘the rationale for the DPT is unclear. It could therefore have been either to take the sting out of a difficult political issue in light of the upcoming election or alternatively, as some have speculated, in anticipation of a possible partial failure of BEPS. One also cannot underestimate the desire to raise additional tax revenues’. On the broader international work regarding anti-abuse rules see Luc De Broe and Joris Luts, ‘BEPS Action 6: Tax Treaty Abuse’ (2015) 43 *Intertax* 122; Michael Lang, ‘BEPS Action 6: Introducing an Antiabuse Rule in Tax Treaties’ (2014) 74 *Tax Notes International* 655; Stewart(n 52); on the European jurisprudence on anti-abuse measures see Christiana Panayi, ‘The Anti-Abuse Rules of the CCCTB’ (2012) 66 *Bulletin for International Taxation* 256; Adolfo Martin Jimenez, ‘Towards a Homogeneous Theory of Abuse in EU (Direct) Tax Law’ (2012) 66 *Bulletin for International Taxation* 270; Romero JS Tavares and Bret N Bogenschneider, ‘The New De Minimis Anti-Abuse Rule in the Parent-Subsidiary Directive: Validating EU Tax Competition and Corporate Tax Avoidance?’ (2015) 43 *Intertax* 484; Dennis Weber, ‘Abuse of Law in European Tax Law: An Overview and Some Recent Trends in the Direct and Indirect Tax Case Law of the ECJ - Part 1’ (2013) 53 *European Taxation* 251; Dennis Weber, ‘Abuse of Law in European Tax Law: An Overview and Some Recent Trends in the Direct and Indirect Tax Case Law of the ECJ - Part 2’ (2013) 53 *European Taxation* 313.

<sup>326</sup> FA 2015 s 79(2).

This diversion can broadly occur under the following two scenarios. First, a foreign corporation could maintain some business presence in the UK, which is technically not taxable from a source tax country perspective but which has been artificially structured such that the foreign corporation gains a tax advantage in the country.<sup>327</sup> Second, a foreign corporation could already have taxable presence in the form of a branch or a subsidiary but artificially deflates taxable profits in the UK using transfer pricing planning or through mismatch arrangements.<sup>328</sup> Where a corporation considers that it is within the scope of the diverted profits tax rules, it is required to make a disclosure to the tax authorities, which subsequently assess diverted tax payable.<sup>329</sup>

It is considered by the UK tax authorities that a punitive measure that applies an extra 5% on top of the statutory tax rate would promote voluntary compliance, prompting foreign corporations to reassess their tax position in the market and thus reallocate the tax base across jurisdictions to remain outside the scope of the higher DPT rate. Given that the UK has implemented the tax regime on a unilateral basis, it may also be viewed as an attractive measure for some of the jurisdiction as implementable in the short term.<sup>330</sup> Being a tax on profits, it does not overhaul the

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<sup>327</sup> FA 2015 s 86(1), which provides that a non-UK person will be considered as avoiding UK taxable presence if it carries on a trade; the person is carrying on this activity in the UK in connection with supplies of services, goods or other property made by the foreign company in the course of that trade; s 87 exception for low-volume sales does not apply; it is reasonable to assume that the activity of the avoided PE or the foreign company (or both) is designed so as to ensure that the foreign company does not carry on that trade in the UK for the purposes of corporation tax (whether or not it is also designed to secure any commercial or other objective); the mismatch condition or the tax avoidance condition is met; the general PE exceptions do not apply; and neither the PE nor the foreign company is an SME.

<sup>328</sup> FA 2015 ss 80–81.

<sup>329</sup> FA 2015 ss 79(1) and 92.

<sup>330</sup> For a similar anti-avoidance provision in Australia see Australian Treasury, *Exposure Draft. Tax Laws Amendment (Tax Integrity Multinational Anti-avoidance Law) Bill 2015* (2015); Australian Treasury, *Tax Laws Amendment (Tax Integrity Multinational Anti-Avoidance Law) Bill 2015. Exposure Draft Explanatory Material* (2015).

common system for international taxation, although there may be major issues with securing a tax credit in residence countries.<sup>331</sup> Being a universal measure applicable across all industries, it also appears non-discriminatory and avoids some definitional problems relating to different sectors.

In the context of the increasingly digitised economy, the diverted profits tax, however, appears to fall short of offering a comprehensive measure that would help address jurisdictional nexus erosion. One of the major downsides is that it incorporates the traditional concepts of physical nexus in its design, making it potentially ineffective for tackling nexus erosion in the context of fully dematerialised business models.<sup>332</sup> Further, it establishes onerous compliance procedures, which for digital businesses may be too burdensome to comply with given the mobility of personnel and equipment that might be present in the territory temporarily, without any intention to create a fixed place of business.<sup>333</sup> Given the discriminatory nature of a punitive 25% charge, it has also been argued that the tax may not be EU-compliant as it imposes restrictions targeted specifically at overseas entities, whilst favouring domestic businesses.<sup>334</sup>

In the context of digital commerce, the diverted profits tax would not achieve anything substantially new to justify the extreme lengths to which national governments

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<sup>331</sup> Luca Cerioni, 'The New "Google Tax": The "Beginning of the End" for Tax Residence as a Connecting Factor for Tax Jurisdiction?' (2015) 55 *European Taxation* 185, 190, arguing that due to non-inclusion of the DPT within the scope of double tax treaties 'the DPT paid on profits arising out of UK sales would remain unrelieved and the company would incur jurisdiction double taxation on those profits'.

<sup>332</sup> FA 2015 ss 86(1)(c) and (5) require that a connected person has to be carrying on a trading activity in the UK through a PE.

<sup>333</sup> Neidle (n 325) 155, arguing that '[t]he punitive effect of the DPT is magnified by the procedure by which it is imposed'; Neidle (n 325) 154, noting that '[t]he central element of the section 86 charge is the question of whether activity is designed to ensure a foreign company does not carry on a trade in the UK for corporation tax purposes ... The difficulty with this is that many non-UK trading companies will have some sort of activity, temporary or permanent, in the UK'.

<sup>334</sup> Neidle (n 325) 160–164. See also Philip Baker, 'Diverted Profits Tax: A Partial Response' [2015] *British Tax Review* 167.

have to go to implement the measure.<sup>335</sup> DPT essentially requires that a business should already have some form of a PE or a subsidiary in the country that has been ‘avoided’, which will not necessarily be the case when it comes to a fully dematerialised digital business.<sup>336</sup> For example, if a cloud computing provider renders services to local customers, it can do so using server farms located in bordering jurisdictions, without maintaining any business presence in the UK, thereby avoiding the physical nexus required to trigger a DPT notification. Similar arguments apply in the context of online advertising and e-tailing businesses, which do not necessarily require substantial presence in market jurisdiction. Even though they may need to maintain some business presence in the market to support client relationships, the need for that is gradually disappearing with the development of distant communication technologies, which would make the DPT redundant in the long term.<sup>337</sup>

Overall, it appears that the DPT would not be an appropriate long-term measure to tackle the nexus erosion in the context of the gradually dematerialising digital commerce. Whilst it is aimed at curbing tax avoidance using nexus erosion schemes, it stops short of delivering a comprehensive solution that could apply across different industries, as it is not tailored to the specific features of various business models. More importantly, it relies on physical nexus rules to define diversion of profits and, therefore, falls into the trap of using offline concepts to regulate digital trade. Being a

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<sup>335</sup> Cerioni (n 331) 190–191.

<sup>336</sup> Cerioni (n 331) 190, arguing that a DPT ‘would require, for its application, inter alia, the “avoided PE” to undertake activities and specific thresholds to be met’, which would be difficult to satisfy as ‘the nexus under current international tax rules would not really changes’ and therefore ‘a hi-tech company – due to its digital presence – might not need either a PE or a person carrying out an activity in the country in connection with electronic sales’.

<sup>337</sup> Cerioni (n 331) 191, explaining that ‘[a] hi-tech company that obtains significant profits in another country and that is linked with a person carrying out activity therein in connection with electronic sales to local clients, could simply discontinue its relations with this person (and, therefore, eliminate the “avoided PE”) whilst still managing to achieve the same volume of sales of goods and services due only to its digital presence’.

profits tax model, it can be introduced unilaterally, but there are doubts as to its creditability in overseas countries.<sup>338</sup> It overburdens businesses with compliance requirements, without offering any incentives in return.

Overall, it can be concluded that erosion of the physical PE nexus at the pre- and post-production stages shows that it is no longer satisfactory to place substantial reliance on functional nexus factors for taxing economic value generated through automated digital platforms. Engineers tend to work on research and development tasks from various points across jurisdictions using online collaborative platforms, while post-production personnel and equipment that commercially exploit trade intangibles no longer need to be constantly present in destination markets to perform their functions. All this renders the functional nexus fluid and hence highly unpredictable.<sup>339</sup>

## **Conclusion**

In this chapter, it has been argued that over-reliance of the current residence and source tax rules on functions performed by people or equipment to establish taxable nexus creates challenges for jurisdictional rules. Whilst residence taxation has historically been determined based on functional nexus that directors create for an enterprise, this nexus proxy has become highly unreliable due to the overall increased mobility of personnel. At the same time, such anti-avoidance measures as CFC and anti-inversion rules have become limited in scope due to residence states' political unwillingness to enforce such restrictive measures in practice, which US tax policy has clearly demonstrated.

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<sup>338</sup> Neidle (n 325) 164.

<sup>339</sup> This does not mean that physical production factors disappear, but their concentration in particular jurisdictions and flexibility in location across countries creates challenges for the current compromise regarding the residence versus source divide.

Equally, PE nexus rules also largely depend on functions that personnel and equipment perform in source jurisdictions. Nexus erosion, therefore, occurs in the context of source taxation based on PEs, as functions can be transferred within the corporate structure of multinationals thanks to the mobility of personnel and equipment. Whilst BEPS reforms, if implemented in the current form, would ensure that corporations with at least some physical presence in source countries have appropriate enforceable nexus for profits tax purposes, these measures would not offer a comprehensive solution for the largely dematerialised business models.

The novel approach to combating nexus and profit allocation erosion, a diverted profits tax, could help to recreate nexus in cases involving tax avoidance and allocate appropriate profits to such nexus points. However, this model is also heavily reliant on physical nexus standards, when determining jurisdictional connection based on either staff or equipment present in a source country. This measure appears to remain within the framework of the traditional source tax regimes operating physical nexus standards and does not offer a transformational solution for taxing digital commerce in the long term.

As discussed in the next chapter, similar issues arise in the context of sales taxation; both the EU VAT and the US sales tax systems have struggled with physical nexus standards used as proxies for determining the place of taxable supply. Although reforms are under way to shift towards more relaxed economic nexus standards, nexus erosion remains a pertinent issue on the consumption taxation agenda.

## CHAPTER 3. SALES NEXUS CHALLENGES

### Introduction

It was argued in the previous chapter that functional nexus challenges prevent jurisdictions from establishing justifiable connections when taxing digital enterprises. Similar issues arise in the context of sales taxation, which currently relies on physical proxies, such as permanent presence of business customers and residence of consumers, to establish jurisdiction to tax cross-border sales. In this regard, it would be difficult to rely on sales taxes to compensate for erosion of direct tax nexus as the business community representatives have argued:

We understand that arguments have been made that a market jurisdiction should have an entitlement to tax the profits of sales into the jurisdiction, based on the value of the market place, even if the enterprise may have no actual presence in the market jurisdiction. It may well be that this is an appropriate discussion to have in relation to, for example, comparability factors under Transfer Pricing rules ... However, BIAC believes that the appropriate tax to impose by reference to the place of consumption is a VAT.<sup>340</sup>

As discussed below, origin sales nexus have been eroded in the same way as residence nexus. Recent examples of companies migrating across the EU in search of a better ‘home’ are illustrative of this issue; particularly notable are examples of technology businesses migrating within the EU in response to VAT changes.

Although globally there has been a gradual shift towards taxation at destination, which is more difficult to manipulate, nexus issues remain valid. In particular, sales to complex multinationals use proxies, which look at where the fixed establishment most closely connected with the supply is located. Although this simplifies the process of establishing nexus for suppliers, it stumbles on the same physical nexus issues as direct tax systems with PEs. It is concluded that, as EU VAT experience shows, it may be

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<sup>340</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 49. See also Kathryn James, *The Rise of the Value-Added Tax* (Cambridge University Press 2015).

challenging to move away from physical proxies as the place of actual consumption for business-to-business supplies due to complexities arising in the context of intangible supplies.

US states have attempted to rectify the physical nexus problems in relation to consumer supplies and artificially created nexus using wider proxies for imposing a statutory obligation to collect use taxes. This measure, however, has stopped short of offering a comprehensive non-physical nexus solution due to the US constitutional constraints. It can, therefore, be suggested that in the context of the more straightforward business-to-consumer sales taxes, which the US tax system uses, it may be difficult to reach a political consensus on changing traditional jurisdictional nexus standards.

The chapter, therefore, concludes that, whilst reliance on sales taxes may increase as nexus erosion continues in the area of direct taxation, physical proxies for consumption taxes may generate their own issues relating to sales diversion.

## **1. US sales tax nexus challenges**

### **1.1. Challenges relating to traditional physical nexus**

By way of background, US sales taxation exists only at the state level.<sup>341</sup> States levy retail sales and use taxes as well as gross receipts taxes on business-to-business supplies as a form of compensation for the benefit of doing business in the state.<sup>342</sup> Before a state

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<sup>341</sup> On the US debate on VAT see James (n 340) 338-405.

<sup>342</sup> van Brederode (n 108) 232: ‘Generally, sales taxes are limited to domestic sales within the state borders, and for constitutional reasons the states are unable to tax out-of-state sales; therefore, exports to another state are exempt from sales tax, and imports from another state cannot be taxed under a sales tax. As a compensation for this, all states that levy sales tax introduced an equivalent system of use tax which applies to imports and is payable by customers purchasing goods from out-of-state vendors. Private consumers must either file a separate use tax return or account for use tax via their annual state income tax return, but except in the case of purchases of goods that require registration, such as cars, boats and airplanes, compliance by private consumers is very low’.

may impose a tax liability on an out-of-state business, a constitutionally sufficient connection, or nexus, must exist between the state and business.<sup>343</sup>

The US constitution has been interpreted as requiring ‘minimum contacts’ with a state for the exercise of extraterritorial jurisdiction.<sup>344</sup> In early case law, it was established that a state could not subject non-residents to the jurisdiction of its courts, unless they were served with process within the territory of the state.<sup>345</sup> However, acknowledging the change in the commercial world, the Supreme Court modified the test in *International Shoe* and held that a court could exercise personal jurisdiction over a non-resident if the defendant had ‘certain minimum contacts with the State’, such that the maintenance of the suit did not contradict ‘traditional notions of fair play and substantial justice’.<sup>346</sup> This due process test was described as ‘neo-territorial’ in nature,<sup>347</sup> as basing a state's jurisdiction on a ‘kind of virtual presence’.<sup>348</sup>

It was subsequently clarified that a defendant's contacts are sufficient to satisfy the minimum contacts requirement where they are substantial and systematic, showing that the defendant ‘purposefully avails itself of the privilege of conducting activities within the forum State, thus invoking the benefits and protections of its laws’.<sup>349</sup> A defendant ‘purposefully avails’ himself of jurisdiction where ‘the contacts proximately

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<sup>343</sup> Armikka R Bryant, ‘Economic Nexus in Washington State: Defining Substantial Nexus’ (2012) 30 *Quinnipiac Law Review* 301, 302.

<sup>344</sup> Nexus in the US is discussed generally in Charles W 'Rocky' Rhodes, ‘Nineteenth Century Personal Jurisdiction Doctrine in a Twenty-first Century World’ (2012) 64 *Florida Law Review* 387; Henry S Noyes, ‘The Persistent Problem of Purposeful Availment’ (2012) 45 *Connecticut Law Review* 41. Richard D Freer, ‘Personal Jurisdiction in the Twenty-First Century: The Ironic Legacy of Justice Brennan’ (2012) 63 *South Carolina Law Review* 551.

<sup>345</sup> *Pennoyer v Neff* 95 US 714 (1878).

<sup>346</sup> *International Shoe v State of Washington* 326 US 310 (1945), 316 (internal citations omitted).

<sup>347</sup> See Allan R Stein, ‘The Unexceptional Problem of Jurisdiction in Cyberspace’ (1998) 32 *International Lawyer* 1167, 1169–1170.

<sup>348</sup> Kohl (n 16) 52.

<sup>349</sup> *Hanson v Denckla* 357 US 235 (1958), 253.

result from actions by the defendant himself that create a substantial connection with the forum State'.<sup>350</sup> The level of contacts required has been described as 'conduct and connection with the forum ... such that [the defendant] should reasonably anticipate being haled into court there'.<sup>351</sup>

In the sales tax context, however, the above due process nexus has been historically restricted by a physical nexus standard devised under the constitutional Commerce Clause, which requires that an out-of-state supplier may be obliged to collect sales taxes in the state where it sells its goods but only if it has a substantial physical presence there.<sup>352</sup>

Hence, in *National Bellas Hess*, the Supreme Court held that 'the Constitution requires some definite link, some minimum connection, between a state and the person, property, or transaction it seeks to tax'.<sup>353</sup> It was held that the state of Illinois could not require out-of-state mail-order companies to collect a use tax from resident customers where their only contact with the state was via the US Postal Service or common carriers.<sup>354</sup> The Supreme Court found these contacts to be insufficient to establish

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<sup>350</sup> *Burger King Corp v Rudzewicz* 471 US 462 (1985), 475 (citation marks omitted).

<sup>351</sup> *World-Wide Volkswagen Corp v Woodson* 444 US 286 (1980), 291.

<sup>352</sup> *van Brederode* (n 108) 233.

<sup>353</sup> *National Bellas Hess v Department of Revenue* 386 US 753 (1967), 756; discussed Michael J Payne, 'Selling the Main Street Fairness Act: A Viable Solution to the Internet Sales Tax Problem' (2012) 44 *Arizona State Law Journal* 927, 930–931. The state of Illinois subjected to the use tax collection obligation a mail-order house with the head office in Missouri and Delaware and no outlets, sales representatives, tangible property, or warehouses in Illinois. The sole contact with the state was that it mailed its catalogues to the residents of Illinois twice a year as well as mailed promotional brochures more frequently. The company's customers mailed their orders back to the company by US mail or common carrier. Illinois claimed that National Bellas Hess had an obligation to collect the use tax from Illinois consumers and remit payment to the state.

<sup>354</sup> *National Bellas Hess* 758–760.

physical presence, or nexus, under either the due process or commerce clauses. For both clauses, the Supreme Court used criteria based on physical presence.<sup>355</sup>

In *Complete Auto Transit*, the Supreme Court produced a test that determined whether a state is eligible to tax certain activities under the commerce clause.<sup>356</sup> The test was further adopted in *Quill*, where the court restated the principle as follows:

Under Complete Auto's four-part test, we will sustain a tax against a Commerce Clause challenge so long as the tax [1] is applied to an activity with a substantial nexus with the taxing State, [2] is fairly apportioned, [3] does not discriminate against interstate commerce, and [4] is fairly related to the services provided by the State.<sup>357</sup>

In *Quill*, the Supreme Court ruled that in the absence of substantial nexus a state could not require a seller to collect use tax.<sup>358</sup> The Supreme Court dropped the physical presence test under the due process clause, requiring only that the seller's efforts should be purposefully directed toward the residents of the taxing state.<sup>359</sup> The due process clause was, therefore, no longer an impediment to requiring use tax collection by out-of-state sellers. However, the Supreme Court also reaffirmed the physical presence test or substantial nexus under the commerce clause.<sup>360</sup>

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<sup>355</sup> van Brederode (n 108) 235.

<sup>356</sup> *Complete Auto Transit, Inc v Brady* 430 US 274 (1977).

<sup>357</sup> *Quill Corporation v North Dakota* 504 US 298 (1992), 311 (internal quotation marks and citations omitted).

<sup>358</sup> *Quill* (n 357) 306. Although the facts of the case were similar to *National Bellas Hess*, the court based its decision on the commerce clause.

<sup>359</sup> *Quill* (n 357) 306–307: ‘The Due Process Clause “requires some definite link, some minimum connection, between a state and the person, property or transaction it seeks to tax”, and that the “income attributed to the State for tax purposes must be rationally related to values connected with the taxing State” ... Applying these principles, we have held that if a foreign corporation purposefully avails itself of the benefits of an economic market in the forum State, it may subject itself to the State's in personam jurisdiction even if it has no physical presence in the State’ (internal citations omitted).

<sup>360</sup> *Quill* (n 357) 313: ‘Thus, the “substantial nexus” requirement is not, like due process’ “minimum contacts” requirement, a proxy for notice, but rather a means for limiting state burdens on interstate commerce. Accordingly, contrary to the State's suggestion, a corporation may have the “minimum

As US Congress could not authorise the states to collect a tax that violates the due process clause, even though it had constitutional authority to regulate interstate commerce, the removal of the due process clause opened the door for Congress to undertake action. Under its commerce powers, Congress can, therefore, legislatively empower the states to require out-of-state sellers to collect use taxes from their customers and remit the revenues to the customers' home states.<sup>361</sup>

However, to date Congress has chosen not to enact legislation granting such authority to the states, mainly because of excessive compliance costs.<sup>362</sup> Only the physical presence requirement of the first prong, substantial nexus, of the Complete Auto test prevents states from imposing use tax compliance obligations on e-commerce retailers. Different states have, therefore, attempted to circumvent the physical nexus requirements by enacting innovative versions of the nexus tests discussed below.

## **1.2. Alternative sales nexus standards for digital commerce**

One of the alternatives that have been implemented in response to physical nexus erosion has been the click-through nexus.<sup>363</sup> In order to apply intangible nexus standards without violating the constitution, a number of states have introduced the so-called Amazon laws, whereby online businesses create nexus in the state if they have an agent there that solicits sales on behalf of the out-of-state online retailer by placing links on their websites and redirecting customers to the retailer's online shop.<sup>364</sup>

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contacts” with a taxing State as required by the Due Process Clause, and yet lack the “substantial nexus” with that State as required by the Commerce Clause’. See van Brederode (n 108) 239.

<sup>361</sup> *Quill* (n 357) 318: ‘Accordingly, Congress is now free to decide whether, when, and to what extent the States may burden interstate mail-order concerns with a duty to collect use taxes’. See van Brederode (n 108) 239.

<sup>362</sup> van Brederode (n 108) 240.

<sup>363</sup> Discussed in detail in Gamage and Heckman (n 125).

<sup>364</sup> New York Tax Law, s 1101(b)(8)(vi): ‘[A] person making sales of tangible personal property or services taxable under this article (“seller”) shall be presumed to be soliciting business through an

The New York Supreme Court confirmed the constitutionality of this nexus standard.<sup>365</sup> However, the provision has been interpreted relatively narrowly, meaning that an out-of-state retailer would only have nexus through an affiliate if this online advertising partner actively solicited sales in the state of New York by doing something other than merely placing links on their website, i.e. distributing flyers or contacting customers on behalf of the principal.<sup>366</sup>

However, the Supreme Court decision negates the obligation to collect taxes from most online retailers that merely place links on their partners' websites. Such a

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independent contractor or other representative if the seller enters into an agreement with a resident of this state under which the resident, for a commission or other consideration, directly or indirectly refers potential customers, *whether by a link on an internet website or otherwise*, to the seller ... This presumption may be rebutted by proof that the resident with whom the seller has an agreement did not engage in any solicitation in the state on behalf of the seller that would satisfy the nexus requirement of the United States constitution during the four quarterly periods in question ...' (emphasis added).

See also New York State Department of Taxation and Finance, *New Presumption Applicable to Definition of Sales Tax Vendor* (TSB-M-08(3)S, 2008) clarifying that the in-state nexus presumption will be rebutted 'where the seller is able to establish that the only activity of its resident representatives in New York State on behalf of the seller is a link provided on the representatives' Web sites to the seller's Web site and none of the resident representatives engage in any solicitation activity in the state targeted at potential New York State customers on behalf of the seller'.

See also New York State Department of Taxation and Finance, *Additional Information on How Sellers May Rebut the New Presumption Applicable to the Definition of Sales Tax Vendor as Described in TSB-M-08(3)S* (TSB-M-08(31)S, 2008) providing that a contract clause, together with an annual signed certification for the in-state representative, should show that the resident representative is not engaged in any sort of solicitation, 'including, but not limited to: distributing flyers, coupons, newsletters and other printed promotional materials, or electronic equivalents; verbal solicitation (e.g., in-person referrals); initiating telephone calls; and sending e-mails'.

<sup>365</sup> *Amazon.com, LLC v New York State Department of Taxation and Finance* 913 NYS2d 129, 196–197, holding that 'on its face the statute does not violate the Commerce Clause. It imposes a tax collection obligation on an out-of-state vendor only where the vendor enters into a business-referral agreement with a New York State resident, and only when that resident receives a commission based on a sale in New York. The statute does not target the out-of-state vendor's sales through agents who are not New York residents. Thus, the nexus requirement is satisfied'. The decision was appealed but the court of appeals affirmed the appellate division decision in *Overstock.com Inc v New York State Department of Taxation and Finance* 20 NY3d 586 (NY Ct App 2013).

<sup>366</sup> *Amazon* (n 365) 197: 'Of equal importance to the requirement that the out-of-state vendor have an in-state presence is that there must be solicitation, not passive advertising. Whilst Tax Law s 1101(3)(8)(vi) creates the presumption that the in-state agent will solicit, it provides the out-of-state vendor with a ready escape hatch or safe harbor. The vendor merely has to include in its contract with the in-state vendor a provision prohibiting the in-state representative from "engaging in any solicitation activities in New York State that refer potential customers to the seller", and the in-state representative must provide an annual certification that it has not engaged in any prohibited solicitation activities as outlined in the memorandum. Thus, an in-state resident which merely acts as a conduit for linkage with the out-of-state vendor will be presumed to have not engaged in activity which would require the vendor to collect sales taxes'.

restrictive interpretation can be explained by the desire of the court to stay within the US constitutional limits requiring physical nexus under the commerce clause, whilst attempting to catch out-of-state digital businesses. This solution is, therefore, ineffective for re-establishing nexus with digital enterprises, since online soliciting may involve targeting even without active solicitation.

Given the above difficulties with intangible nexus standards, other states attempted to introduce a variation of the sales nexus standards, including an affiliate nexus in California.<sup>367</sup> Under this nexus standard, an affiliate entity of an online business that is present in California and is engaged in the same line of business as the out-of-state supplier, even if not directly involved in supplies, could create deemed physical presence for the online retailer, making it liable to collect use taxes in the state.<sup>368</sup> This measure was specifically targeted at Amazon, which has a Californian R&D unit developing e-readers.<sup>369</sup> As a result, Amazon reached settlement with the state of California and started collecting use taxes there and in a number of other states that introduced similar provisions.<sup>370</sup>

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<sup>367</sup> Andrew J Haile, 'Affiliate Nexus in E-Commerce' (2012) 33 *Cardozo Law Review* 1803, 1814.

<sup>368</sup> California Revenue and Tax code s 6203(a)(4), providing that retailers engaged in business in the state will include 'any retailer that is a member of a commonly controlled group ... and is a member of a combined reporting group ... that includes another member of the retailer's commonly controlled group that, pursuant to an agreement with or in cooperation with the retailer, performs services in this state in connection with tangible personal property to be sold by the retailer, including, but not limited to, design and development of tangible personal property sold by the retailer, or the solicitation of sales of tangible personal property on behalf of the retailer'.

<sup>369</sup> Haile (n 367) 1814–1815, noting that 'affiliate nexus provision was reportedly targeted at Amazon.com, which has a research and development facility in the state. That R&D facility provides services related to the company's popular Kindle electronic reader and is operated by an Amazon subsidiary (Lab 126), rather than by Amazon itself. Prior to enactment of AB 155, operating through the subsidiary allowed Amazon to contend that it maintained no physical presence in the state and therefore had no obligation to collect use tax on sales to California residents. Performing operational functions (like R&D or warehousing) through a subsidiary rather than through the retailing entity is a commonly used strategy to avoid tax collection obligations. This strategy is known as "entity isolation." Entity isolation evolved as a response to the physical presence standard. Thus, AB 155 represents California's attempt to combat entity isolation and to require Internet retailers like Amazon to collect use tax'.

<sup>370</sup> Haile (n 367) 1815.

Finally, some states have artificially created compliance nexus in relation to use taxes, requiring out-of-state sellers to file comprehensive reports on sales into the jurisdictions, for fear of substantial fines.<sup>371</sup> This measure was designed to make it worthwhile for out-of-state vendors to collect use taxes instead of complying with such draconian reporting requirements. This measure, however, has overcomplicated and overburdened the system and therefore has been found to be non-compliant with constitutional commerce clause prohibiting unjustifiable restrictions on interstate commerce.<sup>372</sup>

### **1.3. Proposed shift to economic nexus standards**

In response to sales tax nexus failures, it has been proposed that an economic nexus standard should be adopted instead of the physical nexus, to bring it in line with the due process jurisprudence.<sup>373</sup> In this context, it has been argued that a properly designed use tax can avoid any due process concerns as long as it provides a minimum threshold for exempting small remote vendors, applies a tax rate to interstate transactions no higher than the sales or use tax rate that applies to intrastate transactions, and provides a credit or exemption for transactions already taxed in another state.<sup>374</sup>

In this regard, the jurisdictional nexus standards for the purposes of the US state income taxes are defined by the constitutional due process jurisprudence, which does

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<sup>371</sup> Colorado Revised Statutes Annotated s 39-21-112.3.5(c)–(d). Discussed in Tyler Murray and Eric J Zinn, ‘Colorado and the "Amazon Tax" – Recent History’ (2012) 41 Colorado Lawyer 43.

<sup>372</sup> *Direct Marketing Association v Huber* No 10-cv-01546-REB-CBS (D Colo 2012) (granting an injunction against enforcement of the Colorado enforcement nexus law against out-of-state retailers without physical presence in Colorado). Discussed in David Gamage and Darien Shanske, ‘The Saga of State "Amazon" Laws: Reflections on the Colorado Decision’ (2012) 3 State Tax Notes 197.

<sup>373</sup> See, for instance, Gamage and Heckman (n 125); Baez III (n 125).

<sup>374</sup> Gamage and Heckman (n 125) 496.

not require a physical nexus with a state to permit it to exercise jurisdiction to tax.<sup>375</sup> Accordingly, a group of states apply qualitative criteria, assuming an economic nexus where an out-of-state enterprise has ‘substantial business presence’ in the state.<sup>376</sup> In this context, business presence is assessed on a case-by-case basis and specifically takes into account market presence. This interpretation of nexus derives from cases where, for example, out-of-state financial institutions were found to have a tax nexus for the purpose of state income and financial activity taxes because they generated substantial revenue through exploiting state markets and selling credit cards to state-resident consumers.<sup>377</sup>

The second type of the US economic nexus standards applies quantitative rather than qualitative criteria. The standards are modelled based on guidelines issued by the Multistate Tax Commission and take into account the level of sales, and presence of assets or personnel, in the state.<sup>378</sup> For example, a company may be deemed to have economic nexus with the State of Washington for the purposes of the state business and occupation tax if it is commercially domiciled there or has property with an average value exceeding \$50,000, payroll exceeding \$50,000, or sales exceeding \$250,000, or if it has at least 25% of its worldwide property, payroll, or sales in the state.<sup>379</sup> Once nexus

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<sup>375</sup> See generally Adam B Thimmesch, ‘The Illusory Promise of Economic Nexus’ (2012) 13 Florida Tax Review 157; Bryant (n 343). See also Robert F van Brederode, ‘The Re-Emergence of Gross Receipt Taxes in the United States’ (2008) 19 International VAT Monitor 182; van Brederode (n 108) 234–237; William Joel Kolarik II, ‘Untangling Substantial Nexus’ (2011) 64 Tax Lawyer 851.

<sup>376</sup> Thimmesch (n 375) 181.

<sup>377</sup> *Tax Commissioner of the State of Virginia v MBNA America Bank* 640 SE2d 226 (WV 2007); discussed in Thimmesch (n 375) 177.

<sup>378</sup> Thimmesch (n 375) 184.

<sup>379</sup> Bryant (n 343) 328.

is established using these standards, gross income is apportioned to the state using a formula with the same allocation keys.<sup>380</sup>

In this context, the recent Supreme Court decision concerning the physical nexus standards for use tax collection purposes has criticised the physical proxies as dated standards and proposed replacing them with a more adequate economic presence standard that meets the global digital commerce requirements more appropriately.<sup>381</sup>

Congress could take action and enact economic nexus standards across all states for the purposes of use tax collection, given that it could be enforced through third-party agents.<sup>382</sup> In this context, under the SSUTA initiative, private authorised providers have developed software solutions, which automate collection of use taxes using centralised databases and assumptions regarding location of consumers purchasing online.<sup>383</sup> This compliance mechanism has been adopted across many states and has simplified collection but has not gained traction amongst businesses.<sup>384</sup> As a result, a shift towards economic nexus principles could be implemented. However, this shift has not been

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<sup>380</sup> Bryant (n 343) 327.

<sup>381</sup> *Direct Marketing Association v Brohl* 135 S Ct 1124 (2015): Justice Kennedy criticised physical nexus requirements, holding that the ‘Internet has caused far-reaching systemic and structural changes in the economy, and, indeed, in many other societal dimensions ... Given these changes in technology and consumer sophistication, it is unwise to delay any longer a reconsideration of the Court’s holding in *Quill*. A case questionable even when decided, *Quill* now harms States to a degree far greater than could have been anticipated earlier ... It should be left in place only if a powerful showing can be made that its rationale is still correct’.

<sup>382</sup> A number of unsuccessful attempts have been made to replace physical nexus requirements with economic nexus standards based on SSUTA – for the latest proposal see Marketplace Fairness Act 2015 <<https://www.congress.gov/bill/114th-congress/senate-bill/698/all-info>> accessed 7 October 2015. Discussed in Pareesa Ashabi, ‘Comment: The Struggle Over Internet Sales and Use Tax: Why the Marketplace Fairness Act Could be the Hero for Wall Street, Main Street, and the Fifty States’ (2015) 49 *University of San Francisco Law Review* 543.

<sup>383</sup> Streamlined Sales and Use Tax Agreement. Adopted November 12, 2002 and 5 amended through May 13, 2015 <<http://www.streamlinedsalestax.org/uploads/downloads/Archive/SSUTA/SSUTA%20As%20Amended%20through%205-13-15.pdf>> accessed 12 September 2015. Discussed in Cockfield (n 74) 105–107.

<sup>384</sup> Cockfield (n 74) 106.

achieved yet. But even if economic nexus standards were to be implemented, they would only apply in the context of consumer supplies but would not affect the B2B trade, which suffers from its own nexus issues, as can be seen in the EU VAT context.

## **2. EU VAT: challenges of destination sales taxation**

Much in the same way as the US state administrations have struggled with implementing physical nexus standards and enforcement mechanisms, the EU VAT has faced issues relating to physical proxies for consumption nexus. As discussed below, the imperfections of the VAT design as a whole could create opportunities for tax abuse in the context of digital supplies. In particular, reliance on physical nexus standards, the ineffectiveness of the use and enjoyment backstop provision, and VAT fraud in digital supplies could undermine sales taxation and hence block the sources of additional revenue streams for destination countries.

### **2.1. Erosion of origin nexus**

In the context of the EU VAT, technology companies explored the changing tax environment by setting up in favourable EU jurisdictions. Given that the EU VAT was originally designed as an origin-based tax, EU suppliers paid VAT regardless of where sales took place, whereas non-EU suppliers were outside the scope of EU VAT altogether, even if the destination of their sales was within the EU.<sup>385</sup>

In order to remove this distortion, the EU implemented a comprehensive principle of destination taxation and introduced a special regime governing electronically supplied services, which now applies to most types of goods and services delivered online.<sup>386</sup> Under the destination principle, since 2003, non-EU suppliers providing B2C

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<sup>385</sup> Discussed in Oleksandr Pastukhov, ‘The E-VAT Directive: Mitigating Tax Competition or Spurring It?’ (2007) 2 *Journal of International Commercial Law and Technology* 54.

<sup>386</sup> Electronically supplied services include electronic goods and services. Council Directive 2002/38/EC of 7 May 2002 amending and amending temporarily Directive 77/388/EEC as regards the value added tax arrangements applicable to radio and television broadcasting services and

electronically supplied services must account for VAT in the country where their customers are resident, with an option to file tax returns via a single EU country of choice which collects and transfers VAT to destination states. When implemented, these rules did not apply, however, to intra-EU trade, and therefore EU-established suppliers could continue using the VAT rates of the countries where they were established.

This provided incentives for non-EU businesses companies to relocate to the EU jurisdictions with low VAT rates. As a result, companies such as Amazon, Apple and AOL moved to Luxembourg, which charged a general 15% rate and a reduced rate of 3% on electronic and physical books as well as other publications.<sup>387</sup> This created opportunities for minimising tax liabilities in destination markets, without having to pay VAT.

Having recognised the issue with forum shopping, the EU has further extended the scope of destination-based rules relating to B2C electronic supplies from 2015, whereby both EU and non-EU suppliers have to account for VAT using destination-state rates.<sup>388</sup> This change has aligned the tax regimes for EU and non-EU suppliers. In a sense, by moving towards destination-based taxation for EU suppliers, the EU has transitioned towards economic nexus standards based on sales, motivated by the need to re-establish jurisdictional nexus in relation to B2C electronic supplies. In addition, the

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certain electronically supplied services OJ 2002 L128/41. From 1 January 2007 this matter is regulated by Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax OJ 2006 L347/1 [‘EU VAT Directive’].

<sup>387</sup> ‘VAT forces AOL to Luxembourg’ <<http://www.internationaltaxreview.com/Article/2609886/VAT-forces-AOL-to-Luxembourg.html>> accessed 24 April 2011. The recent CJEU cases confirmed that application of reduced VAT rates to ebooks has been illegal in France and Luxembourg because such ebooks are more in the nature of electronic services which are not subject to reduced rates – see Case C-479/13 *European Commission v French Republic* (CJEU, 5 March 2015); Case C-502/13 *European Commission v Grand Duchy of Luxembourg* (CJEU, 5 March 2015).

<sup>388</sup> Council Directive 2008/8/EC of 12 February 2008 amending Directive 2006/112/EC as regards the place of supply of services OJ 2008 L44/11.

EU has created an enforcement nexus with suppliers by setting up a one-stop shop mechanism; e-tailers are now able to register with one Member State, which will collect and transfer VAT to other EU countries.<sup>389</sup>

These responses to corporation migration within the EU demonstrate that, given the mobility of origin nexus standards, governments have focused on destination-based taxation, as it is perceived as a more secure way to guarantee taxation of sales. As discussed below, the issue, however, is that the current destination tax regimes still utilise functional nexus proxies to identify where consumption takes place, which poses its own nexus issues.

## **2.2. Reliance of the place of supply rules on physical nexus standards**

B2B commerce uses physical nexus standards as a consumption proxy.<sup>390</sup> Essentially, there can be no taxable supply under EU VAT law, unless there is a fixed establishment capable of consuming the supply in a destination Member State.<sup>391</sup> These fixed establishments are different from permanent establishments under the OECD Model, but nevertheless follow similar physical nexus standards, requiring permanent human or technological presence capable of using the service rendered in the destination market.<sup>392</sup> If a business customer purchasing a digital supply has numerous fixed

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<sup>389</sup> Discussed at 2.6 further below. See generally Lamensch (n 122); Marie Lamensch, ‘Proposal for Implementing the EU One-Stop-Shop Scheme from 2015’ (2012) 23 *International VAT Monitor* 312.

<sup>390</sup> EU VAT Directive, art 56; Council Implementing Regulation (EU) No 282/2011 of 15 March 2011 laying down implementing measures for Directive 2006/112/EC on the common system of value added tax OJ 2011 L 77/1, arts 20–24; Discussed in van Kesteren and Merkx (n 118); Madeleine Merkx, ‘Fixed Establishments and VAT Liabilities under EU VAT – Between Delusion and Reality’ (2012) 23 *International VAT Monitor* 22; see Vazquez del Rey and Lasheras (n 119); Fabiola Annacondia and Walter van der Corput, ‘EU Place-of-Supply Rules from 2010 – VAT Committee Guidelines’ (2010) 21 *International VAT Monitor* 203.

<sup>391</sup> EU VAT Directive, art 56; VAT Implementing Regulation, arts 20–24; Discussed in van Kesteren and Merkx (n 118); Merkx (n 390); Rendahl (n 32) 265–272.

<sup>392</sup> VAT Implementing Regulation, art 11. See also Case C-168/84 *Gunter Berkholz v Finanzamt Hamburg-Mitte-Alstadt* [1985] ECR I-2251, [18], requiring that the fixed establishment must be of a ‘certain minimum size and both human and technical resources necessary for the provision of the

establishments in the EU, the place of supply will be in the country where the fixed establishment that is the most relevant to the supply is located.<sup>393</sup> The supplier determines the relevance of fixed establishments based on the information that its customer supplies, taking into consideration the actual destination of the digital service.<sup>394</sup>

This means that, similarly to physical proxies used for PEs, fixed establishments, when applied as VAT proxies, can be unreliable, since sales can be diverted to a convenient fixed establishment of a multinational group overseas. Even if the relevant establishments consuming the supply can be determined, there is currently no rule for splitting the VAT between multiple fixed establishments of a single group or entity.<sup>395</sup> This means that the entire amount of tax would be payable only in the country that is most effectively connected with the supply, leaving other countries without an opportunity to raise tax revenue, even if fixed establishments located in those countries benefit from the digital supplies.

### **2.3. Ineffectiveness of the ‘use and enjoyment’ backstop measure**

Reliance on VAT would also be ineffective as a compensatory measure for market nexus erosion because not all transactions targeted at the EU market would fall within

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services are permanently present’; Case C-260/95 *Commissioners of Customs & Excise v DFDS A/S* [1997] ECR I-1005, providing that a fixed ‘establishment must be independent and have sufficient resources, meaning that a mere separate personality of a subsidiary is insufficient to create a nexus’; Case C-210/04 *Ministero dell’Economia e delle Finanze, Agenzia delle Entrate v FCE Bank plc* [2006] ECR I-2803, [39], stating that a direct tax PE concept does not apply to VAT. Discussed, for example, in Antonio Vazquez del Rey, ‘VAT Connecting Factors: Relevance of the Place of Supply’ (2015) 43 *Intertax* 410.

<sup>393</sup> VAT Implementing Regulation, art 22(1).

<sup>394</sup> VAT Implementing Regulation, art 22(1).

<sup>395</sup> Discussed in Rahiela Abdoelkariem and Frank Prinsen, ‘The Interaction between Head Office, Branch and VAT Grouping: New Challenges Ahead for the European Union’ (2015) 26 *International VAT Monitor* 205, 206, noting that under the EU VAT Directive, art 9(1), the head office and its branch are always a single taxable persons and therefore recharging of costs between them is not subject to VAT.

the EU VAT net.<sup>396</sup> If a buyer's fixed establishment is located outside the EU, any transaction will not be subject to VAT altogether, as it will be outside the scope of EU VAT under the destination principle. Although the transaction that falls contractually outside the EU can be brought back within the EU VAT net if it is effectively used and enjoyed in the EU, there are several limitations to this anti-avoidance provision, negating the potential upside from an overall increase in reliance on VAT.

One of the impediments to overreliance on VATs within the EU setting is that the use and enjoyment test does not apply to intra-EU supplies.<sup>397</sup> This means that determining the place of supply in an EU country where the supply may actually be used and enjoyed would be impossible. This means that, for instance, a rise in VAT rates to compensate for direct nexus erosion, without the effective use and enjoyment test applicable to intra-EU supplies, may not be a viable compensatory measure. Introduction of the effective use and enjoyment test for intra-EU transactions, however, would be impossible since this would contradict the essence of the harmonised EU market.

Even where the 'effective use and enjoyment' provision can be invoked, it would suffer from definitional problems as it is not specifically defined in the EU law and is subject to interpretation on a case-by-case basis, potentially creating uncertainty for taxpayers and tax authorities.<sup>398</sup> It has, therefore, been suggested that specific proxies should be introduced into VAT law so that the application of the use and enjoyment

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<sup>396</sup> EU VAT Directive, arts 58–59; discussed in Thomas Ecker, 'Place of Effective Use and Enjoyment of Services – EU History Repeats Itself' (2012) 23 *International VAT Monitor* 407. See also Joep JP Swinkels, 'Effective Use and Enjoyment of Services under EU VAT' (2009) 20 *International VAT Monitor* 208; Richard T Ainsworth, 'Use and Enjoyment of Intangible Services: The German, Austrian, Danish and Estonian VAT Derogations' (2009) 54 *Tax Notes International* 273.

<sup>397</sup> EU VAT Directive arts 58–59; Ecker (n 396) 407.

<sup>398</sup> Gorka E Zubeldia, 'Legal Uncertainty of the EU Effective-Use-and-Enjoyment Criterion' (2012) 23 *International VAT Monitor* 228, 228; Ecker (n 396) 408–409.

criterion could become more predictable, but they all revolve around significant business presence, which may be even vaguer.<sup>399</sup>

For now, the use and enjoyment test still operates the concept of fixed establishments. This means that reliance on VAT would not affect distant trade associated with market presence in the EU. In the context of trade conducted from outside the EU, it would be impossible to deem a supply to take place within the EU if none of the parties to the transaction has a fixed establishment in a Member State, despite maintaining significant market presence there.

As a result, the existing interpretation of the use and enjoyment test shows that the application of the test in certain circumstances may reallocate taxable sales to the countries other than the destination states where market presence is felt more strongly. For example, in *Athesia Druck* advertisements were shown to EU consumers but supplied by an EU agency to a non-EU business customer.<sup>400</sup> The court held that the advertising service, despite being supplied outside the EU, was effectively used and enjoyed in the country from which the advertisements were disseminated, i.e. in the state where the advertising agency was established.<sup>401</sup> If such an interpretation of the test in the traditional advertising context were transposed to the digital industry, it would become evident that the test might be inadequate when applied to certain digital business models.

Suppose that an online advertising agency located in Luxembourg supplies services to a US holding company, which buys advertisements targeted at UK

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<sup>399</sup> Ecker (n 396) 409–410.

<sup>400</sup> Case C-1/08 *Athesia Druck Srl v Ministero dell'economia e delle finanze and Agenzia delle entrate* [2009] ECR I-1255, [38]. See Ecker (n 396) 409.

<sup>401</sup> *Athesia Druck* (n 400) [38].

consumers. In that case, the advertising fee may be brought within the EU VAT charge but would be taxable in Luxembourg rather than the UK where final consumers may be viewing these advertisements. Furthermore, if the Luxembourg online publisher supplies the same services to a business customer in Ireland, instead of the US, the effective use and enjoyment test would not be applicable altogether since the supply would be within the EU. Given that the place of supply and thus VAT would be due where the business customer is established, i.e. in Ireland, the UK would be left outside the scope of VAT, despite the market presence that both the publisher and its customer may maintain there. All this makes the use and enjoyment test highly difficult to apply to compensate for sales nexus erosion.

#### **2.4. Sales diversion under global framework agreements**

In addition, if a supply is made under a global framework agreement, the parent company or the treasury company of the business customer may purchase electronic services to be subsequently used by the group members and their divisions.<sup>402</sup> The legal qualification of this transaction will depend on whether the global agreement is for the benefit of the entire group or is regarded as a framework term sheet under which separate supplies will be made to each group member.

In the former case, VAT will be due in the country where the global purchaser is located, while in the latter case every supply will be subject to VAT in the country

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<sup>402</sup> Discussed in Walter Hellerstein, 'Exploring the Potential Linkages Between Income Taxes and VAT in a Digital Global Economy' in Michael Lang and Ine Lejeune (eds), *VAT/GST in a Global Digital Economy* (Kluwer Law International 2015) 104-115; see OECD, *BEPS Digital Taxation Report 2014* (n 13) 107: 'It is common practice for multinational businesses to arrange for a wide scope of services to be acquired centrally to realise economies of scale. Typically, the cost of acquiring such a service or intangible is initially borne by the establishment that has acquired it and, in line with normal business practice, is subsequently recharged to the establishments using the service or intangible. The establishments are charged for their share of the service or intangible on the basis of the internal recharge arrangements, in accordance with corporate tax, accounting and other regulatory requirements. However, many VAT jurisdictions do not currently apply VAT to transactions that occur between establishments of one single legal entity'.

where fixed establishments using the services are located.<sup>403</sup> Moreover, if it is a global contract for the benefit of the entire group and the branches of the parent company rather than its subsidiaries use the service, there can be no VAT-able supply since head office / PE transactions are currently outside the scope of EU VAT.<sup>404</sup>

While the issues relating to sales diversion under the framework contracts can be rectified by making intragroup supplies within multinationals taxable, with VAT being recharged from the main group company to the subsidiaries or branches that effectively use an electronic service, this is yet to be endorsed within the EU, which may face issues with the single market approach.<sup>405</sup>

## 2.5. VAT fraud

A major flaw in the design of the current EU VAT regime, which would prevent it from being an effective measure for taxing market presence in the context of digital commerce, is the credit system for offsetting input tax against output tax.<sup>406</sup> While input tax credits enable the tax system to be neutral for businesses, ‘breaks’ in supply chains

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<sup>403</sup> Ine Lejeune, Ellen Cortvriend and Davide Accorsi, ‘Implementing Measures Relating to EU Place-of-Supply Rules: Are Business Issues Solved and Is Certainty Provided?’ (2011) 22 *International VAT Monitor* 144, 160.

<sup>404</sup> *FCE Bank* (n 392); discussed, for example, in van Kesteren and Merckx (n 118) 634. See also Case C-7/13 *Skandia America Corp (USA) filial Sverige v Skatteverket* (CJEU, 17 September 2014) concerning supplies from outside the EU to an EU branch as part of the EU VAT group, which was considered taxable in the EU – discussed in Odile Courjon, ‘New Rules for Head Office to Branch Scenarios - Comments on the Skandia Case’ (2015) 26 *International VAT Monitor* 22; Simon Cornielje and Ivan Bondarev, ‘Scanning the Scope of Skandia’ (2015) 26 *International VAT Monitor* 17. There is some further scope to argue that pan-European VAT grouping could be introduced in the near future, blurring the distinction between national regimes across European countries – see discussion in Claudia Dias Soares and Afonso Arnaldo, ‘VAT Grouping Schemes – Standpoint’ (2015) 26 *International VAT Monitor* 86.

<sup>405</sup> OECD, *International VAT/GST Guidelines* (n 58) 3.32. The so-called economic approach is endorsed in other countries, such as Australia – discussed in Abdoelkariem and Prinsen (n 395) 205–206.

<sup>406</sup> See, for example, Michael Keen and Stephen Smith, ‘VAT Fraud and Evasion: What Do We Know, and What Can be Done?’ (2006) 59 *National Tax Journal* 861; Michael Walpole, ‘Tackling VAT Fraud’ (2014) 25 *International VAT Monitor* 258.

as a result of export zero-rating and tax exemptions, coupled with reverse charge for cross-border services, make the system vulnerable to missing trader fraud.<sup>407</sup>

The digital services industry is particularly vulnerable to this type of fraud because it may be difficult to verify whether the supply of digital services actually took place or was only recorded on paper. As a result, the enforcement mechanism has suffered from VAT fraud in the context of digital trade in CO<sub>2</sub> certificates and VoIP minutes, where the actual movement of physical goods is not involved.<sup>408</sup>

Although the EU has introduced an anti-fraud mechanism, whereby Member States can apply reverse charging for selected industries on a temporary basis, this measure may be challenging to justify for the entire digital industry, as compliance incidence would be shifted from larger wholesalers to smaller retailers, which may be less reliable in complying with VAT requirements.<sup>409</sup>

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<sup>407</sup> Richard T Ainsworth, 'VAT Fraud as a Policy Stimulus - Is the US Watching? VAT Withholding, RTvat, and the Mittler Model' Boston University School of Law Working Paper No 11-08 (February 24, 2011) <<http://www.bu.edu/law/faculty/scholarship/workingpapers/2011.html>> accessed 2 March 2013; Keen and Hellerstein, 'Interjurisdictional Issues in the Design of a VAT' (n 111) 369: This type of tax fraud involves a company, the so-called 'missing trader', that purchases services from another country and self-accounts for VAT using the reverse charge mechanism. It does not actually remit the tax to the budget but rather charges output VAT at a later stage when services are resold through a layer of companies to another Member State. Hence, such a trader neither pays the tax on the purchased service nor remits its tax on the subsequent supply, going missing as soon as a tax audit begins. The subsequent purchaser is entitled to tax credits and can be entitled to tax rebates on export.

<sup>408</sup> Richard T Ainsworth, 'VoIP MTIC – The Italian Job (Operazione "Phuncards-Broker")' (2010) 58 *Tax Notes International* 721; Richard T Ainsworth, 'The Morphing of MTIC Fraud: VAT Fraud Infects Tradable CO<sub>2</sub> Permits' (2009) 55 *Tax Notes International* 733; Richard T Ainsworth, 'VAT Fraud: MTIC & MTEC – The Tradable Services Problem' (2010) 61 *Tax Notes International* 217.

<sup>409</sup> Tumpel and Wurm (n 121) 603; Crawford, Keen and Smith (n 108) 314: 'Universal reverse charging, as proposed by Austria and Germany, avoids these difficulties. But it also, in effect, turns the VAT into something closely akin to a single-stage retail sales tax, with tax payments suspended until goods are sold to final consumers (albeit with the possibility of cumbersome reporting procedures for B2B transactions). The danger of this is obvious: it undermines the fractional nature of the VAT and instead collects all VAT revenue at the final sale, so exposing the system to substantially greater risks of revenue loss through unreported sales to final consumers. In effect, the VAT would be converted into an RST'.

The general conclusion, therefore, is that, even if a jurisdiction increases its reliance on sales taxes, such as VAT, to compensate for profits tax nexus erosion and to capture sales in the market jurisdiction, it may not be too difficult to divert supplies to other countries under global contractual arrangements.<sup>410</sup> Given the harmonised VAT rules, it may also be difficult to implement the sales anti-diversion rules for the purposes of fixing VAT, unless the overall tax design is changed by introducing amendments to the EU VAT Directive permitting the use of the force of attraction rules and extending the use and enjoyment criterion. This is, however, unrealistic to expect even in the long term.<sup>411</sup>

## **2.6. Enforcement nexus challenges**

Given that the EU VAT operates as a transactional sales tax, often compliance in market jurisdiction can be compromised where purchasers are part of a scheme that operates a fraud mechanism or where supplies are made to consumers without any physical presence in destination countries. In this context, enforcement nexus have to be reinforced through a number of mechanisms suggested in the literature. None of them, however, have been implemented yet, except for the simplified version of MOSS. Without certainty around compliance nexus, however, it would be difficult to rely on sales taxes to compensate for direct tax nexus erosion.

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<sup>410</sup> Rebecca Millar, 'Potential Solutions and the Framework to Make Them Work' in Michael Lang and Ine Lejeune (eds), *VAT/GST in a Global Digital Economy* (Kluwer Law International 2015) 178: 'Suggestions that the most effective response to the BEPS problem is to collect VAT on supplies by the likes of Google, Apple and Microsoft, rather than to impose income tax on their profits, should be objected to not only because they ignore the practical difficulties of collecting VAT from non-established, non-resident suppliers, but also because they miss their mark as a response to the real core of community concern'.

<sup>411</sup> By design, the inapplicability of the use and enjoyment test to intra-EU trade is designed to promote the single EU market, meaning that it is irrelevant where VAT is payable as long as it is due within the EU. This, however, would make the EU VAT an ineffective measure for compensating for the erosion of profits tax base in individual countries within the EU.

As noted earlier, the EU has implemented a trial version of a VAT compliance mechanism, whereby suppliers of digital services are required to register with the Member State of their choice to report and pay VAT due in relation to EU supplies.<sup>412</sup> The system relies on the ability of digital suppliers to identify location of consumers based on a checklist, which generally looks at the location of permanent residence using the billing address proxy.<sup>413</sup>

The upside of the model is that it offers simplicity for digital suppliers as it reduces compliance costs relating to EU supplies.<sup>414</sup> The system further simplifies nexus proxies by listing the key indicators of consumer residence, whilst relieving suppliers of the obligation to prove the actual place of consumption. At the same time, the system has been criticised for being voluntary in nature, as Member States lack the necessary enforcement infrastructure to force non-EU suppliers, especially smaller businesses, to register with the scheme.<sup>415</sup> Further, it has been argued that the system is fraught with uncertainties regarding the facts-and-circumstances tests suggested for determining residence of private consumers.<sup>416</sup>

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<sup>412</sup> Council Regulation (EU) No 967/2012 of 9 October 2012 amending Implementing Regulation (EU) No 282/2011 as regards the special schemes for non-established taxable persons supplying telecommunications services, broadcasting services or electronic services to non-taxable persons OJ 2012 L 290/1; European Commission, *Guide to the VAT mini One Stop Shop* (23 October, 2013); European Commission, *VAT MOSS Explanatory Notes* (n 122).

<sup>413</sup> See European Commission, *VAT MOSS Explanatory Notes* (n 122) 59.

<sup>414</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 201, noting that ‘the application of fast track processing and “One Stop Shop” regimes at regional/national level could facilitate tax compliance obligations by non-resident vendors, including small and medium size vendors’.

<sup>415</sup> Aleksandra Bal, ‘Taxation of Digital Supplies in the European Union and United States – What Can They Learn from Each Other?’ (2015) 55 *European Taxation* 245, 251, noting that ‘[e]nforcing the OSS regime is difficult in a digital context with multiple, and often low-value, transactions. Tax authorities have limited possibilities to sanction third-country suppliers who fail to register and report their supplies to EU customers ... It is questionable whether the fact that tax collection in cross-border scenarios is reliant on voluntary compliance by non-resident suppliers is acceptable from a neutrality and competition perspective in the long term. Without effective supervision and enforcement, there is a risk of non-taxation that threatens to distort competition’.

<sup>416</sup> Lamensch (n 122) 13–14.

Whilst the EU MOSS is a positive step towards creating a reliable and understandable mechanism for VAT compliance, it is still far beyond the levels of compliance that the literature has suggested would be necessary to ensure capturing of sales in the digital world in relation to B2B transactions, which still rely on reverse charging mechanisms. In this regard, several suggestions relating to automated enforcement have been considered in policy papers and in the literature.<sup>417</sup>

The first option is to introduce special VAT accounts.<sup>418</sup> Under this model, the purchaser would pay VAT into a blocked VAT account that can only be used for paying the tax. The advantage of this option is that tax authorities become capable of monitoring and blocking funds on the VAT bank accounts at an early stage of collection when VAT is physically transferred to a blocked bank account. Despite the seeming simplicity, the model would create cash flow and compliance issues for businesses, whilst overburdening financial institutions and leaving cash and e-payments outside the scope of the compliance mechanism.

Another alternative option would involve creating a central VAT monitoring database.<sup>419</sup> The model could only work if electronic invoicing and electronic

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<sup>417</sup> Practical proposals discussed further below and more radical enforcement solutions considered in Chapter 5 from n 723.

<sup>418</sup> Discussed in Crawford, Keen and Smith (n 108) 315; assessed in PwC, *Study on the Feasibility of Alternative Methods for Improving and Simplifying the Collection of VAT Through the Means of Modern Technologies and/or Financial Intermediaries. Executive Summary* (20 September, 2010) 6–7; PwC, *Study on the Feasibility of Alternative Methods for Improving and Simplifying the Collection of VAT Through the Means of Modern Technologies and/or Financial Intermediaries* (Order No TAXUD/2009/AO-05 Final Report 20 September, 2010) 144–177; European Commission, *Accompanying Document to the Green Paper on the Future of VAT. Towards a Simpler, More Robust and Efficient VAT System* (Commission Staff Working Document SEC(2010) 1455 Final, 1 December, 2010), 102; European Commission, *Summary Report of the Outcome of the Public Consultation on the Green Paper on the Future of VAT: Towards a Simpler, More Robust and Efficient VAT System (1 December 2010–31 May 2011)* (Taxudc1(2011)1417007, 2011) (n 418) 58–60.

<sup>419</sup> PwC, *Executive Summary of the Study on Alternative Methods for VAT Collection*(n 418) 8–9; PwC, *Final Report on the Study on Alternative Methods for VAT Collection* (n 418) 178–199; European Commission, *EC Summary Report on the Outcome of the Public Consultation of the VAT*

registration of transactions is made obligatory for B2B transactions, which the tax authorities would access at an early stage. The system would, however, overload tax inspectors with largely irrelevant and sensitive data, whilst necessitating substantial capital investments by businesses.

Another option for tackling VAT enforcement would involve switching to the VAT data warehouse model.<sup>420</sup> The accounting system would need to be able to generate a standard audit file and the data in that file would have to be stored in a secure data warehouse that the tax authorities could access.<sup>421</sup> Although the model would allow monitoring and auditing of all activities within an entire sector and supply chain, it would also become just another auditing tool for the tax authorities.

Under the final option, the certified taxable person, the taxpayer, would be required to comply with the requirements for certification and invest in an internal control system.<sup>422</sup> The benefit of the model is additional assurance that taxable persons use compliant systems and that the risk level diminishes. The model should lead to a higher-level cooperation between the business and the tax authorities, resulting in more correct tax assessments, a reduced need for audits and the reduction of tax inspectors' workload. However, this model would simply offload compliance obligations onto

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*Green Paper* (n 418) 60–61; European Commission, *Staff Working Document Accompanying the EC VAT Green Paper* (n 418) 102.

<sup>420</sup> PwC, *Executive Summary of the Study on Alternative Methods for VAT Collection* (n 418) 9; PwC, *Final Report on the Study on Alternative Methods for VAT Collection* (n 418) 200–219; European Commission, *EC Summary Report on the Outcome of the Public Consultation of the VAT Green Paper* (n 418) 62–63; European Commission, *Staff Working Document Accompanying the EC VAT Green Paper* (n 418) 102–103.

<sup>421</sup> This model has already been implemented in some OECD countries. The requirements have been defined in the OECD guidance for the standard audit file in 2010. See OECD, *Guidance Note. Guidance for the Standard Audit File – Tax Version 2.0* (2010).

<sup>422</sup> PwC, *Executive Summary of the Study on Alternative Methods for VAT Collection* (n 418) 10; PwC, *Final Report on the Study on Alternative Methods for VAT Collection* (n 418) 220–241; European Commission, *EC Summary Report on the Outcome of the Public Consultation of the VAT Green Paper* (n 418) 63–64; European Commission, *Staff Working Document Accompanying the EC VAT Green Paper* (n 418) 102–103.

suppliers, without offering anything new in terms of automation and simplification of the VAT collection process.

Overall, the lack of adequate enforcement mechanisms for intangible sales creates additional complexities for market countries that may rely on capturing sales to be able to raise sufficient tax revenue. While several proposals have been developed regarding enforcement mechanisms, they would only marginally boost confidence in market tax authorities, without adding much value in terms of simplifying tax enforcement and restoring nexus. For this reason, reliance on sales nexus standards to compensate for profits nexus erosion could be difficult to achieve in the short term, without ensuring businesses' compliance with market countries' demands.

## **Conclusion**

This chapter discussed sales nexus challenges arising in the context of digitalisation of global commerce. Whilst it has been suggested in the literature that sales taxation could act as a backstop measure to compensate source countries for direct nexus tax erosion, it has been argued that in the context of the US sales tax and the EU VAT models, sales nexus erosion would also create uncertainty for tax revenue streams in destination countries.

In the context of the US sales tax models, it was explained that constitutional constraints prevent states from enacting a comprehensive set of non-physical nexus standards, and therefore they have resorted to amending the physical enforcement nexus to adapt them to the digital commerce realities. This has led to the emergence of the so-called 'Amazon' nexus standards, which still, however, rely on various degrees of physical connections between out-of-state vendors and target markets, ranging from affiliate to click-through nexus.

While the sales tax nexus issues could be rectified through adopting economic nexus standards under the due process jurisprudence, there are certain reservations about whether these nexus factors can be enforced without sufficiently tested mechanisms for automated compliance. While the SSUTA mechanism is in place, it does not offer a sufficiently sophisticated system that could be transposed to the EU VAT regime in the context of complex business-to-business supplies, as this system would involve a significant degree of judgment when applying the rules.

In the EU VAT context, sales taxation in destination markets also uses physical proxies for determining places of supply. As a result, VAT fraud and the inefficiency of the use and enjoyment backstop measures further challenge the reliability of VAT as a compensatory measure for direct nexus erosion. Whilst enforcement mechanisms are being reformed to ensure simplified compliance for overseas suppliers, the mechanisms currently in force are voluntary and, thus, do not offer sufficient certainty as to whether sales revenue streams would remain secure.

It has, therefore, been suggested that, due to significant reliance of the current direct and indirect tax models on physical nexus proxies, digital commerce may warrant alternative solutions, as proposed in the literature. These solutions would move towards more globalised virtual nexus, which would tax e-commerce globally and enforce the rules through a clearing house. Alternatively, more relaxed territorial virtual nexus standards could be adopted to capture the value that digital enterprises extract from source countries, without maintaining substantial physical presence there. The viability of both these proposals is considered in the subsequent two chapters in the light of the Internet governance developments.

## **PART III. GLOBAL AND TERRITORIAL VIRTUAL NEXUS SOLUTIONS**

### **CHAPTER 4. GLOBAL NEXUS SOLUTIONS**

#### **Introduction**

In the previous chapters it was argued that the non-territorial and mobile nature of digital commerce challenges the international tax regime, which has been traditionally based on physical nexus standards.

In the area of direct taxation, whilst it should be possible to address some of the issues relating to physical nexus erosion through adjusting PE standards for dependent agents and ancillary activities, this would mean applying the same physical nexus standards, albeit in a modified form. In the area of indirect taxation, although collection issues are being addressed using the mini one-stop shop in the EU and other jurisdictions, issues still remain with regard to physical proxies for taxable supplies, especially in B2B sales, which can be prone to diversion within multinational corporate structures.

As noted earlier, there are a number of scenarios that could be used to address the issues relating to nexus erosion. One route would entail designing a global solution for the borderless trade, while an alternative solution would relax territorial nexus rules even further, establishing virtual nexus standards. This chapter discusses the first model, the global nexus solution, which could apply either across all industries or in respect of automated digital commerce specifically.

It is argued below that, although Internet commerce conducted over the borderless network logically warrants a global solution, it might cause substantial sovereignty issues, as has been witnessed in the context of the wider Internet

governance regimes. The challenges of the global governance regime are illustrated using the example of the Internet Corporation for Assigned Names and Numbers (ICANN), a US not-for-profit corporation that governs the Internet architecture through controlling the core Internet connectivity infrastructure. It is argued that, although ICANN appears to be a global governance institution, it has only survived due to being an extension of the territorial US regime rather than a genuine supranational authority.

It is, therefore, argued that, since there is no global authority in international taxation, backed by a powerful nation-state, it would be difficult to ensure effective operation of a global governance regime for digital commerce taxation. Whilst establishing a global solution for Internet governance has been possible because the Internet originated from the US research programme, which superimposed a desirable governance structure, tax governance is different in the sense that it is based on the international cooperation of historically disentangled states competing for tax revenues.

It is concluded that, since the legitimacy of the global governance regime for the Internet itself has been constantly questioned, it is even more unrealistic to expect any unanimity regarding the international tax governance regime for digital commerce. For this reason, it is concluded that the more likely scenario is that the international business community would follow the general trend in Internet and tax governance jurisprudence and focus on international cooperation in designing territorial solutions that are enforceable using intermediaries.

## **1. Globalisation of cross-border taxation**

### **1.1. Utopian view**

Early commentators on the framework for Internet regulation advocated the view that issues relating to the separation of global digital realities from the offline world could be resolved ‘by one simple principle: conceiving of Cyberspace as a distinct “place” for

purposes of legal analysis by recognising a legally significant border between Cyberspace and the “real world”<sup>423</sup>. They argued that the Internet’s freedom was built into its protocols, and therefore cyberspace did not require any political institutions to control it:

Global computer-based communications cut across territorial borders, creating a new realm of human activity and undermining the feasibility – and legitimacy – of laws based on geographical boundaries. While these electronic communications play havoc with geographic boundaries, a new boundary, made up of the screens and passwords that separate the virtual world from the ‘real world’ of atoms, emerges. This new boundary defines a distinct Cyberspace that needs and can create its own law and legal institutions.<sup>424</sup>

Cyber-libertarians further argued for placing control over the Internet in the hands of self-governing communities of engineers and Internet users, with national governments retaining no real power over Internet resources:

Territorially based lawmakers and law-enforcers find this new environment deeply threatening. But established territorial authorities may yet learn to defer to the self-regulatory efforts of Cyberspace participants who care most deeply about this new digital trade in ideas, information, and services. Separated from doctrine tied to territorial jurisdictions, new rules will emerge to govern a wide range of new phenomena that have no clear parallel in the nonvirtual world. These new rules will play the role of law by defining legal personhood and property, resolving disputes, and crystallizing a collective conversation about online participants’ core values.<sup>425</sup>

The self-governance regime appealed to early Internet engineers and developers who played a major role in the development of the Internet in its early stages and who, therefore, believed that the Internet could be freed from state regulation and effectively controlled using self-governing codes of conduct.

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<sup>423</sup> For a comprehensive discussion of Internet governance models see generally Mayer-Schonberger (n 14). The cyber-libertarian position is set out in David R Johnson and David Post, ‘Law and Borders – The Rise of Law in Cyberspace’ (1996) 48 *Stanford Law Review* 1367, 1378. See other cyber-libertarians’ discourse, for example, in Lawrence Lessig, ‘Reading the Constitution in Cyberspace’ (1996) 45 *Emory Law Journal* 869; I Trotter Hardy, ‘The Proper Legal Regime for “Cyberspace”’ (1994) 55 *University of Pittsburgh Law Review* 993; Henry H Perritt, ‘Cyberspace Self-Government: Town Hall Democracy or Rediscovered Royalism?’ (1997) 12 *Berkeley Technology Law Journal* 413.

<sup>424</sup> Johnson and Post (n 423) 1367.

<sup>425</sup> Johnson and Post (n 423) 1367.

In this regard, cyber-libertarians argued that, given ‘the power to control activity in Cyberspace has only the most tenuous connections to physical location’, it is unsatisfying that:

rather than permitting self-regulation by participants in online transactions, many governments establish trade barriers, attempt to tax border-crossing cargo, and respond especially sympathetically to claims that information coming into the jurisdiction might prove harmful to local residents.<sup>426</sup>

This perception of the offline world has been explained by the fact that ‘[l]ibertarians looked at the Internet and rejoiced, because they saw in it a world without the state, and environment without taxation, censorship, or regulation’.<sup>427</sup>

Arguably, the cyber-libertarians’ views revolve around a somewhat dated idea that, if cyberspace activity could be freed from state control, many issues surrounding jurisdictional conflicts and overreaching state claims would be resolved, leaving all powers to the self-governing community of users who would abide by social norms of the Internet. However appealing this scenario may seem, it is far removed from the practical realities of the legal and regulatory world, where national governments have strongly asserted their interest in regulating Internet activities, even those having the most tenuous connection with their state territory.

An insurmountable wall of national interests competing for a share in tax revenue would most likely block any movements towards surrendering control over the Internet to the community of users.<sup>428</sup> In this regard, one should not be confused by the title of

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<sup>426</sup> Johnson and Post (n 423) 1371.

<sup>427</sup> Mueller 2002 (n 14) 265.

<sup>428</sup> Proposals regarding freedom from taxation discussed in Doernberg (n 108) 572–574; Donald Bruce, William F Fox and Matthew N Murray, ‘To Tax or Not to Tax? The Case of Electronic Commerce’ (2003) 21 *Contemporary Economic Policy* 25 (concluding that it is difficult to make the case for not taxing e-commerce on the basis of the optimal tax theory); Bo Sandermann Rasmussen, ‘On the Possibility and Desirability of Taxing E-Commerce’ Working Paper No 2004-08, Department of Economics, University of Aarhus <<http://ssrn.com/abstract=595525>> accessed 5 September 2015; James S Gilmor, ‘No Internet Tax. A Proposal Submitted to the ‘Policies & Options’ Paper of the

the Internet Tax Freedom Act adopted in the USA in 1998.<sup>429</sup> This statute does not achieve anything more than a competitive advantage for US-based technology enterprises by prohibiting multiple and discriminatory taxes on Internet access, while maintaining the right to levy other pre-existing state charges, such as sales, gross receipts and state income taxes.<sup>430</sup> In addition, the moratorium is temporary, with the latest bans being extended yearly until the end of 2015, which illustrates that the key objective behind the Act is to provide a temporary boost to the market position of US technology companies globally.<sup>431</sup>

It may, therefore, be impracticable to expect that national governments would voluntarily abstain from exercising their tax jurisdiction over Internet-based commerce, unless their policy objective is to give a competitive advantage to local innovative enterprises. However noble the aim of supporting innovation may seem, if implemented only by a handful of governments it would not survive tax arbitrage practices, whereby migrating firms could enjoy the available tax freedoms. Even if innovation incentives are carefully crafted, it is highly unlikely that such an incentive regime would free Internet commerce proceeds from all forms of taxation altogether, as a cyber-libertarian theory would envisage, meaning that e-commerce would still remain in the realm of a bordered Internet where local tax authorities compete for tax revenues.

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Advisory Commission on Electronic Commerce'  
<[http://lobby.la.psu.edu/043\\_3%25\\_Excise\\_Tax/Organizational\\_Statements/E-Freedom/E-Freedom\\_Gilmore\\_Proposal\\_No\\_Internet\\_Tax.htm](http://lobby.la.psu.edu/043_3%25_Excise_Tax/Organizational_Statements/E-Freedom/E-Freedom_Gilmore_Proposal_No_Internet_Tax.htm)> accessed 5 September 2015.

<sup>429</sup> Internet Tax Freedom Act 1998, s 1101(a). Discussed in Charles E Jr McLure, 'Thinking Straight about the Taxation of Electronic Commerce: Tax Principles, Compliance Problems, and Nexus' (2002) 16 *Tax Policy and the Economy* 115.

<sup>430</sup> Internet Tax Freedom Act 1998, s 1101(b): 'Except as provided in this section nothing in this title shall be construed to modify, impair, or supersede, or authorize the modification, impairment, or superseding of, any State or local law pertaining to taxation that is otherwise permissible by or under the Constitution of the United States or other Federal law and in effect on the date of enactment of this Act'.

<sup>431</sup> Extended to 1 October 2015 by Public Law 113–235, s 624.

## 1.2. Realistic view

A more realistic theory developed in the literature would design an international tax regime for the Internet. The idea behind global tax regimes has been generally justified by the overall globalisation of the economy, which has challenged state sovereignty and created opportunities for governments to coordinate their regulation, including tax policy, on a greater scale:

Territorial states ... are not particularly well-suited to the taxation of nonterritorial electronic commerce. Consequently, as electronic commerce grows in volume, states will experience a corresponding decline in their ability to tax global commerce. More precisely, states are likely to experience a decline in their *autonomous* taxing abilities, since any measures developed to tax electronic commerce will ... almost certainly have to involve the establishment of collective, multilateral arrangements among many states.<sup>432</sup>

The development of the Internet as a global medium for international trade has exacerbated the effects of economic globalisation and thus prompted regulatory responses envisaging the implementation of a global governance regime. In this regard, on the basis that ‘the Internet may not be a separate, self-governing, libertarian utopia’, which is ‘still a realm that hampers government regulation’, it has been suggested that the Internet architecture requires a global system of regulation that would respect the Internet community’s freedom and balance it with national interests. As Solum explains in this respect:

Closely related to the idea that cyberspace is an independent realm outside the control of national governments is the notion that the Internet should be governed by special transnational institutions that are outside the control of national governments and instead answer to the ‘Internet community’ or the ‘community of network engineers’.<sup>433</sup>

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<sup>432</sup> Roland Paris, ‘The Globalization of Taxation? Electronic Commerce and the Transformation of the State’ 47 *International Studies Quarterly* 153, 175.

<sup>433</sup> Solum (n 187) 59. On the global governance approach to the Internet see Dan L Burk, ‘Federalism in Cyberspace’ (1996) 28 *Connecticut Law Review* 1095; Michael A Geist, ‘The Reality of Bytes: Regulating Economic Activity in the Age of the Internet’ (1998) 73 *Washington Law Review* 521.

These views have been transformed into a multi-stakeholder model of governance, which envisages that an international body should unite all interested parties, from private stakeholders to national administrations, and develop either a global or at least a harmonised system of rules that would govern online behaviour.<sup>434</sup> In an ideal world, such a scenario would have achieved an effective mechanism for regulating highly fluid online behaviour that easily transcends national boundaries.<sup>435</sup> This would be particularly convenient in the context of international taxation, which would no longer require compliance with multiple diverging tax codes.

Appreciating the practical reasons associated with designing a global governance regime, a number of scholars have emphasised the dominance of states in governing the Internet and enforcing traditional laws.<sup>436</sup> They seek to promote national governments' importance in determining Internet policy, whilst diminishing other parties' positions, asserting that there is nothing fundamentally new about the Internet and, therefore, claiming that only national institutions could provide the public goods required for the Internet to work properly.<sup>437</sup>

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<sup>434</sup> See generally Jeremy Malcolm, *Multi-Stakeholder Governance and the Internet Governance Forum* (Terminus Press 2008); Mueller 2010 (n 14) ch 5.

<sup>435</sup> Taubman (n 44) 18: 'Although the Internet was conceived and crafted in the context of a national defence programme during the Cold War, and the US continues to assert national authority over the main components of Internet architecture, conceptually it was born global; and in practice, it is famously blind to national boundaries, confronting assumptions about the reach and effect of national legal jurisdictions'.

<sup>436</sup> On conservative views regarding cyberspace governance see Jack L Goldsmith, 'Against Cyberanarchy' (1998) 65 *University of Chicago Law Review* 1199; Jack L Goldsmith, 'The Abiding Significance of Territorial Sovereignty' (1998) 5 *Indiana Journal of Global Legal Studies* 475; Neil Weinstock Netanel, 'Cyberspace Self-Governance: A Skeptical View from Liberal Democratic Theory' (2000) 88 *California Law Review* 395.

<sup>437</sup> See Frank H Easterbrook, 'Cyberspace and the Law of the Horse' (1996) 11 *University of Chicago Legal Forum* 207, 207–208.

In reality, there has always been considerable tension between the global and territorial approaches, and, hence, neither of them has existed in its pure form.<sup>438</sup> Given that the Internet is an important resource, which governments view as an integral part of their national sovereignty, they are not ready to give up control over the network and delegate exclusive power to the global Internet community.<sup>439</sup> At the same time, the non-territorial design of the Internet that transcends national borders makes it impossible for national governments to adopt a purely nation-centric view.

In international taxation, similar trends can be observed. The idea of a globalised Internet regime has inspired proposals to transition to a global tax regime, which would address the issues that the international community is currently facing in connection with the digitisation of cross-border commerce. The more radical proposals would, thus, introduce a comprehensive global profit split or a more focused digital commerce tax, enforced through an international body.<sup>440</sup>

The global e-commerce tax would apply to income from all types of cross-border e-commerce transactions, without distinguishing between business profits and portfolio income.<sup>441</sup> Whilst it is proposed that the tax should apply on a net basis, it is unclear how attribution rules would operate in practice.<sup>442</sup> Instead of national governments, the tax would be payable as a certain percentage of profits or revenue to an artificially

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<sup>438</sup> See Mueller 2010 (n 14) 2–3.

<sup>439</sup> Schultz (n 19) 802, arguing that “‘illusions of a borderless world’ remain very strongly anchored in our collective imagination. But the reality appears to be that the Internet is being carved up into discrete legal spheres’.

<sup>440</sup> Discussed further below at 3.

<sup>441</sup> Azam (n 70) 664. See also Azam (n 70).

<sup>442</sup> Azam (n 70) 665, arguing that ‘[d]espite the costs of attribution difficulty, a GET [global e-commerce tax] on net income is better than a GET on gross income, for both equity and efficiency reasons. It also bears mention that ... the GET model will have to cope with attribution issues insofar as it is imposed on global e-commerce income which should be distinguished and separated from national e-commerce income and non-e-commerce income’.

created global tax fund, managed by a global body comprised of national representatives, who would tax e-commerce income using technological solutions and reinvest proceeds in developing the Internet infrastructure.<sup>443</sup>

It has been argued that the proposed global e-commerce tax would address the issues created by the borderless Internet by dispensing with the need to establish where exactly value is produced and, instead, imposing a global tax on all e-commerce activities.<sup>444</sup> Global e-commerce income would be defined as ‘income deriving from a cross-border transaction taking place wholly or partially on the Internet – for example, the sale of a physical or digital book through Amazon.com’.<sup>445</sup>

Even though it is accepted that the proposal would face political challenges by infringing state sovereignty, it is argued that ‘the normative scope of sovereignty has been transformed and even curtailed to meet the new world order of the twenty-first century’.<sup>446</sup> The proposed tax is argued to be a ‘part of the evolution of global sovereignty’, which is ‘gradually evolving in the direction of an increasingly pivotal role in the global era of an inter-linked world’.<sup>447</sup>

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<sup>443</sup> Azam (n 70) 666–670, proposing that the global tax on e-commerce ‘will be levied and run by the global tax fund (GTF). The GTF will be the main supranational institution to run the tax on cross-border e-commerce income. Countries shall establish the global tax fund by a treaty. The GTF shall be the main administrator of the GET: crystallizing the details of the tax; administering the tax; spending the revenues; and so on’.

<sup>444</sup> Azam (n 70) 644: ‘A global e-commerce tax would handle the challenges of global e-commerce taxation appropriately ... The challenges derive from the global nature of e-commerce and the irrelevance of territory and borders, which constitute the mainstay of the current international tax regime. A global e-commerce tax targets this source of the challenges and tailors the tax regime to e-commerce by making it global. This will lead to the effective taxation of global e-commerce – one that overcomes the difficulty created by the need to identify the territory in which the income was generated’.

<sup>445</sup> Azam (n 70) 643.

<sup>446</sup> Azam (n 70) 645.

<sup>447</sup> Azam (n 70) 645.

A more conventional proposal seen in the literature would involve a gradual shift towards a global unitary taxation regime, which would reflect the globalised nature of modern business practices, consolidating profits of the whole multinational group in one location, calculating the tax base according to pre-agreed rules and subsequently attributing profits using a formula that would take into account a combination of allocation keys such as personnel, assets and sales.<sup>448</sup> The less radical proposal would use a combination of the arm's length standards for routine transactions but still introduce profit splits for returns related to unique assets, with further reliance on multilateral pricing agreements to negotiate allocation keys.<sup>449</sup>

The idea behind these proposals is that, while the arm's length principle would enable the OECD countries to retain the already tried and tested approach to measuring profits, the OECD profit splits method would take into account other indicators that may help allocate profits relating to highly integrated operations or unique intangibles.<sup>450</sup> The objective criteria that could be used are determined on a case-by-

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<sup>448</sup> See, for example, Kobetsky; Hellerstein and McLure Jr (n 69); Avi-Yonah and Clausing (n 69); Schon (n 69); Bellingwout (n 69); Li; McLure Jr (n 145); Jack Mintz and Joann Martens Weiner, 'Exploring Formula Allocation for the European Union' (2003) 10 *International Tax and Public Finance* 695; Maarten de Wilde, "'Sharing the Pie": Taxing Multinationals in a Global Market' (2014) 43 *Intertax* 438.

<sup>449</sup> Cockfield (n 71) 653, arguing in the context of economic nexus that '[m]ore problematic cases would likely require more sophisticated approaches, such as profit splits (or the residual profit-split method for unique intangibles) and the negotiation of bilateral or multilateral advance pricing agreements'. See also Reuven S Avi-Yonah and Ilan Benshalom, 'Formulary Apportionment – Myths and Prospects' [2010] *University of Michigan Legal Working Paper Series* 28; Benshalom (n 34); Norbert Herzig, Manuel Teschke and Christian Joisten, 'Between Extremes: Merging the Advantages of Separate Accounting and Unitary Taxation' (2010) 38 *Intertax* 334.

<sup>450</sup> Herzig, Teschke and Joisten (n 449) 345, arguing that '[t]hrough transfer pricing can be applied universally, it fails to reflect synergy effects. Furthermore, it is disadvantageous in cases where no comparable transaction can be found. Therefore, elements of unitary taxation could be used if separate accounting fails to reflect economic reality'.

case basis and may include indicators such as costs, assets or payroll that each member of the group uses in generating economic value.<sup>451</sup>

As part of these proposals, it has been suggested that the distribution of profits across jurisdictions would also be managed through an international clearing house acting as an enforcement one-stop shop facility for collecting either traditional or global e-taxes.<sup>452</sup> This option can be amalgamated with proposals for the establishment of a world tax organisation or a more narrowly focused clearing house, with potential candidates including the OECD and United Nations.<sup>453</sup>

As discussed below, however, it can be envisaged that genuinely global tax regimes would be doomed to failure in practice, given the lack of the global infrastructure for implementing such models. It is argued that, even though a global governance regime has been developed to regulate the technical connectivity of the Internet, the issues that this regime has faced are illustrative of why a purely global tax regime might be difficult to establish in the near future.

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<sup>451</sup> Reuven S Avi-Yonah, Kimberly A Clausing and Michael C Durst, *Allocating Business Profits for Tax Purposes: A Proposal to Adopt a Formulary Profit Split* (University of Michigan Legal Working Paper Series No 138, 2008), 14–15, analysing various allocation keys and advocating a sales-only formula for profit splits.

<sup>452</sup> Cockfield 2000 (n 43) 1258, describing how the clearing house would operate: ‘The international online tax clearinghouse could work as follows. Governments would first determine, through multilateral negotiations, an appropriate online intermediary that could be licensed to act as the collector of revenues ... [O]nline billing companies such as Mastercard, Visa, or Digicash could act as the intermediary. Regulators could compensate these intermediaries for the collection and remittance of taxes by permitting the intermediaries to keep a portion of the taxes that have been collected. The intermediaries would maintain electronic records of the transactions in order to provide an audit trail for tax authorities, should any disputes arise. Additionally, it may make sense to open up a bidding process whereby potential online intermediaries would propose Internet-based collection mechanisms and the regulators could choose the most efficient and cost-effective solution’.

<sup>453</sup> For a general overview of the international tax infrastructure see Wouters and Meuwissen (n 70); Horner (n 70); Tanzi (n 70). For a proposal relating to an informal international forum see David H Rosenbloom, Noam Noked and Mohamed S Helal, ‘The Unruly World of Tax: A Proposal for an International Tax Cooperation Forum’ (2014) 15 Florida Tax Review 57. For a discussion of the OECD as an international tax organisation see Sawyer (n 70); Cockfield (n 70). The UN as an international tax organisation is discussed in Rixen (n 70). The role of G20 and the OECD is discussed in Christians. WTO as an international organisation is considered in Avi-Yonah (n 72) 1670–1674.

## 2. Global Internet governance model

### 2.1. Control over technical infrastructure

Whilst historically private actors were in charge of governing the Internet infrastructure, with Dr Jon Postel playing the key role in managing the core Internet bottleneck resources, the commercialisation of the Internet meant that an internationally compatible Internet required global mechanisms for managing names and addresses, which resulted in the establishment of ICANN.<sup>454</sup>

Hence, the US Department of Defense had become less involved in governing the Internet, having transferred their functions to the US Department of Commerce with the direction to privatise the system of DNS governance, which was implemented when the US Department of Commerce produced proposals for the privatisation of the Internet, releasing the Green Paper in January 1998 and the White Paper in June 1998.<sup>455</sup> In September 1998, a non-profit corporation for administering the DNS, ICANN, was created.<sup>456</sup>

ICANN is a global institution that has authority to make policies affecting the core of the Internet infrastructure. ICANN has been viewed as a manifestation of the global regime, whereby engineers, standard-setting bodies and national governments

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<sup>454</sup> On the history of ICANN see generally Mueller 2002 (n 14) 74–88; Jonathan Weinberg, ‘Governments, Privatization and "Privatization": ICANN and the GAC’ (2011) 18 Michigan Telecommunications and Technology Law Review 189, 191; Michael Froomkin, ‘Wrong Turn in Cyberspace: Using ICANN to Route around the APA and the Constitution’ (2000) 50 Duke Law Journal 17. For a background on the Internet history see generally James Slevin, *The Internet and Society* (Wiley 2000); Janet Abbate, *Inventing the Internet* (MIT Press 2000); Katie Hafner and Matthew Lyon, *Where Wizards Stay Up Late: The Origins of the Internet* (Pocket 2003).

<sup>455</sup> Statement of Policy, Management of Internet Names and Addresses, 63 Fed Reg 31741(1998) (the White Paper) <[http://www.ntia.doc.gov/files/ntia/publications/6\\_5\\_98dns.pdf](http://www.ntia.doc.gov/files/ntia/publications/6_5_98dns.pdf)> accessed 24 September 2012; A Proposal to Improve Technical Management of Internet Names and Addresses Discussion Draft 30 January 1998 <<http://www.ntia.doc.gov/files/ntia/publications/dnsdrft.txt>> accessed 24 September 2012.

<sup>456</sup> Memorandum of Understanding between the US Department of Commerce and Internet Corporation for Assigned Names and Numbers <<http://www.ntia.doc.gov/other-publication/1998/memorandum-understanding-between-us-department-commerce-and-internet-corporat>> accessed 24 September 2012.

would collaborate in regulating the Internet architecture.<sup>457</sup> Such powers have been assumed because ICANN is an international body that controls the global Internet bottleneck – the DNS root.<sup>458</sup>

The DNS root comprises the root zone file and the system of the root name servers.<sup>459</sup> By way of background: for the Internet to work properly, each domain name and each IP address must be unique.<sup>460</sup> To ensure this uniqueness, a central table, the root zone file, maintains a list of the name servers that link up addresses and names.<sup>461</sup> The root zone file operates in the following way: when a computer needs to resolve a name into an IP address, it connects to the central table which then redirects the query to the relevant name server.<sup>462</sup> The root zone file is distributed through thirteen root servers that store copies of the root zone file; one root server, the ‘A’ root, where the root zone file is first loaded, is considered the authoritative copy of the root zone file and is maintained by VeriSign, Inc., under its memorandum of understanding with the US Department of Commerce.<sup>463</sup>

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<sup>457</sup> See generally Mueller 2002 (n 14); Tamar Frankel, ‘The Managing Lawmaker in Cyberspace: A Power Model’ (2002) 27 *Brooklyn Journal of International Law* 859; Tamar Frankel, ‘Governing by Negotiation: The Internet Naming System’ (2004) 12 *Cardozo Journal of International and Computer Law* 449; Jonathan Weinberg, ‘ICANN and the Problem of Legitimacy’ (2000) 50 *Duke Law Journal* 187.

<sup>458</sup> Jack Goldsmith and Tim Wu, *Who Controls the Internet? Illusions of a Borderless World* (Oxford University Press 2006) 31: ‘To communicate on the Internet, your computer needs a unique number, or address, known as an Internet Address ... Someone has to decide who gets which numbers, and how many they get. In addition, someone has to give out the valuable ‘domain names’ that are shorthands for the numbers ... Those domain names, furthermore, are organized by their top-levels – dot-com, dot-net, and so on – and someone needs to decide what ‘top-level domains’ will exist and who will administer them. These decisions are the job of the ‘naming and numbering authority’.

<sup>459</sup> Mueller 2002 (n 14) 47.

<sup>460</sup> Froomkin (n 454) 41.

<sup>461</sup> Mueller 2002 (n 14) 47.

<sup>462</sup> Mueller 2002 (n 14) 47.

<sup>463</sup> See Amendment 24 to the Cooperative Agreement between NSI and US Government <<http://www.ntia.doc.gov/files/ntia/publications/amend24.pdf>> accessed 24 September 2012. Discussed in Mueller 2002 (n 14) 47–56; Jonathan Weinberg, ‘Non-State Actors and Global

One of ICANN's primary roles is to maintain the root zone file through the so-called IANA function.<sup>464</sup> Controlling the root zone file, ICANN stands at the top of the Internet hierarchy and, thus, enables computers to exchange information, a role that carries with it considerable power, prompting debate as to whether it should be the only body in charge of the root zone:

The heart of the DNS controversy is actually very simple. At issue is who should control a single small file of computer data kept in Herndon, Virginia, and how the power flowing from control of that file should be exercised. This 'root' file or 'root zone' file is the authoritative list of top-level domain names. For each name it gives the Internet address of the computer that has the authoritative list of who has registered domain names in that top-level domain (TLD). The data is authoritative because the right people use it — it is the file from which the thirteen computers known as the legacy root name servers get their data. And they, in turn, are authoritative because almost every computer on the Internet gets its data from one of those root servers, or from a cached downstream copy of their data.<sup>465</sup>

The DNS root, essentially, ensures that name servers around the world copy the same data from the root zone file, maintaining Internet stability.<sup>466</sup> The ability to enter or delete names in the root zone file confers the power to control which top-level domains will be visible on the Internet, so that, if a user enters a name incorporating a top-level domain that is not known to the root servers, the DNS will be unable to find the corresponding computer.<sup>467</sup> For example, ICANN can make visible such TLDs as .com

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Informal Governance – The Case of ICANN' in Thomas Christiansen and Christine Neuhold (eds), *International Handbook on Informal Governance* (Edward Elgar 2012) 5.

<sup>464</sup> See IANA committee at <<http://www.iana.org>>. The contract between the US Department of Commerce and ICANN for the performance of the IANA function, extended until 2016 <[http://www.ntia.doc.gov/files/ntia/publications/sf\\_26\\_pg\\_1-2-final\\_award\\_and\\_sacs.pdf](http://www.ntia.doc.gov/files/ntia/publications/sf_26_pg_1-2-final_award_and_sacs.pdf)> accessed 24 September 2012 [IANA Contract].

<sup>465</sup> Froomkin (n 454) 43–44.

<sup>466</sup> Froomkin (n 454) 43–44.

<sup>467</sup> Michael A Froomkin, 'Internet Governance: Almost Free: An Analysis of ICANN's "Affirmation of Commitments"' (2011) 9 *Journal on Telecommunications and High Technology Law* 187, 211.

or re-delegate them from one registry to another by changing a line in the root zone file.<sup>468</sup>

As noted in the literature, ICANN has used its power to limit the number of new TLDs, select winners, and determine business models and the domain name market structure.<sup>469</sup> Furthermore, control over the DNS has been used to restrict the semantic content of top-level domains.<sup>470</sup> For instance, it is now a well-known fact that ICANN had rejected the introduction of the .xxx domain proposed by a US company, although this decision was subsequently overturned in International Chamber of Commerce arbitration.<sup>471</sup> ICANN has also imposed various limits on what names can be registered, determining the lists of words, including country names, that cannot be allocated to anyone.<sup>472</sup>

## **2.2. Illusions of a genuinely international regime**

Even though the US promotes the view that ICANN adheres to a global model of governance that is built on taking into account the interests of all its stakeholders, this is not an entirely correct picture. On 30 September 2009, the US Department of Commerce and ICANN signed an Affirmation of Commitments, whereby the US Department of Commerce affirmed its commitment to a multi-stakeholder, private-sector-led, bottom-up policy development model for DNS technical coordination that acts for the benefit of global Internet users.<sup>473</sup> ICANN, on its part, confirmed that it

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<sup>468</sup> Froomkin (n 467) 211.

<sup>469</sup> Froomkin (n 467) 212.

<sup>470</sup> Froomkin (n 467) 216.

<sup>471</sup> Froomkin (n 467) 212.

<sup>472</sup> See ICANN's New Applicant Guidebook 2012 <<http://newgtlds.icann.org/en/applicants/agb>> accessed 20 September 2012. Discussed in Froomkin (n 467) 212.

<sup>473</sup> ICANN, *Affirmation of Commitments by the United States Department of Commerce and the Internet Corporation for Assigned Names and Numbers* (2009) s 4.

would remain a not-for-profit corporation, headquartered in the USA with offices around the world to meet the needs of a global community.<sup>474</sup>

ICANN's real power, however, lies in its invisible control over the IP numbering system; as noted in the literature, it is not difficult to exist on the Internet without a domain name, but it is impossible to operate without an IP number.<sup>475</sup> As mentioned earlier, the power over IP numbers comes with the IANA function, which is governed by a private contract with the US Government and which entitles ICANN to assign blocks of IP numbers to Regional Internet Registries that hand them out to Internet service providers.<sup>476</sup>

The IANA Contract is a zero-price contract between ICANN and the US government that authorises ICANN to perform the technical functions of the Internet Assigned Numbers Authority.<sup>477</sup> These functions include allocating IP address blocks, coordinating the assignment of unique protocol numbers to end users, and editing the root zone file.<sup>478</sup> The US Department of Commerce must approve any changes in the

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<sup>474</sup> ICANN, *Affirmation of Commitments* (n 473) s 8: 'ICANN affirms its commitments to: (a) maintain the capacity and ability to coordinate the Internet DNS at the overall level and to work for the maintenance of a single, interoperable Internet; (b) remain a not for profit corporation, headquartered in the United States of America with offices around the world to meet the needs of a global community; and (c) to operate as a multi-stakeholder, private sector led organization with input from the public, for whose benefit ICANN shall in all events act. ICANN is a private organization and nothing in this Affirmation should be construed as control by any one entity'.

<sup>475</sup> Froomkin (n 467) 219.

<sup>476</sup> See IANA Contract <[http://www.ntia.doc.gov/files/ntia/publications/sf\\_26\\_pg\\_1-2-final\\_award\\_and\\_sacs.pdf](http://www.ntia.doc.gov/files/ntia/publications/sf_26_pg_1-2-final_award_and_sacs.pdf)> accessed 10 September 2014, s C.2.9.3.

<sup>477</sup> IANA Contract (n 476) s B: 'This is a no cost, \$0.00 time and material contract'; s C.1.1: 'The U.S. Department of Commerce (DoC), National Telecommunications and Information Administration (NTIA) has initiated this contract to maintain the continuity and stability of services related to certain interdependent Internet technical management functions, known collectively as the Internet Assigned Numbers Authority (IANA)'; s C.2.4: 'The Contractor is required to perform the IANA functions, which are critical for the operation of the Internet's core infrastructure, in a stable and secure manner'.

<sup>478</sup> IANA Contract (n 476) s C.2.9: 'Internet Assigned Numbers Authority (IANA) Functions – include (1) the coordination of the assignment of technical Internet protocol parameters; (2) the administration of certain responsibilities associated with the Internet DNS root zone management;

root zone file and, therefore, as long as the agreement is in force, the US government has the power to transfer the IANA function to a different organisation if ICANN does something that contradicts the US government's policy.<sup>479</sup>

Furthermore, there is a contract between the US Department of Commerce and VeriSign, Inc., whereby the physical root zone file resides on a computer controlled by VeriSign, a US Government contractor.<sup>480</sup> The contract requires VeriSign to implement all the technical coordination decisions made via ICANN and to follow US instructions regarding the root zone file, which follows from Amendment 11 of the Cooperative Agreement with Network Solutions, Inc., requiring VeriSign to request written direction from an authorised official before making or rejecting any changes to the root zone file.<sup>481</sup>

It appears, therefore, that the proclaimed commitment to multi-stakeholder and private-led bottom-up governance was no more than a mere window-dressing exercise

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(3) the allocation of Internet numbering resources; and (4) other services related to the management of the ARPA and INT top-level domains (TLDs)'.

<sup>479</sup> IANA Contract (n 476) s C.7.3: 'In the event the Government selects a successor contractor, the Contractor shall have a plan in place for transitioning each of the IANA functions to ensure an orderly transition while maintaining continuity and security of operations'.

<sup>480</sup> ICANN, '.com Registry Agreement' (1 December 2012) <<https://www.icann.org/resources/pages/com-2012-12-07-en>> accessed 24 August 2015. See Froomkin (n 467) 203–204. VeriSign is a US corporation that operates the master root server and owns the .com and .net top-level domains, making it both a dominant supplier in the domain name industry and a critical part of the domain name system's infrastructure.

<sup>481</sup> IANA Contract (n 476) s C.8.1: 'This contract does not authorize the Contractor to make modifications, additions, or deletions to the root zone file or associated information. This contract does not alter the root zone file responsibilities as set forth in Amendment 11 of the Cooperative Agreement NCR-9218742 between the US Department of Commerce and VeriSign, Inc. or any successor entity as designated by the U.S. Department of Commerce'. The primary root zone file is currently located on the A root server, which is operated by VeriSign, Inc., under a cooperative agreement with the US Government. Changes to the root zone file are made according to procedures established under Amendment 11 of the cooperative agreement. See <http://www.icann.org/en/resources/cctlds/delegation>; Cooperative agreement between NSI and US [http://www.ntia.doc.gov/legacy/ntiahome/domainname/agreements/Amend11\\_052206.pdf](http://www.ntia.doc.gov/legacy/ntiahome/domainname/agreements/Amend11_052206.pdf): 'While NSI continues to operate the primary root server, it shall request written direction from an authorized USG official before making or rejecting any modifications, additions or deletions to the root zone file'. Discussed in Mueller 2010 (n 14) 63; Froomkin (n 467) 45, noting that 'during the creating of ICANN the US repeatedly indicated that it would relinquish its authority over the DNS and delegate it to ICANN. Later, it asserted a right to hold on to it forever'.

for the purposes of retaining control over the network.<sup>482</sup> By opting to create a corporation that governs the technical side of the Internet, the US government hence curbed the flourishing competition for control of critical Internet resources. The rapid commercialisation of the Internet and the increasing value of domain names meant increased competition in political and private circles as to who should control these resources. As a matter of political will, the US government stopped this debate by pursuing its own agenda, thereby calming down the waves of unrest among the competing parties, at least for a short while.<sup>483</sup>

By privatising the root using ICANN, the US government distanced itself from the control of the Internet, making its degree of control less visible and operating from behind the shield of a corporation.<sup>484</sup> This enabled the US government to address foreign governments' concerns, at least temporarily, regarding excessive control over the Internet.<sup>485</sup> Although the US Department of Commerce retained control over

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<sup>482</sup> Goldsmith and Wu (n 458) 169: 'ICANN seemed in many ways the realization of the dreams of the engineers and others who wanted the Net to be self-governed ... But ICANN was not what it seemed. The United State, while talking about things like "bottom up governance" and "the Internet community," never actually ceded control over either ICANN or the root. Legally, ICANN remained under contract to the U.S. Commerce Department. And the physical root, the computer containing the root zone file, remained under the control and ownership of the United States ... And talking about "privatization" and "internationalization" temporarily distracted critics who argued that a single nation, no matter how powerful, had no right to control the root. But the United States had no real intentions to relinquish its power over such an important resource'.

<sup>483</sup> Mueller 2002 (n 14) 259: '[T]he objective of the ICANN regime was not to facilitate a free market in DNS. It was, rather, part of a concerted effort to *regulate* and *limit* the market for domain names, and to *prevent* the creation of private property rights in certain areas ... In the new Internet governance regime, private and intergovernmental conflict over the ownership of the root was resolved through the establishment of a central authority that, in effect, owns the entire name space and grants limited privileges of use to suppliers and consumers'.

<sup>484</sup> Goldsmith and Wu (n 458) 170: 'ICANN's spirit of "self-regulation" was an appealing label for a process that could be more accurately described as the U.S. government brokering a behind-the-scenes deal that best suited its policy preferences ... [T]he United States wanted to ensure the stability of the Internet, to fend off the regulatory efforts of foreign governments and international organizations, and to maintain ultimate control. The easiest way to do that was to maintain formal control while turning over day-to-day control of the root to ICANN and the Internet Society, which had close ties to the regulation-shy American technology industry'.

<sup>485</sup> Viktor Mayer-Schonberger and Malte Ziewitz, 'Jefferson Rebuffed: The United States and the Future of Internet Governance' (2007) 8 Columbia Science & Technology Law Review 188, 196: 'In viewing the combination of ICANN's power with the actual as well as perceived US domestic

ICANN, the image of an efficient private manager of the Internet that ICANN created in the international domain helped it to survive some countries' attempts to politicise the technical management of the Internet by subjecting ICANN to United Nations control.<sup>486</sup>

Under this process, national governments viewed the US authority over the DNS root as posing a threat to their national sovereignty and, therefore, they initiated an international process – the World Summit on the Information Society (WSIS).<sup>487</sup> One of the key initiatives was to subject ICANN to the control of an intergovernmental organisation, such as the International Telecommunication Union (ITU) under the auspices of the United Nations.<sup>488</sup> Although the process was aimed at defining Internet governance in the terms of sovereign regulation, it failed to achieve this aim, with control still remaining in the hands of the US:

WSIS ended with no more than an agreement to create a new forum in which participants would continue to discuss Internet governance; that process ... has no apparent interest in challenging ICANN's authority over the domain name system.<sup>489</sup>

More importantly, however, it has been acknowledged that the WSIS conferences confirmed that conflict has actually taken place between nation-states rather than between the illusory Internet community and governments:

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influence on its decision-making, governments around the world that are sometimes at odds with the United States on various issues, such as France, Russia, China, and Brazil, have noted ICANN's willingness to exercise its own power. These governments and many others have repeatedly called on the US government to internationalize policymaking over naming and numbering, pointing to the obviously global character and reach of the Internet'.

<sup>486</sup> Discussed in Mueller, Mathiason and Klein (n 164) 240–242, noting that 'four years of WSIS debate had produced little concrete change to ICANN and had contributed little to defining a framework for global Internet governance'.

<sup>487</sup> See generally Mayer-Schonberger and Ziewitz (n 485).

<sup>488</sup> The World Summit on the Information Society and Internet Governance Developments and Resources at <<http://archive.icann.org/en/wsisis/icann-wsis-11nov05.htm#wsisis>> accessed 10 September 2012.

<sup>489</sup> Weinberg (n 463) 306.

The Tunisia compromise is the latest round in the battle for control of the Internet's naming system – a battle in a larger war for control over the Internet ... [T]he outcome of this battle is less important than the identity of opponents. For the struggle for ultimate control over Internet naming and numbering policy is not between governments and private cybercommunities, as many once envisioned. Rather, it is indisputably between national governments – a problem of clashing government interests and ideologies not unlike age-old disputes over global resources like oceans, air, and outer space.<sup>490</sup>

Although the WSIS forum did not result in a complete overhaul of the governance system, the US government received a message from the international community and, as a result, had to readjust the system to their claims. For this purpose, ICANN gradually expanded the role of its Governmental Advisory Committee (GAC).<sup>491</sup> ICANN's GAC began in 1998 as an advisory committee consisting of one representative of each participating national government and selected international governmental organisations.<sup>492</sup> Membership was open to all national governments and to international organisations when invited by the GAC or the Board.<sup>493</sup> The ICANN Board, when considering decisions that substantially affected the operation of the Internet, had to provide notice to the GAC for comment and to consider the GAC's comments before making a final decision.<sup>494</sup>

In 2002, new ICANN Bylaws further expanded the GAC's powers: if a conflict was between a GAC comment and the Board's decision, the Bylaws permitted negotiation towards a mutually acceptable decision.<sup>495</sup> However, the Board retained its

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<sup>490</sup> Goldsmith and Wu (n 458) 171.

<sup>491</sup> For a comprehensive discussion see generally Weinberg (n 454).

<sup>492</sup> Froomkin (n 467) 195.

<sup>493</sup> Weinberg (n 454) 194.

<sup>494</sup> Froomkin (n 467) 195.

<sup>495</sup> ICANN, *Bylaws* (2012) art XI, s 2(1)(j): 'The advice of the Governmental Advisory Committee on public policy matters shall be duly taken into account, both in the formulation and adoption of policies. In the event that the ICANN Board determines to take an action that is not consistent with the Governmental Advisory Committee advice, it shall so inform the Committee and state the reasons why it decided not to follow that advice. The Governmental Advisory Committee and the

power to take action in spite of GAC's advice, as long as the reasoning for that was reflected in the final decision.<sup>496</sup> The 2002 Bylaws gave the GAC unilateral authority to recommend that a Board solicit comments from external sources on recommendation by the GAC or decision by the Board.<sup>497</sup> The GAC was given further representation in ICANN governance through non-voting involvement in Board meetings.<sup>498</sup>

Finally, in 2009, the US government and ICANN ended contractual obligations in force since 1998, by signing the Affirmation of Commitments; the US gave up a contractual right to assign the ICANN's function to another entity.<sup>499</sup> The Affirmation further expanded the role of the GAC such that it 'mandate[d] periodic review of ICANN and its policies and [gave] the GAC a lead role in constituting the review teams'.<sup>500</sup> Although this move was aimed at increasing transparency, it was merely designed to provide more legitimacy to ICANN, without fundamentally changing the regime.<sup>501</sup> However, the accountability reform was not aimed at limiting the power of ICANN and the US, which retained considerable discretion as to how to conduct

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ICANN Board will then try, in good faith and in a timely and efficient manner, to find a mutually acceptable solution'.

<sup>496</sup> ICANN, *Bylaws* (n 495) art XI, s 2(1)(k): 'If no such solution can be found, the ICANN Board will state in its final decision the reasons why the Governmental Advisory Committee advice was not followed, and such statement will be without prejudice to the rights or obligations of Governmental Advisory Committee members with regard to public policy issues falling within their responsibilities'. See Froomkin (n 467) 196.

<sup>497</sup> ICANN, *Bylaws* (n 495) art XI-A, s 1(3)(a); Froomkin (n 467) 196.

<sup>498</sup> ICANN, *Bylaws* (n 495) art XI, s 2(1)(a); Froomkin (n 467) 196.

<sup>499</sup> ICANN, *Affirmation of Commitments* (n 473) para 17: 'ICANN commits to this Affirmation according to its Articles of Incorporation and its Bylaws. This agreement will become effective October 1, 2009. The agreement is intended to be long-standing, but may be amended at any time by mutual consent of the parties'.

<sup>500</sup> Weinberg (n 454) 206–207.

<sup>501</sup> Mueller 2010 (n 14) 250, arguing that '[p]olitically, this was a good move. At a stroke, it eliminated some of the key objections to ICANN coming from Western allies such as the European Union; the GAC has been elevated in status and used to provide a soft internationalization without plunging ICANN into the morass of the United Nations or any other type of intergovernmental agreement. The effect is to institutionalize ICANN as a privatized governance entity and solidify international acceptance of it as such'.

reviews.<sup>502</sup> Although the battle for authority over the global Internet resources has now resumed on both fronts, with the private community lobbying for the transition of the IANA function and international governments resuming the WSIS process, it is unrealistic to expect that the US would relinquish its control over the network completely.<sup>503</sup>

### **3. Assessment of global tax governance solutions**

#### **3.1. Global e-commerce tax**

All the tax proposals promoting a globalised governance view would be in line with the internationalists' approach to the Internet governance discussed earlier, which envisages a uniform set of substantive and enforcement rules coordinated through a global body, such as ICANN, with government representatives having a say in designing the rules.<sup>504</sup> These tax models would also reflect the globalised realities of the digital economy where it may be practically challenging to identify where exactly value is generated and hence to apportion it to specific jurisdictions participating in business activities.

More specifically, the model involving a uniform global transaction tax on all e-commerce payments would alleviate most concerns arising in the context of income

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<sup>502</sup> Mueller 2010 (n 14) 250: 'As a response to ICANN's accountability problems, however, the Affirmation is far less impressive. The appointment of the review panels is subject to a public comment process, but aside from that they are hand-picked by the leaders of ICANN, the very people who are responsible for what ICANN does. Moreover, the composition of the panel will mirror ICANN's existing policy-making organs. In other words, the people who are being reviewed select the reviewers, largely from among the ICANN subunits already responsible for making policies and decisions ... No new perspectives or checks and balances will be put into place by such a process'.

<sup>503</sup> On WSIS see <<http://www.itu.int/net/wsis/>> accessed 2 September 2015; on the IANA transition see <<https://www.icann.org/stewardship>> accessed 2 September 2015; discussed in Milton Mueller and Brendon Kuerbis, 'Towards Global Internet Governance: How to End US Control of ICANN Without Sacrificing Stability, Freedom or Accountability' 27 August 2014, TPRC Conference Paper <<http://ssrn.com/abstract=2408226>> accessed 2 September 2015; David Post and Danielle Kehl, 'Controlling Internet Infrastructure. Part 1: The "IANA Transition", and Why It Matters for the Future of the Internet' Open Technology Institute, April 2015 <<http://www.newamerica.org/oti/controlling-internet-infrastructure/>> accessed 5 September 2015

<sup>504</sup> See nn 434–435.

characterisation.<sup>505</sup> Combined with the administration of tax policy on a global level within the framework of a world tax organisation or improving tax collection using a narrowly focused technical clearing house, it would promote tax cooperation and ensure a better overall tax climate.<sup>506</sup>

However appealing the reality of a global administration might seem, the issues associated with creating an effective global tax regime may be colossal, since the development of such a regime would require international agreement on a broad spectrum of issues. There is, therefore, a risk that such a measure may not find support, particularly across developing countries, which may refuse to contribute to the general pool of funds on an equal footing with major players on the digital scene.<sup>507</sup> Absent substantial cooperation, the fund would not operate efficiently; given that the global e-commerce tax would entail acceptance of a uniform tax rate and remittance of the tax proceeds to the global tax fund rather than to national tax administrations, this measure may be impracticable in the near future.

The primary issue is that, currently, there is insufficient global infrastructure to implement a truly global tax policy.<sup>508</sup> Whilst the OECD has achieved unprecedented participation of countries and business community representatives in the BEPS project, it still remains an exclusive club for developed countries, whose decisions are not

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<sup>505</sup> Azam 2012 (n 70) 664: ‘The tax base is comprehensive insofar as it includes all increase in wealth without any distinction between the categories of income’.

<sup>506</sup> Azam 2012 (n 70) 644, arguing that a global e-commerce tax ‘tailors the tax regime to e-commerce by making it global. This will lead to the effective taxation of global e-commerce – one that overcomes the difficulty created by the need to identify the territory in which the income was generated. In addition, a global e-commerce tax would advance efficiency in the sense of neutrality, which subsequently leads to efficient allocation of resources and maximizes welfare, and in the sense of administrative efficiency’.

<sup>507</sup> See n 545 below.

<sup>508</sup> See generally Sawyer (n 70); Rosenbloom, Noked and Helal (n 453); Wouters and Meuwissen (n 70).

mandatory.<sup>509</sup> The UN can secure broad-base participation but would lack the basic support infrastructure to carry out a comprehensive review and implementation of tax policies across the globe.<sup>510</sup> Other international organisations, despite playing an important role in certain aspects of international tax policy, would not be suitable to guide global policy development.<sup>511</sup>

The issues that the financial transaction tax has faced are illustrative in this respect, with major developed countries struggling to agree on rates and implementation of the proposal on a multilateral basis.<sup>512</sup> Initially, it was envisaged that governments would work towards a global approach to taxing financial institutions, including development of a financial transaction tax.<sup>513</sup> In 2011, eleven countries within the EU

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<sup>509</sup> Wouters and Meuwissen (n 70) 15–16: ‘Input from all parties likely to be affected is needed to respect each party’s sovereign right to regulate its own fiscal policies. The OECD, an exclusive membership of the leading industrialized nations, is not the appropriate forum for a worldwide discussion regarding global tax competition’ (internal citations omitted).

<sup>510</sup> Wouters and Meuwissen (n 70) 17: ‘Criticism has been voiced that the UN Tax Committee is too weak in terms of political clout and resources ... to engage in substantial issues other than updating the UN Model Double Taxation Convention. In other words, even though the UN provides as such a more inclusive and legitimate forum to elaborate global tax policy, it lacks the institutional capacity to do so’ (internal citations omitted).

<sup>511</sup> Sawyer (n 70) 74–80, noting particularly at 76 that ‘while the IMF and WB [World Bank] structures are commercially focused, their experience with taxation is essentially limited to macroeconomic policy and assisting the setting up of tax administration in developing countries, rather than with international business, such as MNEs, with cross-jurisdiction disputes. Thus the IMF and WB would not ... be suitable organisations to incorporate an additional structure with taxation policy and practice as its core focus’.

<sup>512</sup> See Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC Brussels, COM(2011) 594 final, 28 September 2011 [The 2011 FTT proposal]. For a general discussion of financial transaction taxes see Stephan Schulmeister, Margit Schratzenstaller and Oliver Picek, *A General Financial Transaction Tax: Motives, Revenues, Feasibility and Effects* (WIFO, March 2008); Thornton Matheson, ‘Taxing Financial Transactions: Issues and Evidence’ [2011] IMF Working Paper WP/11/54; Patrick Honohan and Sean Yoder, ‘Financial Transactions Tax: Panacea, Threat, or Damp Squib?’ (2011) 26 *The World Bank Research Observer* 138; John D Brondolo, ‘Taxing Financial Transactions: An Assessment of Administrative Feasibility’ [2011] IMF Working Paper WP/11/185; Daniel N Shaviro, ‘The Financial Transaction Tax versus (?) the Financial Activities Tax’ NYU Law and Economics Research Paper No 12-04 <<http://ssrn.com/abstract=1989163>> accessed 8 April 2012; Malcolm Gammie and Erik Roder, ‘Taxation of Financial Transactions’ (2013) 67 *Bulletin for International Taxation* 529.

<sup>513</sup> European Council, *Conclusions of the European Council Meeting* (17 June, 2010) 7 para 17, suggesting that ‘[t]he EU should lead efforts to set a global approach for introducing systems for levies and taxes on financial institutions with a view to maintaining a world-wide level playing field and will strongly defend this position with its G20 partners. The introduction of a global financial

managed to agree on a draft proposal, whereby, where one of the parties is established in an EU Member State, a 0.1% tax would have applied on most financial transactions and a 0.01% tax would have applied on derivatives.<sup>514</sup> Whilst Germany, France, Italy and Spain pushed for the adoption of the new tax, other EU countries opposed, including the UK, which challenged the measure and lost the appeal on technical grounds, with the measure still remaining open to challenge.<sup>515</sup> The key obstacle has been the perceived extraterritorial reach of the measure, which would apply not only to financial instruments issued in the FTT zone but also to transactions carried out elsewhere, albeit with one of the parties resident in the FTT territory.<sup>516</sup> Although the initial proposal to apply the FTT would have covered the entire EU, only a handful of countries eventually agreed to participate in the project, sufficient to introduce the tax using the enhanced cooperation procedure, but even those are yet to agree on the overall design and implementation of the tax regime.<sup>517</sup>

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transaction tax should be explored and developed further in that context'. Noted and discussed in Christiana Panayi, 'The EU's Financial Transaction Tax, Enhanced Cooperation and the UK's Challenge' (2013) 53 *European Taxation* 358, 358.

<sup>514</sup> The 2011 FTT Proposal, arts 1(2) and 8(2). For an overview and critical analysis of the 2011 proposal see John Vella, Clemens Fuest and Tim Schmidt-Eisenlohr, 'The EU Commission's Proposal for a Financial Transaction Tax' (2011) 6 *British Tax Review* 607; John Vella, 'The Financial Transaction Tax Debate: Some Questionable Claims' (2012) 2 *Intereconomics* 90.

<sup>515</sup> See Proposal for a Council Directive implementing enhanced cooperation in the area of financial transaction tax. COM (2013) 71 final. It was challenged by the UK in the CJEU on the grounds that, inter alia, the proposal has unacceptable extraterritorial reach. See Case C-209/13 *United Kingdom of Great Britain and Northern Ireland v Council of the European Union* (CJEU, 30 April 2014). Discussed in Thorsten Vogel and Benjamin Cortex, 'Recent Developments and Resulting Implications Regarding a Financial Transaction Tax in Europe' (2013) 53 *European Taxation* 135; Adrian Cloer and Stefan Trencsik, 'Alive and Deadly – The European Financial Transaction Tax Through Enhanced Cooperation: Current Progress' (2014) 54 *European Taxation* 307.

<sup>516</sup> Cloer and Trencsik (n 515) 310.

<sup>517</sup> Eleven EU Member States have agreed to introduce a financial transaction tax – see *Taxation of the Financial Sector* <[http://ec.europa.eu/taxation\\_customs/taxation/other\\_taxes/financial\\_sector/index\\_en.htm](http://ec.europa.eu/taxation_customs/taxation/other_taxes/financial_sector/index_en.htm)> accessed 20 November 2012. However, it has been reported that no progress has been made to date, with Slovenia potentially withdrawing from the project. See David D Stewart, 'Participants Claim Progress on EU FTT but Offer No Details' (2015) 79 *Tax Notes International* 33.

### 3.2. Global unitary taxation

The unitary taxation solution involving allocation of profits using a formula would arguably be better aligned with the way multinationals generate value through interaction of all elements of the business group, from personnel to intangible assets.<sup>518</sup> In this regard, however, a global profit split would entail agreeing on a uniform formula and rules for calculating the tax base.<sup>519</sup> When agreeing on such a formula, in the digital commerce context the biggest challenge lies in determining jurisdictional nexus in relation to intangible assets; given the ubiquitous nature of such assets, most formulae exclude intangibles altogether, which would inevitably skew profit allocation results for digital enterprises.<sup>520</sup>

If there are no uniform rules, a real risk exists that the application of different profit split rules by numerous national governments would result in double taxation, which may be witnessed in countries that apply conflicting interpretations of transfer pricing methods on a unilateral basis.<sup>521</sup> Although such conflicts may be resolved using mutual agreement procedures, using such agreements can be cumbersome, especially when it comes to sharing substantial taxable revenues generated by digital enterprises

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<sup>518</sup> See references at n 448–449. See also Arthur J Cockfield, ‘Formulary Taxation Versus the Arm’s-Length Principle: The Battle Among Doubting Thomases, Purists, and Pragmatists’ (2004) 52 Canadian Tax Journal 114, 117: ‘Formulary taxation ... accepts the reality of firm integration and tries to come up with a workable solution that matches each jurisdiction with tax revenues related to the value-adding economic activity that takes place within the jurisdiction’.

<sup>519</sup> McLure Jr (n 145) 592: ‘To be workable, in the sense of avoiding complexity and gaps/overlaps in the tax base, there should be a standard definition of a unitary business that all jurisdictions apply uniformly. Ideally, the definition would be reflected in objective quantitative tests. Unfortunately, while the general idea behind the concept of a unitary business may be intuitively appealing and easy to grasp, it is difficult to formulate a satisfactory objective standard of what constitutes a unitary business, especially one that can be quantified’.

<sup>520</sup> McLure Jr (n 145) 591.

<sup>521</sup> Cockfield (n 71) 649, noting that ‘[d]espite its potential merits, formulary taxation is likely politically infeasible, as many governments and international organizations have come out against formulary taxation in recent years’. See, for example, United Nations, *Practical Manual on Transfer Pricing for Developing Countries* (2013) s 10.4.4.4, where India, in the context of R&D transfer pricing, does not accept the notion of the remote control over risks as currently envisaged under the OECD Manual.

between national governments.<sup>522</sup> Hence, the business community has reached interim consensus that global formulary apportionment would not be viable in the near future.<sup>523</sup>

As the CCCTB experience shows, it may be challenging to agree on a specific set of rules for one region, not to mention major developed jurisdictions across the globe.<sup>524</sup> Whilst the EU issued a proposed directive, negotiations on the rolling out of the measure have stalled due to disagreements on the scope of the required corporate consolidation.<sup>525</sup> Only recently has the European Commission revived the proposals, amending the scope to make the CCCTB mandatory and to implement it in several stages, starting with a common tax base and delaying corporate consolidation.<sup>526</sup> It

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<sup>522</sup> Cockfield (n 71) 649, arguing that formulary allocation will be politically challenging because ‘countries would be bound to formulae determined at the supranational level. Others attack formulary taxation on technical grounds that the proposed system will be inefficient, increase enforcement and compliance costs and continue to permit income shifting strategies’.

<sup>523</sup> See, for example, OECD, *BEPS Action Plan* (n 46) 14.

<sup>524</sup> ‘European Corporate Tax Base: Making Business Easier and Cheaper’ (16 March 2011) <[http://ec.europa.eu/taxation\\_customs/taxation/company\\_tax/common\\_tax\\_base/index\\_en.htm](http://ec.europa.eu/taxation_customs/taxation/company_tax/common_tax_base/index_en.htm)> accessed 26 April 2011; European Commission, *Proposal for a Council Directive on a Common Consolidated Corporate Tax Base (CCCTB)* (COM(2011) 121/4, 2011). For a general discussion of the CCCTB see, for example, Luca Cerioni, ‘Postponement of the Commission’s Proposal for a CCCTB Directive: Possible Ways Forward’ (2010) 64 *Bulletin for International Taxation* 98; Panayi (n 233) ch 3; Luca Cerioni, ‘The Commission’s Proposal for a CCCTB Directive: Analysis and Comment’ (2011) 65 *Bulletin for International Taxation* 515; Maria Jesus Garcia-Torres Fernandez, ‘Corporate Tax Harmonization: Key Issues for Ensuring an Efficient Implementation of the CCCTB’ (2012) 40 *Intertax* 598; Walter Hellerstein, ‘Tax Planning under the CCCTB’s Formulary Apportionment Provisions: the Good, the Bad, and the Ugly’ in Dennis Weber (ed), *CCCTB: Selected Issues* (Wolters Kluwer Law & Business 2012); Julien Lamotte, ‘New EU Tax Challenges and Opportunities in a (C)CCTB World: Overview of the EU Commission Proposal for a Draft Directive for a Common Consolidated Corporate Tax Base’ (2012) 52 *European Taxation* 271.

<sup>525</sup> Stephanie Soong Johnston, ‘EU Revives CCCTB Proposal’ (2015) 78 *Tax Notes International* 1078, noting that ‘one of the many reasons why negotiations on the CCCTB proposal stalled was the consolidation element. The proposal originally called for consolidation of corporate tax group returns on a cross-border basis in Europe; however, some EU countries don’t have a national tax consolidation regime’.

<sup>526</sup> European Commission, *Communication From the Commission to the European Parliament and the Council. A Fair and Efficient Corporate Tax System in the European Union: 5 Key Areas for Action* (COM (2015) 302 final 1762015, 2015) 7–8. Discussed in Johnston (n 525). On consolidation see generally Antony Ting, *The Taxation of Corporate Groups under Consolidation: An International Comparison* (Cambridge University Press 2013). See also Philip I Blumberg, ‘The Transformation of Modern Corporation Law: The Law of Corporate Groups’ (2005) 37 *Connecticut Law Review* 605.

remains to be seen, however, whether the amended proposal, to be issued next year, would gain traction.

### **3.3. Increased cooperation accompanied by the lack of global consensus**

But even with increased international cooperation, the international tax realm still remains very much a combination of divergent national tax rules rather than a global harmonised regime, and it may therefore be implausible to expect that as a result of economic globalisation nation-states would be prepared to give up their exclusive right to a share in tax revenues that digital enterprises produce within national markets.<sup>527</sup> Although we have witnessed that the OECD is increasing the overall acceptance of international cooperation, most of the developments that have taken place recently relate to increased cooperation in enforcing local rules rather than in producing genuinely global tax regimes.<sup>528</sup>

The FATCA agreements, which have been developed as part of the US action against income tax evasion overseas, are one example of such extraterritorial regimes, and one which appears to be a global regulatory instrument, whereas in fact it is an extraterritorial US regime.<sup>529</sup> This tax regime requires foreign financial institutions to

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<sup>527</sup> Cockfield (n 74) 111–112, suggesting that ‘[w]ithout a world tax organization or a world tax court, it seems unlikely that an effective political mechanism will develop to align enforcement jurisdiction with substantive jurisdiction properly’ and therefore ‘[n]ational governments will act to preserve their tax sovereignty and promote their economic self-interest ...’.

<sup>528</sup> Paris (n 432) 176, noting that ‘the present-day phenomenon of the globalization of regulation involves the decentralization, rather than the centralization, of authority. The result of this process is a complex network of formal and informal transnational regimes, which, unlike the state, lacks central control and geographical borders, but nonetheless exercises de facto political authority. The globalization of governmental regulation, in other words, seems to involve an ‘unbundling’ of the political-territorial assumptions that have traditionally underpinned the modern states system’.

<sup>529</sup> Itai Grinberg, ‘The Battle Over Taxing Offshore Accounts’ (2012) 60 *UCLA Law Review* 304; Vokhidjon Urinov, ‘The Rubik Model: An Alternative for Automatic Tax Information Exchange Regimes?’ (2015) 69 *Bulletin for International Taxation* (forthcoming). See also Pasquale Pistone, ‘Exchange of Information and Rubik Agreements: The Perspective of an EU Academic’ (2013) 67 *Bulletin for International Taxation* 216; Richard J Jr Harvey, ‘Offshore Accounts: Insider’s Summary of FATCA and Its Potential Future’ (2012) 57 *Villanova Law Review* 471; Alberto Gil Soriano, ‘Toward an Automatic but Asymmetric Exchange of Tax Information: the US Foreign Account Tax Compliance Act (FATCA) as Inflection Point’ (2012) 40 *Intertax* 540, 549–553; Maryte Somare and Viktoria Wohrer, ‘Two Different FATCA Model Intergovernmental

cooperate with the US tax authorities by disclosing the list of their customers who are US citizens, for fear of bearing a 30% withholding tax on their income passing through the bank accounts.<sup>530</sup> Whilst it has been argued in this respect that ‘automatic information reporting systems and cross-border anonymous withholding systems both clearly break from past practice and move toward a global norm of financial institutions serving as cross-border tax agents for governments’, this network of international agreements is a compromise that merely extends a territorial power rather than creating a truly global regime.<sup>531</sup>

Equally, the development of information exchange agreements and country-by-country reporting as part of the OECD work has the visible effect of improving cross-border cooperation in collection and administration of taxes.<sup>532</sup> It has been argued in this respect that increased corporate transparency would have a deterrent effect on multinationals that would be unwilling to promote certain tax practices if they knew that

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Agreements: Which is Preferable?’ (2014) 68 Bulletin for International Taxation 395; Carol P Tello, ‘FATCA: Catalyst for Global Cooperation on Exchange of Tax Information’ (2014) 68 Bulletin for International Taxation 88.

<sup>530</sup> For the current FATCA agreements see <<http://www.treasury.gov/resource-center/tax-policy/treaties/Pages/FATCA.aspx#ModelAgreements>> accessed 25 August 2015.

<sup>531</sup> Grinberg (n 529) 347, 317, arguing in respect of FATCA and Rubik agreements that ‘these unilateral techniques, while somewhat effective, often are not available to less powerful countries looking to address their own offshore tax evasion concerns’. See also Urinov (n 529), arguing in respect of the Swiss Rubik agreements that ‘[e]ven though Rubik agreements appear to be reciprocal agreements in that they are designed to serve the interests of both parties, they lack certain attributes of genuine reciprocity’.

<sup>532</sup> Council of Europe and OECD, *Convention on Mutual Administrative Assistance in Tax Matters* (2011), endorsing automatic information exchange; OECD, *Action 13: Country-by-Country Reporting Implementation Package* (n 48); OECD, *Action 13: Guidance on the Implementation of Transfer Pricing Documentation and Country-by-Country Reporting* (n 48). Discussed in Maria Theresia Evers, Ina Meier and Christoph Spengel, ‘Transparency in Financial Reporting: Is Country-by-Country Reporting Suitable to Combat International Profit Shifting?’ (2014) 68 Bulletin for International Taxation 295. See also Michael Devereux, *Transparency in Reporting Financial Data by Multinational Corporations* (Oxford University Centre for Business Taxation Report, 2011); Jennifer Blouin, ‘Transparency and Financial Accounting’ (2014) 68 Bulletin for International Taxation 304.

they would ultimately become public.<sup>533</sup> Further, it has been stated that such reporting would help tax authorities in obtaining vital information, which would aid in taking preventative measures.<sup>534</sup>

Whilst creating a common ground for information exchange across jurisdictions, transparency requirements do nothing more than merely assist territorial regimes in enforcing their local tax rules extraterritorially.<sup>535</sup> Even if additional disclosure requirements do help in the obtainment of some extra financial data, it may be difficult to decipher, especially within the framework of large multinational corporations with hundreds of subsidiaries operating around the globe, as it would normally be provided in an aggregated form.<sup>536</sup>

Although a shift towards more substantial global cooperation is possible, with the OECD developing a multilateral tax treaty within the framework of the BEPS project, it remains to be seen how it will affect local tax regimes across the network.<sup>537</sup> It is more

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<sup>533</sup> Ting (n 207) 67, arguing that '[p]revention is always better than cure', which means that '[i]f a MNE knows that it will have to disclose the detailed country-by-country information to the tax authorities, it may have less incentive to undertake aggressive BEPS transactions'.

<sup>534</sup> Ting (n 207) 67, noting in the context of the Apple investigation that if country-by-country reporting was in place 'tax authorities in the US as well as in the source countries would have been alerted to the questionable low effective tax rate in Ireland much earlier and may have taken appropriate action promptly'.

<sup>535</sup> Philip Baker, 'Automatic Exchange of Information – The Arrival of a New International Form of Taxation' [2013] *British Tax Review* 371, explaining that 'the multiplicity of instruments for exchange of information creates a series of problems of its own. The information to be exchanged under the different instruments is not always identical, and the modality of exchange – electronic forms, for example – that have been developed are not identical. A task over the next few years will be for revenue authorities to develop common standards and common modalities for information exchange in the most effective form'.

<sup>536</sup> Difficulties with the interpretation of Vodafone's recent voluntary country-by-country disclosure are discussed in Ting (n 207) 70, critically evaluating Vodafone's disclosure and noting that 'the amount of corporate tax payment is buried among over 60 other taxes and charges', whilst the 'data about Vodafone's key vehicle for BEPS – a subsidiary established in Luxembourg which is responsible for the group's "global procurement, financing and roaming operations" – is hidden among other group companies that act as the holding companies for an investment in the US, with the aggregate numbers for those entities shown under the caption "Non-OpCo"'.

<sup>537</sup> Kim Brooks, 'The Potential of Multilateral Tax Treaties' in Michael Lang and others (eds), *Tax Treaties: Building Bridges Between Law and Economics* (IBFD 2010) 236, arguing that whilst multilateral treaties could help 'with tax administration, tax collection and the reduction of tax

likely that the multilateral instrument would merely be used as a convenient way to introduce the agreed-upon BEPS outcome across jurisdictions, instead of amending each bilateral treaty separately.<sup>538</sup> The issue, however, is that potential reservations regarding the incompatibility of the instrument with domestic laws would overcomplicate the process of agreeing on the wording of a multilateral instrument.<sup>539</sup>

What is more likely to occur in the short term, however, is the development of diverging bottom-up initiatives in the areas of international taxation.<sup>540</sup> These already include a DPT in the UK and Australia, web nexus proxies in Italy and Hungary, and online news fees in Spain and Germany, whereby jurisdictions are designing their own measures for tackling the e-commerce nexus erosion instead of waiting for the outcome of the BEPS project.<sup>541</sup> Other countries may seem less enthusiastic about the BEPS

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competition’, there is still scope to argue that ‘multilateral treaties will not provide a panacea for the challenges of modern day international tax planning’. See OECD, *Developing a Multilateral Instrument to Modify Bilateral Tax Treaties* (n 57). Discussed in Achim Pross and Raffaele Russo, ‘The Amended Convention on Mutual Administrative Assistance in Tax Matters: A Powerful Tool to Counter Tax Avoidance and Evasion’ (2012) 66 *Bulletin for International Taxation* 361. See also Michael Lang, ‘The Concept of a Multilateral Tax Treaty’ in Michael Lang (ed), *Multilateral Tax Treaties* (Kluwer Law International 1998); Philip Baker, ‘International Assistance in the Collection of Taxes’ (2011) 65 *Bulletin for International Taxation* 281; Roman Seer and Isabel Gabert, ‘European and International Tax Cooperation: Legal Basis, Practice, Burden of Proof, Legal Protection and Requirements’ (2011) 65 *Bulletin for International Taxation* 88.

<sup>538</sup> CFE Fiscal Committee, ‘Opinion Statement FC 15/2014 on Developing a Multilateral Instrument to Modify Bilateral Tax Treaties (BEPS Action 15)’ (2015) 5 *European Taxation* 157. The mechanics of multilateral implementation have been discussed in Miller and Kirkpatrick(n 57); John F Avery Jones and Philip Baker, ‘The Multiple Amendment of Bilateral Double Taxation Conventions’ (2006) 46 *Bulletin for International Taxation* 555.

<sup>539</sup> Miller and Kirkpatrick (n 57) 684, arguing that ‘[i]f the multilateral instrument is simply used as a vehicle for expediting the implementation into existing DTCs of changes to the MTC, then two drawbacks come to mind. First, if a significant number of OECD members intend to implement changes via a multilateral instrument rather than by renegotiation of individual DTCs then they are going to be much more concerned that the new wording in the OECD MTC meets their needs and is compatible with their domestic law ... Then there is the issue of reservations: some states may require the multilateral instrument to permit them to refrain from implementing changes in their DTCs based on MTC changes in respect of which they have entered a reservation’.

<sup>540</sup> Hugh J Ault, ‘Some Reflections on the OECD and The Sources of International Tax Principles’ (2013) 70 *Tax Notes International* 1195, 1199, arguing that ‘if countries don’t participate in some kind of coordination exercise in dealing with BEPS issues, there will be a proliferation of individual, uncoordinated measures that will lead to issues of double taxation’.

<sup>541</sup> Diverted profits taxes in the UK and an equivalent measure in Australia discussed in Chapter 2 at 2.3. Broadly, Italy attempted to introduce an artificial ‘web tax’ enforcement proxy (subsequently

attack on their businesses, particularly the US, who have been noted to pursue their own agenda, ‘not to avoid double non-taxation, but to minimize the impact of the project on the country and its MNEs’.<sup>542</sup>

### **3.4. Interim conclusions: predominance of territorial regulation**

It is, therefore, highly likely that jurisdictions will be more willing to cherry-pick the measures that they find suitable, which were developed and justified as part of the BEPS project, and further adapt them to local needs. It may be more realistic to expect the development of local tax regimes, which would be enforceable through local tax intermediaries, rather than a global tax regime enforceable through a global clearing house, a scenario that should be reserved for the long-term future.<sup>543</sup> In the medium term, it can be envisaged that international cooperation will increase, but will not lead to comprehensive loss of sovereignty.<sup>544</sup>

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repealed) for the VAT taxation of advertising services, whereby any Italian taxable person purchasing advertising services and sponsored links online would have been obliged to purchase such services from suppliers registered for VAT purposes in Italy. See discussion in Luigi Quarantino, ‘New Provisions Regarding the Taxation of the Digital Economy’ (2014) 54 *European Taxation* 211 (criticising the proposed provisions and arguing for redefining the PE concept at the international level). Hungary has introduced an advertising levy on gross revenue generated from advertisements targeted at the Hungarian audience, with an obligation imposed on local businesses buying the service to reverse charge the levy if the advertiser is not compliant with its advertising obligation. Discussed in Roland Felkai, ‘Government Presses Ahead with Controversial Sectoral Taxation Policy through the Introduction of an Advertisement Tax’ (2015) 55 *European Taxation* 37. The so-called ‘Google tax’, essentially a copyright protection measure, was also introduced in Germany and Spain whereby search engines, such as Google, were required to pay a licence fee to publishers when showing snippets of their material in search results, for example, in the Google News section targeted at German and Spanish readership respectively.

<sup>542</sup> Ting (n 217) 415.

<sup>543</sup> Miller and Kirkpatrick (n 57) 691, noting in the context of international consensus on tax collection that ‘[t]he imposition by the US of the FATCA regime could be viewed as a vote of no confidence in the Mutual Assistance Convention and, indeed, the whole of the OECD’s exchange of information programme. Whilst the US has much to do in repairing the fabric of its own tax system to counter BEPS, it is not inconceivable that it might go beyond mere repair and introduce measures to counter BEPS with respect to US taxation which are particular to the US and which do not lend themselves to adoption on a multilateral basis’.

<sup>544</sup> Cockfield (n 70) 186, concluding that ‘the OECD is increasingly acting as an informal (lower case) world tax organization in contrast to the sometimes touted need for a formal (upper case) World Tax Organization that could impose binding tax rules on participating nations. In a world where governments jealously protect their tax sovereignty, the OECD reform process, which emphasizes multilateral deliberation and consensus-building through “soft-institutions”, may be the best

It may, therefore, be argued that the appearance of a truly globalised governance regime for the Internet naming and numbering system has created an illusion that it may be possible to achieve a politically viable global regime. As the ICANN experience shows, however, this is not entirely possible unless the regime is in fact an extension of a powerful nation's political will, as in the case of the US government controlling the exercise of the naming and numbering authority. Moreover, even if that condition is satisfied, there are bound to be international tensions as major nation-states compete for control over vital global resources.

Hence, however appealing the idea of a globalised cyberspace without borders may seem, it simply does not withstand the reality test. In this regard, the application of the global governance regime to the tax context seems to be a long-term solution at best. Whilst a global solution would tackle the globalised and digitised nature of modern commerce, it would be fraught with issues relating to tax competition amongst nation-states. A specific global tax on e-commerce seems to be the least likely model even in the long term, as it would be difficult to gauge interest from developing countries, leaving the developed world to fund the development of the global Internet infrastructure, a scenario which is highly unlikely to be implemented in practice.<sup>545</sup> A global profit split would seem more appropriate as a long-term solution but the

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available option for the development of international tax policy that promotes international welfare while permitting nations to continue to pass tax laws in their perceived national self-interest'.

<sup>545</sup> Jinyan Li, 'China and BEPS: From Norm-Taker to Norm-Shaker' (2015) 69 *Bulletin for International Taxation* 355, 356, noting that 'China regards BEPS as being fundamentally unfair. The unfairness lies in the mismatch between the location of taxation rights and the substantive economic activities. The right to tax should belong to the jurisdiction where the government creates the necessary business and investment environment for MNEs and business activities are conducted ...'. See also Carmel Peters, 'Developing Countries' Reactions to the G20/OECD Action Plan on Base Erosion and Profit Shifting' (2015) 69 *Bulletin for International Taxation* 375; Leonard Wagenaar, 'The Effect of the OECD Base Erosion and Profit Shifting Action Plan on Developing Countries' (2015) 69 *Bulletin for International Taxation* 84; DP Sengupta and Kavita R Rao, 'Base Erosion and Profit Shifting: An Indian Perspective' (2015) 69 *Bulletin for International Taxation* 382.

insurmountable barriers relating to the need for uniform tax rules across the globe would prevent this model from being implemented in the short to medium term.

Overall, the current status quo is that, although in the beginning the Internet became a major disruption in the way information technology was regulated and, thus, led to the dominance of cyber-libertarian views, later, national governments realised that the Internet simply represents a new unoccupied territory that they can subject to sovereignty claims:

Now, of course, the world is starting to close in on cyberspace. Formal organization, property rights and commerce, regulation and geopolitics are reasserting themselves systematically. Of course, the institutionalization of the Internet is taking place on a variety of fronts. Debates over taxation of e-commerce, regulation of content, and technical standardization are underway in a variety of national and international forums. But the administration of the Internet's name and address root was the first to produce a global solution.<sup>546</sup>

For practical reasons, therefore, it may be expected that tensions between global and territorial regimes will remain pertinent in the future:

Under the pressure of public policy protection and commercial efficiency, the Internet will increasingly be carved up into distinct spheres or virtual spaces governed by different rule-sets ... [T]his evolution will follow two main avenues. On the one hand, states will develop increasingly efficacious and legitimate processes of juridical and technological control in order to safeguard local values. On the other hand, online communities of various kinds, albeit primarily of a commercial nature, will further the development of their social norms into private legal systems.<sup>547</sup>

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<sup>546</sup> Mueller 2002 (n 14) 266; Schultz (n 19) 802–803: ‘The Internet used to be conceived of as a place that was free from regulation. It was thought that everything on the Internet would be free. Free not in the sense of obtaining something for free, but in the sense of being unrestricted ... This inherent liberty on the Internet was taken for granted: it was used as a postulate until it was clearly demonstrated that what we can do on the Internet depends on the laws of technology just as our non-electronic actions depend on the laws of nature ... It had been shown that the Internet could be a place of exquisite control just as it used to be a place of exquisite liberty’.

<sup>547</sup> Schultz (n 19) 805.

While the technical infrastructure and policy issues will rely on international cooperation, nation-states will continue applying local regulation to online activities, utilising less tangible nexus points with Internet actors.<sup>548</sup>

It can be anticipated that an equally challenging road lies ahead for tax administrations with regard to regulating Internet activities. As international cooperation is expected to increase over time, global policy solutions will remain on the agenda and should therefore be carefully scrutinised. Equally, however, it can be expected that territorial nexus issues will remain highly relevant, as states will look to tax the increasingly fluid digital commerce, albeit engaging in dialogue with other governments:

It is a mistake to believe that the globalization of markets for goods, services, and capital signals the demise of national identity or national politics. Economic globalization does not imply global government. Modern developments, such as mobile capital and e-commerce, may limit the ability of any sovereign state to singlehandedly control its economic destiny, and therefore may usher in a new era of multinational cooperation, but they do not mean the end of nationalism.<sup>549</sup>

In this regard, the proposed local nexus solutions will need to be carefully examined for viability, particularly in the light of Internet jurisprudence. Discussion of such territorial models will, therefore, form the overarching framework for further analysis of the tax nexus issues arising in the context of virtual nexus proposals discussed in the next chapter.

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<sup>548</sup> Reidenberg (n 19) 1955: 'In the Internet context, defendants have generally claimed that a remote forum is precluded from jurisdiction because the contacts are only established through a server that is not within the forum. Defendants assert that their activities are not directed at the forum state ... More recently, courts have looked to online targeting and to deleterious effect within the forum to determine if personal jurisdiction is appropriate'.

<sup>549</sup> Graetz (n 22) 279. See also Reidenberg (n 19) 1955, arguing that '[t]he assertion of sovereign jurisdiction to protect citizens is likely to advance the fundamental public policy that the rule of law should be supreme to technological determinism. At the same time, the multiplicity of states with jurisdiction over Internet activities is likely to stimulate creativity and new Internet services such as more accurate and selective filtering technologies, stronger security zones and more robust, customized compliance capabilities'.

## **Conclusion**

In this chapter various global solutions to e-commerce taxation have been discussed in the context of wider Internet regulation. It was concluded that whilst a global solution would alleviate most of the issues relating to the application of divergent state-level tax laws to borderless Internet activities, it would be difficult to agree on specific rules and further set up a global enforcement mechanism.

As experience with ICANN regulation shows, jurisdictions that are not comfortable with the US government controlling ICANN on a unilateral basis under a private contract are prepared to challenge the global Internet governance regime. National authorities further choose to implement territorial regulation over the Internet, using local Internet service providers as enforcement intermediaries controlling the Internet infrastructure.

Similar trends can be observed in international tax law. Although it may be possible to design a global e-commerce tax solution enforceable through a global clearing house, this model may face insurmountable obstacles upon implementation in the short to medium term. As experience with building cross-border tax regimes shows, it may be difficult to agree on a specific set of rules even at the regional level.

It may, therefore, be more practical to look for a way to modify territorial tax nexus standards for digital commerce through implementing less tangible connections. Using the current trends in the Internet jurisprudence, it is, however, argued in the next chapter that, if adopted, the effects and targeting nexus standards implemented in Internet regulation and proposed in the tax context would increase uncertainty for international businesses, as there are no uniform sets of easily identifiable proxies for such intangible jurisdictional connections.

## CHAPTER 5. DESTINATION-BASED VIRTUAL NEXUS SOLUTIONS

### Introduction

It has been argued in the previous chapters that proposals to design a global tax regime for digital commerce appear reasonable, as the Internet transcends state borders, with the underlying technical design determining the network's international reach. Following discussion of broader Internet governance, however, it was concluded that a genuinely global tax regime would be difficult to establish in the near future. Whilst practice shows that multilateral cooperation in tax enforcement is thriving, consensus on substantive jurisdictional matters would be difficult to reach, as this might go beyond the level of cooperation that would respect state sovereignty.

Given the absence of indisputable global consensus on tax matters, a more probable scenario would be for national authorities to use altered territorial nexus standards, adapted to digital realities. In this regard, tax models have been proposed in the literature, which would broadly encompass a 'sliding scale' of various targeting nexuses, ranging from the more traditional 'significant business presence' to a virtual data nexus with a market jurisdiction. The nexus elements of such tax models are considered below in the light of the broader jurisprudence on Internet jurisdiction.

It is explained that the proposed virtual tax nexus standards considered in the literature and policy papers appear to have been inspired by case law on personal jurisdiction adapted to the realities of the Internet. In this regard, it is demonstrated that, in Internet jurisprudence, no consensus currently exists on a harmonised application of jurisdictional rules to online activities. Whilst the effects nexus standard, endorsed in the Indian tax case of *Vodafone*, finds support in cybercrime cases, it has been criticised as creating overlapping jurisdictional claims if applied elsewhere. The more stringent

‘targeting’, or ‘directing’, test, which lies at the core of the destination-based tax proposals, relies on a vague concept of intent, or ‘purposeful availment’ as developed in US law. Rather unhelpfully, the substance of the targeting nexus test has not been interpreted consistently. Academics and courts are generally far from being unanimous on whether simple intent to target a market jurisdiction is sufficient to establish a justifiable nexus with online conduct, or whether some active presence in the country is also required.

If the virtual tax standards were to be implemented in the form suggested in the literature, they would also require the availability of a ready enforcement mechanism in market countries. Given that assessment of virtual presence would require tax authorities to have access to reliable data on sales, assets and, more importantly, digital operations attributable to market countries, such data would be vital for verifying virtual nexus but would be difficult to obtain without enforcement intermediaries. Although financial institutions or Internet service providers have been considered as potentially viable enforcement agents, it is explained that they lack the required expertise to enforce a broad virtual nexus standard.

It is concluded that a proper virtual nexus standard would be unfeasible in the tax context, especially if implemented without unambiguous proxies and reliable enforcement infrastructure. It is suggested, therefore, that a more restricted version of a targeting nexus standard could, nevertheless, be implemented, but only as a backstop anti-abuse measure within the framework of the current tax models, as discussed further in the final chapter.

## **1. Outline of destination-based targeting tax models**

In an attempt to adapt the current physical nexus standards to digital realities, various tax models have been developed, which would use less tangible nexus standards.

Although these models are intended to serve different fundamental purposes, such as moving away from the profits tax base under cash flow tax proposals or curbing base-eroding payments under the base erosion withholding tax model, they would all implement a similar destination-based nexus standard for determining jurisdiction to tax.

Given that these tax models either originated from the US literature (destination cash flow tax) or have been explicitly based on the US case law (virtual PE and e-commerce WHT), it is not surprising that the nexus elements of such proposals are largely based on the broader jurisprudence on personal jurisdiction, including jurisprudence applicable to online activities.<sup>550</sup> The difference only lies in the scale of ‘targeting’ permitted when determining the jurisdictional limits of these tax models. Whilst some models, such as qualitative virtual PEs, would require significant business presence in the country, other models would consider pure sales as constituting sufficient nexus – for example, accounting sales under quantitative virtual PEs or cash sales under withholding and cash flow tax proposals. The more recent models would go further and consider pure virtual activities, such as personal data collection, as constituting nexus, as proposed under the digital nexus PEs and data withholding taxes.

The main nexus features of the destination-based virtual PEs, withholding taxes and cash flow models are discussed below and further critically assessed in the light of the diverging Internet jurisdictional standards.

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<sup>550</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 107: for example, OECD uses the US personal jurisdiction terminology when outlining a virtual nexus solution and proposing that significant economic presence in a country could be established ‘on the basis of factors that evidence *a purposeful and sustained interaction* with the economy of that country via technology and other automated tools’ (emphasis added).

### 1.1. Significant business presence: virtual PEs

It has been proposed in the literature that, instead of relying on the traditional physical proxies for source taxation, the PE concept should be redefined using modified qualitative or quantitative thresholds, which would place more emphasis on a targeting nexus in a market jurisdiction based on significant business presence, substantial sales, personal data collection or a combination of these factors.<sup>551</sup>

The original virtual PE model would use a qualitative threshold of significant business presence, which would follow closely the economic nexus standards developed in the US due process jurisprudence, deeming a non-resident e-business to have a virtual PE in a destination country if it continuously and purposefully directs its business activity into the country, which would be determined based on a combination of factors such as sales, assets, personnel or digital business presence.<sup>552</sup>

Other virtual PE models would typically apply an alternative, or quantitative, test establishing measurable criteria for determining taxable presence based on the level of sales in a market jurisdiction.<sup>553</sup> For example, it has been proposed that a PE could be deemed to exist if regular sales exceeded a certain *de minimis* threshold, often set at

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<sup>551</sup> The virtual PE model was originally proposed in Hinnekens (n 71) 195–199 and has been discussed in detail in Doernberg (n 108) 351–354; Pinto (n 24) 191–205; OECD, *E-Commerce Report 2005* (n 71) 65–72; OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 107–113. A gross sales virtual PE has been proposed in Avi-Yonah (n 32) 535–537; Cockfield (n 71) 650–654. A virtual digital data PE has been proposed in Hongler and Pistone, *Blueprints for a New PE Nexus* (n 71); Collin and Colin, *French Digital Tax Report* (n 71). A refinement of a physical PE, together with a force of attraction rule for digital supplies, has been proposed in Hellerstein (n 71) 348–349.

<sup>552</sup> See Hinnekens (n 71) 195–199, explaining that ‘[a] mere significant volume of sales in a market would not be sufficient to constitute a taxing nexus’, and therefore a virtual PE model would use a business presence PE threshold by incorporating a nexus fiction. The due process economic nexus was discussed earlier in the context of the US sales taxes in Chapter 3 and is further considered below in relation to Internet jurisprudence. See also OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 109, discussing digital targeting nexus factors such as using localised domain names, websites and payment platforms, i.e. translated into local language and adapted to local standards. These nexus factors have been borrowed from the targeting / directing nexus standards adopted in the law of personal jurisdiction developed in the context of Internet-related disputes, as discussed further below at n 603 onwards.

<sup>553</sup> See OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 107, which discusses ‘revenue-based’ nexus factors.

around \$1 million.<sup>554</sup> This means that nexus would be essentially determined based on the location of customers whom an overseas enterprise targeted by virtue of online sales.

A hybrid virtual PE proposal would combine traditional significant business presence proxies, such as sales or assets, with a data collection nexus and thus deem a foreign enterprise to have a taxable connection with a source country based on the traditional PE standards, as well as taking into account the more data-intensive processes that have recently been developed.<sup>555</sup>

## **1.2. Sales nexus**

### **1.2.1. Withholding tax**

As an alternative to virtual PEs, it has been proposed that transactional taxes in the form of gross withholding taxes (WHT) should apply specifically to e-commerce transactions, thereby creating nexus in relation to overseas enterprises regardless of their physical presence in the market, based on where the payer is located.<sup>556</sup> The WHT

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<sup>554</sup> Proposed in Avi-Yonah (n 32) 535–536, who argued that ‘if the goal is to tax the income from electronic commerce in a way that preserves the underlying rationale of the permanent establishment rule ..., a different type of threshold is required, one that is not linked to physical presence’. It has, therefore, been proposed that ‘[s]uch a threshold could be a de minimis amount of sales into the jurisdiction ... For example, the rule could be that if a seller in electronic commerce has gross sales of \$1 million or less from a given tax jurisdiction ... it would not be subject to taxation at source’ (ibid).

<sup>555</sup> Proposed in Hongler and Pistone, *Blueprints for a New PE Nexus* (n 71); Collin and Colin, *French Digital Tax Report* (n 71). The personal data element of these proposals is discussed further below at 1.3. See also OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 111, noting that ‘to be an appropriate measure of participation in the economic life of a country, the revenue factor could be combined with other factors, such as the digital and/or user-based factors that indicate a purposeful and sustained interaction with the economy of the country concerned’. See also OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 110–111, discussing possible combinations of the revenue-factor with other nexus factors, such as the number of ‘monthly active users’, frequent ‘online contract conclusion’ and volumes of personal ‘data collected’.

<sup>556</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 113: ‘A withholding tax on payments by residents (and local PEs) of a country for goods and services purchased online from non-resident providers has also been considered. This withholding tax could in theory be imposed as a standalone gross-basis final withholding tax on certain payments made to non-resident providers of goods and services ordered online or, alternatively, as a primary collection mechanism and enforcement tool to support the application of the nexus option described above, i.e. net-basis taxation’. See also OECD, *BEPS Digital Taxation Report 2014* (n 21) para 218: ‘Another option that has been suggested would be to impose a final withholding tax on certain payments made by residents of a country for digital

models would avoid profit allocation issues by linking taxation with sales transactions that have a measurable economic value visible at the final sales stage and would, therefore, impose a tax on gross sales, either at a very low rate (for example, 3% or 5%) or at a higher corporate tax rate.<sup>557</sup>

Similarly to virtual PEs, one option for determining nexus would involve using a qualitative test, which would determine WHT nexus based on the location of a corporate customer paying for digital services. For example, under the base erosion WHT model, source countries would be allowed to charge a WHT at a low rate ranging from 3% to 10% on all cross-border payments, which are considered to erode the source tax base by either being deductible as administrative expenses or forming part of the cost of sales for a local business customer.<sup>558</sup> The tax base would, therefore, be broader than in the context of traditionally proposed e-commerce withholding taxes, since it would also cover interest payments as base eroding transactions.<sup>559</sup>

Given that the base erosion approach, not being applicable to business-to-consumer transaction, would have a narrow scope, an alternative option has been proposed, which would implement a quantitative sales threshold for determining nexus,

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goods or services provided by a foreign e-commerce provider. This type of proposal is intended to address concerns that it may be possible to maintain substantial economic activity in a market without being taxable in that market under current permanent establishment rules due to lack of physical presence in the market<sup>7</sup>.

<sup>557</sup> For an overview of withholding taxes on e-commerce see Brauner and Baez, *Withholding Taxes* (n 72). A low-rate refundable WHT on e-commerce has been proposed in Pinto (n 24) 207–231; discussed in OECD, *E-Commerce Report 2005* (n 71) 51. A WHT on e-commerce imposed at a corporate tax rate has been proposed in Avi-Yonah (n 32). A low rate (eg 3%) base erosion WHT has been proposed in Doernberg (n 72); discussed in Pinto (n 24) ch 6; OECD, *E-Commerce Report 2005* (n 71) 54. A 5% WHT on e-commerce has been proposed in Cockfield 1999 (n 32)198–205.

<sup>558</sup> See Richard L Doernberg, ‘Electronic Commerce: Changing Income Tax Treaty Principles a Bit?’ (2000) 21 *Tax Notes International* 2417, 2425–2426; discussed in detail in Pinto (n 24) ch 6.

<sup>559</sup> Doernberg (n 558) 2425.

ranging from \$250,000 to \$1 million, and thus impose a withholding tax on gross sales exceeding the required de minimis amount.<sup>560</sup>

It has been proposed that taxable sales would take into account all types of income, disregarding the traditional distinction between royalties, rental and business income, which only exists as a political compromise.<sup>561</sup> Any sales falling below the minimum threshold would be exempt from withholding taxation altogether or, instead, refunded at the end of the tax period.<sup>562</sup> Therefore, payments in excess of the threshold would be subject to a gross WHT at a rate ranging from 3% to higher corporate tax rates, with taxpayers having an option to apply for a credit in the country of residence or to file a net tax return in the source country, allocating relevant costs and receiving a reduction in the amount of WHT payable.<sup>563</sup>

### ***1.2.2. Destination-based cash flow tax***

Instead of rectifying the current profits tax issues relating to profit attribution, a shift from profits to a cash flow basis has been proposed for international corporate taxation.<sup>564</sup> It has been proposed that, instead of trying to identify where economic value is produced, as envisaged under the BEPS reforms, a cash flow tax would replace the

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<sup>560</sup> Proposed in Pinto (n 24) ch 7; Cockfield 1999 (n 32) 198–205.

<sup>561</sup> Doernberg (n 558) 2426–2427.

<sup>562</sup> Cockfield 1999 (n 32) 199.

<sup>563</sup> Doernberg (n 558) 2426–2427.

<sup>564</sup> Discussion of the merits and demerits of the cash flow tax base are outside the scope of this thesis. There is a robust body of literature discussing a shift from profits to consumption taxation. Leaving the personal taxation aspects of these proposals aside, the models include the flat tax and the X tax and would impose an origin subtraction-based tax similar to VAT but which would give deduction for labour costs. The Meade Committee in the UK proposed a cash flow tax and discussed R+F and R-based cash flow taxes, without focusing on cross-border transactions. See Institute for Fiscal Studies, *The Structure and Reform of Direct Taxation* (1978). On flat tax proposals see Robert E Hall and Alvin Rabushka, *Low Tax, Simple Tax, Flat Tax* (New York: McGraw-Hill 1993); Robert E Hall and Alvin Rabushka, *The Flat Tax* (2nd edn, 1995). On the X tax see David F Bradford, *Untangling the Income Tax* (Cambridge: Harvard University Press 1986); David F Bradford, 'A Tax System for the Twenty-First Century' in Alan Auerbach and Kevin Hassett (eds), *Toward Fundamental Tax Reform* (2005).

current system of profits taxes, with the new tax being payable in jurisdictions ‘where products are used rather than where the corporation is located or where the goods are produced’.<sup>565</sup> It has been argued in this regard that ‘assessing the tax based on where a firm’s products are used eliminates issues of where to locate a business and incentives ... to shift profits abroad’.<sup>566</sup> One of the main premises for the destination profits tax is, therefore, that taxing profits where they are generated is difficult because of the mobility of corporations and the underlying production factors.<sup>567</sup>

Two destination-based modifications of these proposals have been developed that would implement elements of a targeting nexus standard.<sup>568</sup> One option would involve implementing a destination-based tax using the VAT credit-invoice system.<sup>569</sup> Under

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<sup>565</sup> Alan J Auerbach, ‘A Modern Corporate Tax’ The Center for American Progress/The Hamilton Project, December 2010 <<http://www.americanprogress.org/issues/2010/12/pdf/auerbachpaper.pdf>> accessed 22 July 2013, 3.

<sup>566</sup> Auerbach (n 565) 3.

<sup>567</sup> Auerbach (n 565) 3: ‘Most countries, including the United States, attempt to collect corporate taxes based on where a corporation’s profits are earned. The problems with this approach are that businesses and investments are increasingly internationally mobile and a business’s profits are intrinsically hard to attribute to a particular place; indeed, the fungibility of profits results in a system where a disproportionate share of the profits of multinational companies appear to occur in the world’s least-taxed countries’.

<sup>568</sup> There are generally three types of models proposed in the literature that could be applicable to business transactions: an origin-based subtraction cash flow tax, a destination-based credit-invoice tax, and a destination-based subtraction tax. The key issue with origin-based taxation is that it could create opportunities for tax avoidance through transfer pricing and relocation to tax jurisdictions not applying the origin-based tax system. In addition, it may be more difficult to audit transactions since no invoicing would exist under the origin base tax. Therefore, only destination-based proposals are considered further. See Harry Grubert and Scott T Newlon, ‘The International Implications of Consumption Tax Proposals’ (1995) 48 *National Tax Journal* 619, 637; William B Barker, ‘International Tax Reform Should Begin at Home: Replace the Corporate Income Tax with a Territorial Expenditure Tax’ (2010) 30 *Northwestern Journal of International Law and Business* 647, 690–691.

<sup>569</sup> See Auerbach (n 565) 11, suggesting that ‘[i]nstead of excluding cross-border transactions from the tax base, a similar outcome could be achieved using border adjustments as practiced under VATs. Under this alternative approach, cross-border transactions would initially be included in the corporate tax base and then offset using border adjustments’. The credit-invoice model is discussed in Auerbach, Devereux and Simpson (n 84) 883; Stephen Bond and Michael P Devereux, *Cash Flow Taxes in an Open Economy* (Centre for Economic Policy Research 2002). Similarly, on E-VAT proposals following the destination-based cash flow tax model see Daniel S Goldberg, ‘E-VAT: An Electronically Collected Progressive Consumption Tax’ (2010) 128 *Tax Notes* 1351. On the credit-invoice system in the context of consumption taxes see generally Itai Grinberg, ‘Where Credit is Due: Advantages of the Credit-Invoice Method for a Partial Replacement VAT’ (2010) 63 *Tax Law Review* 309.

this model, cross-border adjustments could be achieved through a mechanism similar to VAT.<sup>570</sup> Hence, instead of disregarding cross-border transactions altogether, as under the subtraction model, the cash flow tax would be charged on imports, with exports merely zero-rated. As a result, on export, any input tax relating to shipped products would be refunded, but, in addition, a cash tax refund or a reduction in a payroll tax liability would be given in the amount equal to labour costs relating to the production of the exported products.<sup>571</sup>

The advantage of this credit-invoice system is that it is used in all countries employing destination-based VATs and would, therefore, be familiar to tax administrations, if implemented.<sup>572</sup> It would offer the ability to audit files on a transactional basis, thereby ensuring increased tax compliance and facilitating automated tax collection.<sup>573</sup> At the same time, it might overcomplicate the tax system, without actually achieving a different result from what could be done using the subtraction method, computing the tax cumulatively in the same way as under traditional profits taxes.<sup>574</sup>

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<sup>570</sup> Auerbach, 'A Modern Corporate Tax' (n 565) 10: 'The destination principle is already familiar in the context of taxation, because it is the approach used around the world in the implementation of value-added taxes (VATs). Under the VAT, the destination principle is applied through border adjustments, which impose the VAT on all imports and rebate the tax previously collected on domestic production that is exported. Imposing border adjustments serves to make the VAT a tax on all domestic consumption, but another important feature is that it eliminates the incentive that domestic producers would otherwise have to engage in profits shifting for tax purposes'.

<sup>571</sup> Auerbach, Devereux and Simpson (n 84) 884.

<sup>572</sup> Grinberg (n 569) 7.

<sup>573</sup> Goldberg (n 569) 1357.

<sup>574</sup> Auerbach (n 565) 11, arguing that 'relying on border adjustments would accomplish nothing except to make the corporate tax system more complex'.

For this reason, a destination-based subtraction cash flow tax has been developed.<sup>575</sup> When calculating the tax base, the model would ignore all cross-border transactions and take into account only receipts from domestic cash sales and borrowings, whilst allowing deduction only for domestic purchases, investment, interest expenses and payroll costs.<sup>576</sup> Hence, the tax base would be similar to a destination-type VAT, the only difference being the allowable deduction for labour costs, inclusion of financial transactions, and the application of the subtraction method.<sup>577</sup>

### 1.3. Personal data processing nexus

The most relaxed source nexus threshold proposed in the literature would move away from business presence requirements and sales connections and instead establish purely virtual connections based on personal data collection in market jurisdictions.<sup>578</sup> It has been argued that personal data plays a core role in many digital businesses, as ‘data gathered from various sources is often a primary input into the process of value creation in the digital economy’.<sup>579</sup> In this regard, it has been suggested that nexus erosion may

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<sup>575</sup> Developed in Rita de la Feria and Michael Devereux, *Designing and Implementing a Destination-Based Corporate Tax* (Oxford University Centre for Business Taxation WP 14/07, 2014). For a critical evaluation see Wei Cui, ‘A Critical Review of Proposals for Destination-Based Cash-Flow Corporate Taxation as an International Tax Reform Option’ <[http://www.sbs.ox.ac.uk/sites/default/files/Business\\_Taxation/Events/conferences/symposia/2015/cui-paper.pdf](http://www.sbs.ox.ac.uk/sites/default/files/Business_Taxation/Events/conferences/symposia/2015/cui-paper.pdf)> accessed 24 August 2015.

<sup>576</sup> Auerbach (n 565) 3: ‘[W]hen calculating taxable income, firms would include revenues from both sales of goods and services and from financial transactions ... Firms would receive deductions for payments made for the same costs as they do now – wages, cost of goods sold, interest expense – but would also deduct other financial payments, such as repayment of loans’. See also Auerbach (n 565) 10: ‘The second stage is to exclude from the calculation of a company’s tax base all cross-border transactions, regardless of their nature, thereby making the tax liability relate only to domestic transactions. In particular, sales abroad would not be included in receipts, nor would purchases from abroad be deductible. The same exclusion would apply to financial transactions as well; financial flows from abroad would not be added to the tax base, nor would flows going abroad be deductible’.

<sup>577</sup> Auerbach (n 565) 18.

<sup>578</sup> See OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 115-117, discussing an ‘equalisation levy’, which would essentially apply as a WHT on personal data collection in market jurisdictions. See also OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 110, proposing ‘user-based’ nexus factors for the purposes of establishing a virtual PE.

<sup>579</sup> OECD, *BEPS Digital Taxation Report 2014* (n 13) 130.

be occurring due to digital enterprises collecting and processing data distantly, thereby boosting digital market presence without maintaining a physical base in destination countries:

The expanding role of data raises questions about whether current nexus rules continue to be appropriate or whether any profits attributable to the remote gathering of data by an enterprise should be taxable in the State from which the data is gathered, as well as questions about whether data is being appropriately characterised and valued for tax purposes.<sup>580</sup>

In order to address the alleged nexus erosion, data collection tax models have emerged. The French Collin–Colin proposal would introduce a data processing virtual PE, deeming a PE to exist wherever a digital enterprise exceeds a threshold determined according to the volume of personal data collected over a certain period.<sup>581</sup> Similar proposals suggesting the implementation of a virtual PE, which would take into account digital data presence, have recently been developed.<sup>582</sup> These models would combine ‘significant business presence’ nexus standards with data collection proxies, deeming a PE to exist wherever sales facilitated by data processing exceed a certain threshold.<sup>583</sup> Finally, a qualitative nexus test would determine a withholding tax obligation wherever personal data is monitored in a source country, on the basis that Internet users constitute

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<sup>580</sup> OECD, *BEPS Digital Taxation Report 2014* (n 13) 130.

<sup>581</sup> Collin and Colin, *French Digital Tax Report* (n 71) 115: ‘In the context of the digital economy, a company that provides a service in a country by using data collected through regular and systematic monitoring of users in that country could be deemed to have a virtual permanent establishment there’. See also Gaoua (n 73) 12–13; Sheppard (n 73) 300.

<sup>582</sup> Hongler and Pistone, *Blueprints for a New PE Nexus* (n 71) 25, proposing a modification to art 5 of the OECD Model, which would read as follows: ‘If an enterprise resident in one Contracting State provides access to (or offers) an electronic application, database, online marketplace, storage room or offers advertising services on a website or in an electronic application used by more than 1,000 individual users per month domiciled in the other Contracting State, such enterprise shall be deemed to have a permanent establishment in the other Contracting State if the total amount of revenue of the enterprise due to the aforementioned services in the other Contracting State exceeds XXX (EUR, USD, GBP, CNY, CHF, etc.) per annum’. For a discussion of a similar proposal see also OECD, *BEPS Digital Taxation Report 2014* (n 13) 145, suggesting a variation of the significant digital presence test ‘where the entity does a significant business in the country using personal data obtained by regular and systematic monitoring of Internet users in that country, generally through the use of multi-sided business models’.

<sup>583</sup> Hongler and Pistone, *Blueprints for a New PE Nexus* (n 71) 25.

‘free workers’ generating value for overseas enterprises.<sup>584</sup> It has been argued that such a tax could also apply to payments for digital goods and services and be potentially enforceable using financial intermediaries.<sup>585</sup>

#### **1.4. Summary of the targeting nexus elements of the proposed tax models**

All the proposed models outlined above would look to establish a targeting connection with a destination state, albeit using different standards. The virtual PE would look at the business presence, whilst withholding and cash flow taxes would look at the location of customers, and data taxes would be imposed based on the location of personal data collection. As discussed below, the targeting elements of the tax proposals have been inspired by the underlying concepts of personal jurisdiction, adapted to the Internet realities in case law and developed in technology law. Using illustrations from various areas of technology law, it is argued below that the targeting standards, if implemented in tax law, would not provide sufficient certainty, unless specific proxies are used, which would be difficult to agree upon given the overall lack of consensus on nexus standards across jurisdictions.

## **2. Destination-based targeting nexus in Internet jurisprudence**

### **2.1. Origins of the targeting nexus standard**

Extraterritorial application of national laws has long been a pressing issue for nation-states. Hence, the modern targeting nexus standards originate in the old effects nexus doctrine developed in personal jurisdiction case law, which provides that states may be

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<sup>584</sup> See Collin and Colin, *French Digital Tax Report* (n 71) 123, explaining how a data tax would operate in practice: ‘The scope of [the WHT] base and territorial application would be defined as a set of companies, regardless of the country where they are established, that use data collected from large numbers of users located in France ... The tax could apply only to data that are collected through the “free labour” of users who are dynamically participating in the companies’ value chains ... By way of analogy with a notion used in data protection legislation, the tax could affect only data derived from the regular and systematic monitoring of users’ activity ... The tax would only apply above a threshold expressed as a number of users to be determined, with a distinction between identified users and anonymous users ... The tax could take the form of a unit charge per user monitored’. Discussed in Gaoua (n 73) 13.

<sup>585</sup> See OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 114.

permitted to exercise power over conduct that occurred abroad but produced some ‘effect’ in their territory.<sup>586</sup> The effects principle normally establishes that the party whose conduct produced the effect creates a legitimate jurisdictional connection with the affected sovereign state.<sup>587</sup> The effects doctrine itself originates from the objective territoriality principle that establishes jurisdictional principles in criminal law.<sup>588</sup> In the business context, effects may include ‘economic effects’ within state boundaries, as developed in the context of the US antitrust law in the light of the wider constitutional tests relating to personal jurisdiction.<sup>589</sup>

In the economic law context, the effects nexus was introduced into the US jurisprudence in *Alcoa*, where the US asserted jurisdiction over a foreign company that was part of a world aluminium cartel, which allegedly affected US commerce.<sup>590</sup> Explaining the jurisdictional reach of the US antitrust law, the court laid down the

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<sup>586</sup> This section discusses cases that are most relevant for the purposes of the subsequent tax discussion. For a comprehensive analysis of the effects nexus in the Internet jurisprudence see, for example, Kohl(n 16) 87–111; Schultz (n 19) 811–816. See also Maier (n 19).

<sup>587</sup> Bowett (n 85) 7. The same concept applies in the US securities anti-fraud legislation. On the extraterritorial reach of US securities law see generally Genevieve Beyea, ‘Morrison v National Australia Bank and the Future of Extraterritorial Application of the US Securities Laws’ (2011) 72 *Ohio State Law Journal* 537; Hannah L Buxbaum, ‘Remedies for Foreign Investors Under US Federal Securities Law’ (2012) 75 *Law & Contemporary Problems* 161.

<sup>588</sup> See Hannah L Buxbaum, ‘Territory, Territoriality, and the Resolution of Jurisdictional Conflict’ (2009) 57 *American Journal of Comparative Law* 631, 638, noting that criminal law cases concerning the application of the objective territoriality principle in situations where ‘a principle could be found guilty of a crime whose component elements occurred partly within the regulating state, through an accessory, and partly without’. For a general discussion of the theory, history and critique of the effects doctrine in the offline world see Austen L Parrish, ‘The Effects Test: Extraterritoriality’s Fifth Business’ (2008) 61 *Vanderbilt Law Review* 1453.

<sup>589</sup> See case law on personal jurisdiction discussed in Chapter 3 at 1.1. For a detailed discussion of the economic effects doctrine in the context of antitrust law see generally Eleanor M Fox, ‘Modernization of Effects Jurisdiction: From Hands-Off to Hands-Linked’ (2009) 42 *New York University Journal of International Law & Politics* 159; Larry Dougherty, ‘Does a Cartel Aim Expressly? Trusting Calder Personal Jurisdiction when Antitrust Goes Global’ (2008) 60 *Florida Law Review* 915; Christopher Sprigman, ‘Fix Prices Globally, Get Sued Locally? US Jurisdiction over International Cartels’ (2005) 72 *University of Chicago Law Review* 265; Buxbaum (n 588).

<sup>590</sup> *United States v Aluminum Co of America et al* 148 F2d 416 (2nd Cir 1945) [*Alcoa*]; Buxbaum (n 588) 638. In *Alcoa*, despite the parties being resident abroad, concluding the agreements there, and not carrying out any activity within the US, the court held that there was sufficient evidence that the actions of the cartel members intended to have a significant effect on US commerce and, for this reason, the effects nexus could be invoked (*Alcoa* 444).

general principle that ‘any state may impose liabilities, even upon persons not within its allegiance, for conduct outside its borders that has consequences within its borders which the state reprehends’.<sup>591</sup> The court further elaborated that the law should not govern those foreign agreements that were intended to affect imports or exports unless it was demonstrated that their performance actually had some real effect in the US.<sup>592</sup>

Despite being convenient for public policy reasons, the effects nexus has created substantial problems with its overreaching scope, resulting in jurisdictional conflicts that are difficult to resolve.<sup>593</sup> It has, therefore, been argued that a blatant exercise of extraterritorial jurisdiction using effects nexus tests can invade state sovereignty.<sup>594</sup> For political reasons, therefore, the doctrine has been limited, at least on paper, by the incorporation of the so-called ‘jurisdictional rule of reason’ developed in the wider personal jurisdiction case law, which calls for balancing the interests of the state with the interests of other countries when exercising extraterritorial jurisdiction.<sup>595</sup> In US jurisprudence, the balancing test requires establishing an actual or intended effect on US foreign commerce, assessing whether the effects of foreign conduct produced significant negative consequences, and weighing jurisdictional links with the US against

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<sup>591</sup> *Alcoa* (n 590) 443.

<sup>592</sup> *Alcoa* (n 590) 443.

<sup>593</sup> See, for instance, *Rio Tinto Zinc Corp v Westinghouse Electric Corp (Nos 1 and 2)* [1978] AC 547 (HL) [‘*Uranium Contract Litigation*’]. In *Uranium Contract Litigation*, a foreign uranium cartel was accused of price-fixing carried out in response to a US law that prevented the companies’ access to the US market. As a result, the cartel was sued by the US company Westinghouse, which argued that the fixed world prices resulted in the company failing to fulfil its obligations for the supply of uranium to the US power companies. In essence, US law was to be applied to non-US companies in respect of their acts carried out outside the US, where the only link with the US territory was the effect of the cartel actions on US commerce. To obtain evidence, Westinghouse sought access to documents held in the UK and applied to the court in Virginia, which issued letters rogatory to the UK High Court.

<sup>594</sup> *Uranium Contract Litigation* (n 593) (per Lord Diplock) 639: ‘Her Majesty’s Government regards as an unacceptable invasion of its own sovereignty the use of the United States courts by the United States Government as a means by which it can investigate activities outside the United States of British companies and individuals which it claims infringe the anti-trust laws of the United States’.

<sup>595</sup> *Timberlane* (n 131) 613; *Lowenfeld* (n 130) 44. See also *Buxbaum* (n 588) 645–652.

those with other nations to establish whether the connection with the US is strong enough for the US to assert extraterritorial jurisdiction.<sup>596</sup>

The effects test was further codified and subjected to reasonableness and balancing of state interests tests in the application of state interests.<sup>597</sup> Consequently, purely foreign activity was excluded unless the conduct had ‘a direct, substantial, and reasonably foreseeable effect’ on an exporter, imports or domestic commerce.<sup>598</sup> However promising the reasonableness test appeared, it was further restricted and came to be viewed as a ‘soft’ measure that would be arbitrarily applied as a courtesy to other states.<sup>599</sup> This limitation imposed on the reasonableness test, in force up to date, means that the US can continue exercising extraterritorial jurisdiction in a broad range of cases without worrying about unwanted jurisdictional conflicts.<sup>600</sup> Subsequent cases marked

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<sup>596</sup> *Timberlane* (n 131) 613–615.

<sup>597</sup> Discussed in *Lowenfeld* (n 130) 48–50; *Fox* (n 589) 162–164. See Restatement (Third) of Foreign Relations Law s 402 (1)(c) – the comment d to the black letter rule of s 402 provides that ‘[j]urisdiction with respect to activity outside the state, but having or intended to have substantial effect within the state’s territory, is an aspect of jurisdiction based on territoriality, although it is sometimes viewed as a distinct category ... This Restatement takes the position that a state may exercise jurisdiction based on effects in the state, when the effect or intended effect is substantial and the exercise of jurisdiction is reasonable under s 403’. Section 403 establishes the reasonableness test, whereby ‘a state may not exercise jurisdiction to prescribe law with respect to a person or activity having connections with another state when the exercise of such jurisdiction is unreasonable’.

<sup>598</sup> See Foreign Trade Antitrust Improvements Act 1982 (FTAIA) 15 USC ss 6a, 45 (1982). See also *Fox* (n 589) 161: ‘American companies themselves were rebelling against too much regulation, which they claimed was handicapping them in world markets. They protested decisions holding that US antitrust law followed them into foreign markets. They, along with foreign firms that sought clarification of the limits of US jurisdiction, prevailed upon Congress to enact a statute that would put harms in solely foreign markets beyond the reach of the Sherman Act’.

<sup>599</sup> *Buxbaum* (n 588) 648–649: ‘Although some commentators have suggested that comity is in fact a principle of customary international law, the U.S. position remains that ... it lies between law and mere courtesy. This view is shared by the public agencies charged with application of U.S. antitrust law. As a result, courts do not view a consideration of foreign interests as mandated by international law’.

<sup>600</sup> *Hartford Fire* (n 130). Discussed in *Lowenfeld* (n 130). In *Hartford Fire*, submitting London underwriters to jurisdiction in the US for conspiring against the US insurers, the court discarded the reasonableness in a footnote, stating that it was not clear how the new ‘direct, substantial, and reasonably foreseeable effects’ test corresponded with established practice and law (*Hartford Fire* 796). The court also discarded the need to employ international comity because it was concluded that there was no conflict, narrowly construed, between the US and UK laws (*Hartford Fire* 798–799). This decision marked the demise of the interest balancing approach developed in earlier case

the demise of the interest balancing approach and rejection of comity as a basis for limiting the extraterritorial reach of effects nexus standards.<sup>601</sup> It also confirmed wholehearted support for the effects doctrine if the interests of US trade were in question.<sup>602</sup>

Overall, the effects doctrine provides a convenient instrument for jurisdictions to exercise their power, claiming a jurisdictional connection with foreign businesses based on even tenuous links with the economic life of the sovereign territory. Although the test can be limited on paper using the doctrines of reasonableness and comity, such restrictions are arbitrary and can produce overlapping jurisdictional claims. It is, therefore, not surprising that, although the test has been adopted in Internet jurisprudence, there is currently no consensus as to its scope and substance, which has prompted proposals to shift towards the more stringent targeting nexus standards discussed below.

## **2.2. Effects and targeting nexus standards in Internet and technology law**

### **2.2.1. Effects nexus**

Whilst effects nexus standards have been extensively applied in Internet-related case law, such a broad-based test is not commonly accepted as the gold standard for establishing jurisdictional connections with regard to online activities. In criminal law, it is understandable when countries use effects nexus to catch cybercrimes in their net. Hence, in the seminal case of *Yahoo!*, French organisations filed a suit against the US

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law and the rejection of comity as a basis for limiting the extraterritorial reach of antitrust law. See Buxbaum (n 588) 650–651.

<sup>601</sup> Lowenfeld (n 130) 48. More recent cases confirm the arbitrariness of limitations on the effects test as applied by the US courts. See *F.Hoffman-La Roche Ltd v Empagran SA* 542 US 155 (2004); discussed in Sprigman (n 590).

<sup>602</sup> Courts are prepared to hear cases even if there is no direct evidence that foreign conduct had an effect on US commerce; see Lowenfeld (n 130) 47; see more recently, for instance, *Minn-Chem, Inc v Agrium, Inc* 683 F3d 845 (7th Cir 2012); *US v Hui Hsiung* 778 F3d 738 (9th Cir 2015).

corporation and its French subsidiary for breaching French law that prohibited the sale or display of Nazi memorabilia in France.<sup>603</sup> Although it was found that the website was maintained by a US corporation on US servers and was not targeted specifically at French users, the French court held that harmful effects were suffered in France because the website was generally accessible from its territory.<sup>604</sup> The court ordered that the material must be removed from the website, thereby establishing nexus between online conduct and the French territory based on the effects that the obscene material produced in France.<sup>605</sup>

Public policy reasons normally explain the application of the effects test in cybercrime cases, since it is in the interests of the state to adopt a broad interpretation of the territorial reach of its laws, in order to prevent offenders from slipping through the jurisdictional net:

[Effects nexus], as exemplified by recent transnational criminal cases, is less concerned with the overall fairness of the outcome as with protecting existing public interests, and thus involves a readiness to find a basis for asserting

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<sup>603</sup> *UEJF et LICRA v Yahoo! Inc et Yahoo France*, Tribunal de Grande Instance de Paris No RG: 00/05308, Interim Order May 22, 2000 and Decision affirming Order on November 20, 2000 [*'Yahoo!'*]. For a detailed discussion see, for instance, Marc H Greenberg, 'A Return to Lilliput: The Licra v Yahoo! Case and the Regulation of Online Content in the World Market' (2003) 18 Berkeley Technology Law Journal 1191; Maier (n 19) 145–148; Timofeeva(n 19).

<sup>604</sup> Kohl (n 16) 100, noting in the context of *Yahoo!* that the court 'seems to have based jurisdiction on the fact that a constituent element of the offence took place on French territory ... Again, the mere accessibility (without any evidence of intentional and substantial directing of the site to France) triggered French law'.

<sup>605</sup> Harmful effects of online conduct felt in a state territory have also been considered as sufficient nexus when establishing criminal jurisdiction in the UK. Discussed in Kohl (n 16) 99–100. See *R v Perrin (Stephane Laurent)* [2002] EWCA Crim 747 [*'Perrin'*], where it was held that although there was no evidence suggesting that anyone accessed the US website in the UK apart from the police officers that investigated the case, it was not considered necessary to establish that major steps were undertaken in relation to the online publication in England to exercise jurisdiction over such online conduct, as long as harmful effects were felt in the UK territory (*Perrin* [51]). A similar line of reasoning was adopted in *R v Sheppard (Simon Guy)* [2010] EWCA Crim 65 [*'Sheppard'*], where, given that the publication of such material was legal in the USA, the defendants argued that 'a publication on the internet is only cognisable in the jurisdiction where the web server upon which it is hosted is located and since in this case the location was California the publication [fell] outside the jurisdiction of England and Wales' (*Sheppard* at [19]). The court disagreed and held that 'the material in the present case was available to the public despite the fact that the evidence went no further than establishing that one police constable downloaded it' (*Sheppard* at [34]).

jurisdiction whenever its exercise is likely to be effective ... When in possession of enforcement power, States tend to exercise adjudicative jurisdiction ... not only when the effects on the territory are intended and substantial, but upon the most tenuous basis.<sup>606</sup>

However, even where public interest is in point, the application of the effects nexus has been criticised as creating too much uncertainty, prompting proposals to shift to a harmonised international solution or a more restricted destination-based nexus:

[W]hat would happen if the approach of the Yahoo! case were followed globally, if the effects doctrine or the objective territoriality principle generally were used as a jurisdictional basis for Internet behaviours? It is a generally held view that this would lead to the 'slowest ship in the convoy problem'. This is the idea that the universal availability of information on the Internet may potentially have universal effects, which, if the effects doctrine is given application, may lead to assertions of jurisdiction in virtually every state over wrongs created by information being available on the Internet. Such over-broad regulatory reach and overlapping jurisdiction would make the life of producers of information flows impossible.<sup>607</sup>

Whilst supranational harmonisation is unlikely to occur due to the multiplicity of differing national regimes and cultures, a more tangible territorial nexus standard is more likely to offer a solution to the substantial extraterritorial reach of local laws. In this respect, it has been argued that a shift towards a stricter test would be vital for ensuring certainty in international law:

In determining their sphere of jurisdiction, states need to exercise higher moderation and restraint than in the offline world. The genuine link between the state and the activity needs to be taken to a higher threshold, it would seem, on the Internet than elsewhere because in principle all countries have a link to all websites by virtue of their accessibility. Since the effects doctrine is met in the

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<sup>606</sup> Kohl (n 16) 109. See *ibid* 96, arguing that objective territorial jurisdiction is considered acceptable in this context since it enables states to bring within their regulatory reach the online conduct that is even remotely connected to the state: 'The prominence of an effects test generally is not surprising given that it seems tailor-made for the online environment where the effects of foreign online conduct are often the only nexus upon which a State can rely to assert a regulatory right over activities which infiltrate its territory'.

<sup>607</sup> Schultz (n 19) 812. See Greenberg (n 603) (suggesting an international coordinated solution, with the targeting test as a short-term interim solution); Geist (n 19) 1384–1403 (proposing a comprehensive jurisdictional targeting test, as discussed further below); Beverley Earle and Gerald A Madek, 'International Cyberspace: From Borderless to Balkanized???' (2003) 31 *Georgia Journal of International and Comparative Law* 225, 256–261 (discussing international and geolocation solutions to establishing jurisdiction).

offline world with objections that it does not attain this threshold of a sufficient link, it should a fortiori be rejected entirely on the Internet.<sup>608</sup>

The stricter standard, however, currently relies on the differing interpretations of the reasonableness requirement developed in the US doctrine of minimum contacts, whereby ‘the appropriateness of asserting jurisdiction depends upon whether the parties themselves would think it reasonable to do so’.<sup>609</sup> It has been generally argued that the test, which relies on establishing reasonable foreseeability of being haled into court, is challenging to apply as foreseeability in the Internet context ‘is much more difficult to gauge’.<sup>610</sup> Furthermore, it has been observed that local courts would be more inclined to exercise jurisdictional powers whenever there is some actual, albeit tenuous connection, with their territory.<sup>611</sup> As illustrated below, there has, therefore, been disagreement as to what should constitute purposeful availment in the Internet context.

### **2.2.2. *Calder ‘effects test’***

In online defamation law, traditionally, nexus between online publications and territory has been established based on where the publisher is located, but also where the publication has been made and where harm to reputation has been suffered.<sup>612</sup> In this regard, in order to limit the ‘effects’ element of the jurisdictional test, there has been a gradual shift from looking at where a publication is distributed to looking at whether the publication actually targeted the jurisdiction where the publication was disseminated.

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<sup>608</sup> Schultz (n 19) 815.

<sup>609</sup> Geist (n 19) 1356.

<sup>610</sup> Geist (n 19) 1356.

<sup>611</sup> Geist (n 19) 1357.

<sup>612</sup> See discussion in Maier (n 19) 148–156. See also Collins (n 16); Vamialis (n 16); Sarah Ludington, ‘Aiming at the Wrong Target: The ‘Audience Targeting’ Test for Personal Jurisdiction in Internet Defamation Cases’ (2012) 73 Ohio State Law Journal 541.

In the pre-Internet era, the US courts had developed a *Calder* effects test, which looked at where the effects of a harmful publication were felt.<sup>613</sup> Subsequently, however, in the online era, the test was narrowed down in *Young*, which established the principle that a publisher must not only publish something on the Internet but also *target* the audience of the state where damage has allegedly been suffered.<sup>614</sup> Summarising the targeting and intent aspects of the test, the court found as follows:

[The fact that the] websites could be accessed anywhere ... did not by itself demonstrate that the newspapers were intentionally directing their website content to a Virginia audience. *Something more* than posting and accessibility is needed to indicate that the newspapers purposefully (albeit electronically) directed their activity in a substantial way to the forum state, Virginia. The newspapers must, through the Internet postings, manifest an intent to target and focus on Virginia readers.<sup>615</sup>

Equally, the common law rule has traditionally stated that a jurisdictional connection can be established between online conduct and a state if it is possible to show an effects nexus between a claimant's reputation and the state.<sup>616</sup> However, the substance of the test has not been interpreted consistently.

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<sup>613</sup> In *Calder v Jones* 465 US 783 (1984) [*'Calder'*], the US Supreme Court introduced the 'effects test', justifying the exercise of personal jurisdiction over an out-of-state publisher because the publication had a high circulation and, therefore, had a negative effect on the reputation of the plaintiff in the state. Justifying jurisdictional nexus with the state, the court held as follows: 'The allegedly libellous story concerned the California activities of a California resident. It impugned the professionalism of an entertainer whose television career was centred in California. The article was drawn from California sources, and the brunt of the harm, in terms both of respondent's emotional distress and the injury to her professional reputation, was suffered in California. In sum, California is the focal point both of the story and of the harm suffered. Jurisdiction over petitioners is therefore proper in California based on the "effects" of their Florida conduct in California' (*Calder* 788–789 (emphasis added)). Discussed, for example, in Cassandra Burke Robertson, 'The Inextricable Merits Problem in Personal Jurisdiction' (2011) 45 UC Davis Law Review 1301.

<sup>614</sup> In *Young v New Haven Advocate* 315 F3d 256 (4th Cir, 2002) [*'Young'*], the court held that the state could not exercise its jurisdiction over out-of-state defendants because they did not intend to aim their websites or the articles at the Virginia audience. Essentially, the nexus standard has been narrowed down to the targeting nexus test, whereby it is necessary that a person '(1) directs electronic activity into the State, (2) with the manifested intent of engaging in business or other interactions within the State, and (3) that activity creates, in a person within the State, a potential cause of action cognizable in the State's courts' (*Young* 263).

<sup>615</sup> *Young* (n 614) 263 (internal marks and citations omitted; emphasis added).

<sup>616</sup> As established in *Berezovsky v Forbes Inc (No 1)* [2000] 2 All ER 986 (HL), where the House of Lords allowed the businessman to take action in the UK because 'all the needed constituent

Originally, a clicks connection or a subscription base, without regard to the number of downloads of an online publication, was adopted as a nexus standard in Internet-era jurisprudence.<sup>617</sup> Subsequently, a download connection was required to justify a link with an affected jurisdiction.<sup>618</sup> In the later cases, however, a more stringent nexus test has been implemented, which looks at a *substantial* connection between online conduct and a state.<sup>619</sup> For example, where it has been established that, despite a substantial subscription base, the overall readership is immaterial, with only five subscribers actually following a web link and reading the material, the court has dismissed the claim by holding that ‘it would be an abuse of process to continue to commit the resources of the English court ... to an action where so little is now seen to be at stake’.<sup>620</sup>

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elements of the torts occurred in England. The distribution in England of the defamatory material was significant. And the plaintiffs [had] reputations in England to protect’ (*Berezovsky* 1012). Although the court noted (at 1015) that the case was decided on general grounds, without reference to the availability of the article on the Internet, it had a significant effect on subsequent cyberspace case law. See the later Internet case of *Loutchansky v Times Newspapers Ltd (No 2)* [2001] EWCA Civ 1805, with similar facts, which applied *Berezovsky* and established that the statute of limitations for an online publication started every time the publication was *viewed or downloaded*, giving rise to a cause of action.

<sup>617</sup> *Dow Jones & Co Inc v Gutnick* [2002] HCA 56 [‘*Gutnick*’]; discussed in Schultz (n 19) 817. In this seminal case, an Australian businessman filed a defamation suit against a US publisher, Dow Jones, which published an article about the businessman in the American magazine *Barrons Online*. Despite being addressed to the American public, the magazine had a substantial share of subscriptions from readers in Australia. This was recognised as a jurisdictional link between the defendant and Australia. It was established that the publisher of the magazine intended to have readers in Australia and was aware that its publications would be read there (*Gutnick* [199]).

<sup>618</sup> *Lewis v King* [2004] EWCA Civ 1329. Here, a US boxing promoter filed an action in England against a UK citizen/US resident boxer, a New York lawyer and a US promotion company, in relation to the two defamatory articles published by the US lawyer on US websites. The court noted that ‘[t]he libels alleged consist in two texts stored on websites based in California. In the ordinary way they can be, and have been, downloaded here. It is common ground that by the law of England the tort of libel is committed where publication takes place, and each publication generates a separate cause of action. The parties also accept that a text on the Internet is published at the place where it is *downloaded*’ (*King v Lewis* [57] (internal citations omitted)).

<sup>619</sup> *Dow Jones & Co Inc v Jameel* [2005] EWCA Civ 75 [‘*Jameel*’]. In *Jameel*, a Saudi businessman filed a suit before the High Court in London against the US magazine that published an allegedly defamatory article on its website. The court admitted the case because there were about six thousand subscribers to the website in England and Wales (*Jameel* [16]).

<sup>620</sup> *Jameel* (n 619) [70].

### 2.2.3. Purposeful availment and a ‘sliding scale’ test

Given the uncertainty around establishment of minimum contacts with a territory, the US jurisprudence further developed a ‘sliding scale’ doctrine, to aid courts in adapting traditional jurisdictional rules to online realities.<sup>621</sup> *Zippo* put forward a distinction between active and passive Internet websites as follows:

At one end of the spectrum are situations where a defendant clearly does business over the Internet. If the defendant enters into contracts with residents of a foreign jurisdiction that involve the knowing and repeated transmission of computer files over the Internet, personal jurisdiction is proper. At the opposite end are situations where a defendant has simply posted information on an Internet Web site, which is accessible to users in foreign jurisdictions. A passive Web site that does little more than make information available to those who are interested in it is not grounds for the exercise [of] personal jurisdiction. The middle ground is occupied by interactive Web sites where a user can exchange information with the host computer. In these cases, the exercise of jurisdiction is determined by examining the level of interactivity and commercial nature of the exchange of information that occurs on the Web site.<sup>622</sup>

The above test, despite being often relied on in case law alongside the general minimum contacts test, has not been construed consistently. On the one hand, it has been interpreted as meaning that there must be some activity in the state, such as contacts or contracts with local residents, in addition to a mere intent to target.<sup>623</sup> Other courts have

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<sup>621</sup> *Zippo Manufacturing Co v Zippo Dot Com, Inc* 952 F Supp 1119 (WD Pa 1997) [*‘Zippo’*]. Discussed in Carole Aciman and Diane Vo-Verde, ‘Refining the Zippo Test: New Trends on Personal Jurisdiction for Internet Activities’ (2002) 19 *The Computer & Internet Lawyer* 16; Kohl (n 16) 82–87. Here, Zippo Manufacturing based in Pennsylvania filed a trademark infringement suit against Californian Zippo Dot Com that used the name Zippo in its domain names, such as zippo.com. The defendant contended that the Pennsylvania court did not have personal jurisdiction over the Californian online business. The court held that the ability to exercise personal jurisdiction over an online business should be ‘directly proportionate to the nature and quality of commercial activity that an entity conducts over the Internet’ (*Zippo* 1124). It was established that the defendant had a substantial number of subscribers and contracts with Internet service provider to promote the downloading of online material in Pennsylvania (*Zippo* 1121–1126). It was, therefore, held that the website was highly interactive, leading to the assertion of personal jurisdiction in Pennsylvania.

<sup>622</sup> *Zippo* (n 621) 1124.

<sup>623</sup> See the landmark case of *ALS Scan Inc v Digital Service Consultants Inc* 293 F3d 707 (4th Cir, 2002), 714: ‘[A] State may, consistent with due process, exercise judicial power over a person outside of the State when that person (1) directs electronic activity into the State, (2) with the manifested intent of engaging in business or other interactions within the State, and (3) that activity creates, in a person within the State, a potential cause of action cognizable in the State’s courts’. Discussed in Spencer (n 18) 83. The requirements of local contacts with customers are broadly similar to the proposed tax models under the virtual PE nexus standards discussed further in this chapter.

considered that purposeful availment can be found if the website either targets the forum *or* actually interacts with customers.<sup>624</sup>

Generally, however, the vague nature of the test has been noted, as it is generally not clear if anything more than just maintaining the website is necessary to determine the purposeful availment nexus using this test:

The issue that has profoundly divided the lower courts is how much more is required? The current hodgepodge of case law is inconsistent, irrational, and irreconcilable. Some courts find that the requirement of something more is satisfied by any additional activity, no matter how marginal. Other courts properly require that additional conduct be meaningful and related to the forum plaintiff's claims. In these instances, defendants generally ship offending products into the forum state in addition to maintaining a web site, or enter into agreements to provide online services to substantial numbers of forum state residents.<sup>625</sup>

It may, therefore, be difficult to establish targeting nexus even based on a case-by-case analysis, without using clear-cut proxies. What is undisputed, however, is that the distinction between passive and active websites is now less relevant, since technological advances mean that most websites are capable of being interactive.<sup>626</sup> The CJEU has, thus, specifically rejected the relevance of a *Zippo*-style test in EU jurisprudence.<sup>627</sup>

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<sup>624</sup> *Toys "R" Us, Inc v Step Two, SA 318 F3d 446* (3rd Cir 2003), 454: '[T]he mere operation of a commercially interactive web site should not subject the operator to jurisdiction anywhere in the world. Rather, there must be evidence that the defendant "purposefully availed" itself of conducting activity in the forum state, by directly targeting its web site to the state, knowingly interacting with residents of the forum state via its web site, or through sufficient other related contacts'.

<sup>625</sup> Howard B Stravitz, 'Personal Jurisdiction in Cyberspace: Something More is Required on the Electronic Stream of Commerce' (1998) 49 *South Carolina Law Review* 925, 939.

<sup>626</sup> For a critical evaluation of the *Zippo* interactivity test see Spencer (n 18) 97, arguing that 'interactivity of a Web site actually bears no relationship to whether the defendant has purposefully availed itself of the forum state'. See also Geist (n 19) 1378–1379, explaining that 'the *Zippo* test simply does not deliver the desired effect' because 'the majority of websites are neither entirely passive nor completely active'.

<sup>627</sup> Joined cases C-585/08 and C-144/09 *Peter Pammer v Reederei Karl Schluter GmbH & Co KG and Hotel Alpenhof GesmbH v Oliver Heller* [2010] ECR I-12527 [79]: 'It follows that the distinction drawn by certain governments ... between websites enabling the trader to be contacted electronically, indeed even the contract to be concluded on line by means of an "interactive" site, and websites not offering that possibility, a distinction according to which only the former are to be included in the category of sites that enable pursuit of an activity "directed to" other Member States, is not decisive. If a geographical address or other contact details for the trader are given, the

#### 2.2.4. *Deny virtual nexus*

Given the uncertainty that traditional constitutional jurisprudence entails, various modifications of nexus models have been proposed in the literature. It has been suggested that the *Zippo* analysis should be abandoned altogether, in order to return to traditional principles that would completely deny the possibility of virtual activities, without physical nexus, constituting jurisdictional nexus.<sup>628</sup> This would mean, for example, that ‘a defendant infringing a trademark via a Web site would have to be sued in her state of domicile’.<sup>629</sup>

These proposals transpose to personal jurisdiction the ‘stream of commerce’ doctrine, which looks at general jurisdictional nexus between foreign manufacturers trading with a state via a commercial intermediary.<sup>630</sup> Historically, in the context of non-Internet commerce in *Asahi*, considering product liability of foreign manufacturers supplying into the US via distributors, the US Supreme Court produced two doctrines for establishing jurisdiction over this type of trade: the ‘stream of commerce’ and the ‘stream of commerce plus’.<sup>631</sup>

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consumer can in fact contact it in order to conclude a contract. This opportunity for contact exists, whether or not the trader has envisaged doing business with consumers domiciled in Member States other than that in which it is established’.

<sup>628</sup> Trammell and Bambauer (n 19) 1167, arguing that ‘Internet-based contacts should rarely, if ever, suffice for personal jurisdiction. This approach rejects the fiction that virtual activity and harm create physical contact with a particular territory’.

<sup>629</sup> Trammell and Bambauer (n 19) 1167.

<sup>630</sup> Meir Feder, ‘Goodyear, "Home", and the Uncertain Future of Doing Business Jurisdiction’ [2012] South Carolina Law Review 671.

<sup>631</sup> Discussed in Todd David Peterson, ‘The Timing of Minimum Contacts After Goodyear and McIntyre’ (2011) 80 George Washington Law Review 202, 205–206. The doctrine was developed in *Asahi Metal Industry Co v Superior Court* 480 US 102 (1987), where the Supreme Court considered a product liability case where a person injured in an accident in California filed a suit against the Taiwanese tyre manufacturer which in turn sued in the same Californian court the Japanese corporation that manufactured a valve inserted in the tyre. Since the first case was settled, the court had to decide whether the Californian court could assert its jurisdiction over the foreign corporation.

The ‘stream of commerce’ principle establishes that a court may have a personal jurisdiction over a foreign manufacturer if it has minimum contacts with the forum state in the form of products fed into a ‘regular and anticipated flow of products from manufacture to distribution to retail sale’.<sup>632</sup> The alternative ‘stream of commerce plus’ doctrine provides that simply placing items that may foreseeably reach the state in the stream of commerce is not sufficient, and therefore an overseas company must target or purposefully direct its conduct toward the forum state.<sup>633</sup>

In commercial cases concerning the Internet, most courts have accepted the ‘stream of commerce plus’ theory, arguing that the mere maintenance of a passive website is insufficiently purposeful to establish minimum contacts with a state.<sup>634</sup> It has been accepted, therefore, that ‘creating a site, like placing a product into the stream of commerce, may be felt nationwide – or even worldwide – but, without more, it is not an act purposefully directed toward the forum state’.<sup>635</sup> Equally, according to the CJEU, the mere operation of a website accessible in a jurisdiction would not be sufficient to establish that a trader targeted a specific jurisdiction, unless further evidence exists to indicate some intention to conclude contracts with consumers in the jurisdiction.<sup>636</sup>

This would be in line with the plurality opinion in the Supreme Court case of *Nicastro*, which reinterpreted the concept of acting through an intermediary in the

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<sup>632</sup> *Asahi* (n 631) 117.

<sup>633</sup> *Asahi* (n 631) 112.

<sup>634</sup> *Spencer* (n 18) 81.

<sup>635</sup> *Bensuan Restaurant Corp v King* 937 F Supp 295 (SDNY 1996), affirmed 126 F3d 25 (2nd Cir 1997) 301.

<sup>636</sup> *Pammer* (n 627) [69]: ‘It does not follow, however, that the words “directs such activities to” must be interpreted as relating to a website’s merely being accessible in Member States other than that in which the trader concerned is established’. See Case C-324/09 *L’Oreal v eBay* [2011] ECR I-6011 [64]; Case C-173/11 *Football Dataco v Sportradar* (CJEU, 18 October 2012) [36].

stream of commerce cases.<sup>637</sup> The plurality confirmed the ‘stream of commerce plus’ theory, explaining that a company may be subjected to the jurisdiction of the forum state if it places its products into the stream of commerce expecting that the products will reach the forum state, but the plurality reiterated that ‘transmission of goods permits the exercise of jurisdiction only where the defendant can be said to have targeted the forum’.<sup>638</sup> In contrast, ‘it is not enough that the defendant might have predicted that its goods will reach the forum State’.<sup>639</sup>

The plurality therefore rejected the ‘mere foreseeability’ as the only criterion for determining jurisdiction. It was also stressed that a foreign company that targets the overall US market would nevertheless not be subject to the jurisdiction of any particular state if the corporation did not target or concentrate on that particular state.<sup>640</sup> The decision in *Nicastro* essentially confirms that, even if a foreign business is targeting a state through an intermediary, there must, again, be some indication that the supplier

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<sup>637</sup> *J McIntyre Machinery, Ltd v Nicastro* 131 S Ct 2780 (2011). Discussed in Kristianna L. Sciarra, ‘A Gap in Personal Jurisdiction Reasoning: An Analysis of *J McIntyre Machinery, Ltd v Nicastro*’ (2013) 31 *Quinnipiac Law Review* 195; Linda J. Silberman, ‘Goodyear and *Nicastro*: Observations from a Transnational and Comparative Perspective’ [2012] *South Carolina Law Review* 591; Peterson (n 631); Freer (n 344). This is a non-Internet case but which has implications for online trade via intermediaries, such as online marketplaces or online advertising and marketing companies. Here, the plaintiff *Nicastro*, who was operating a metal shearing machine and was injured, filed a suit in the US against the UK manufacturer whose only contact with the US was an Ohio-based exclusive distributor for the entire US. The US Supreme Court found that there was no personal jurisdiction in New Jersey but the court produced a split opinion, requiring different sets of contacts through an intermediary for personal jurisdiction to be exercised in the forum state.

<sup>638</sup> *Nicastro* (n 637) 2788.

<sup>639</sup> *Nicastro* (n 637) 2788.

<sup>640</sup> The dissenting judges went even further and contended that by targeting the US market as a whole for its products, the foreign defendant ‘availed itself of the market of all States in which its products were sold by its exclusive distributor’. The dissent rejected the plurality’s position that a company’s efforts to sell its products nationwide are not relevant to the jurisdictional inquiry, given that such marketing arrangements are common in today’s commercial world.

intended to target a specific jurisdiction rather than to simply place its products into the stream of commerce.<sup>641</sup>

### **2.2.2. Establish targeting nexus using technology solutions**

Similarly, in order to limit unpredictability of virtual nexus standards, proposals for targeting nexus standards have been developed in the literature, which would look to establish ‘foreseeability’ based on a hybrid test that would take into account whether a party’s contractual provisions, technological data, and actual or implied knowledge indicate that they intended to target a specific jurisdiction.<sup>642</sup>

EU courts operate a similar directing test, which is included in the Brussels I Regulation on consumer protection, providing rules for allocating jurisdiction with regard to civil actions between the courts of the Member States.<sup>643</sup> Certain claimants,

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<sup>641</sup> However, the concurring justices, although generally supporting this idea in the non-Internet context, suggested that requiring ‘something more’ than targeting may not be suitable for establishing jurisdiction over online businesses – nowadays websites are capable of targeting any part of the world without the need to perform any kind of real-world solicitation in the states: ‘The plurality seems to state strict rules that limit jurisdiction where a defendant does not intend to submit to the power of a sovereign and cannot be said to have targeted the forum. But what do those standards mean when a company *targets the world by selling products from its Web site*? And does it matter if, instead of shipping the products directly, a company consigns the products through an intermediary (say, Amazon.com) who then receives and fulfils the orders? And what if the company *markets its products through popup advertisements that it knows will be viewed in a forum*? Those issues have serious commercial consequences but are totally absent in this case’ *Nicastro* (n 637) at 2793 (emphasis added; internal marks and citations omitted).

<sup>642</sup> *Geist* (n 19) 1384–1403, recommending that ‘[t]o identify the appropriate criteria for a targeting test, we must ultimately return to the core jurisdictional principle – foreseeability. Foreseeability should not be based on a passive versus active website matrix. Rather, an effective targeting test requires an assessment of whether the targeting of a specific jurisdiction was itself foreseeable. Foreseeability in that context depends on three factors: contract, technology, and actual or implied knowledge’.

<sup>643</sup> Regulation (EU) No 1215/2012 of the European Parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (recast), [2012] OJ L351/1 [‘Recast Brussels Regulation’], art 17(1)(c), providing that jurisdiction can be established where ‘the contract has been concluded with a person who pursues commercial or professional activities in the Member State of the consumer’s domicile or, by any means, *directs* such activities to that Member State or to several States including that Member State, and the contract falls within the scope of such activities’ (emphasis added). Although the test is similar to the US concept of purposeful availment (as accepted in *Pammer* (n 627) [92]), CJEU rejected the US doctrine of ‘targeting’ and ‘purposeful availment’, thereby denying the possibility of using the well-developed US jurisprudence to help establish viable criteria for the targeting nexus. The directing test, however, has been interpreted in the same vein, requiring that it must be established whether a trader envisaged doing business with consumers in the targeted jurisdiction (*Pammer* (n 627) [75]–[76]).

including consumers, as weaker parties, are allowed to bring an action against a supplier at the place of the consumer's domicile, but only where the supplier *directs* their activities to the state of the consumer's domicile.<sup>644</sup>

Broadly, when establishing whether an online enterprise has directed its activities towards a particular market, in addition to looking at the operation of a website it is also necessary to analyse the overall vendor's business purpose, which is one of the core criteria for establishing intent on the part of a business supplier:

[I]n order to determine whether a trader whose activity is presented on its website or on that of an intermediary can be considered to be 'directing' its activity to the Member State of the consumer's domicile ... it should be ascertained whether, before the conclusion of any contract with the consumer, it is apparent from those websites and the trader's overall activity that the trader *was envisaging doing business with consumers* domiciled in one or more Member States, including the Member State of that consumer's domicile, in the sense that it was minded to conclude a contract with them.<sup>645</sup>

The CJEU provides some guidance as to what could constitute the 'something more' prong of the test, apart from intent and general maintenance of online presence, which may include the following factors:

[T]he international nature of the activity, mention of itineraries from other Member States for going to the place where the trader is established, use of a language or a currency other than the language or currency generally used in the Member State in which the trader is established with the possibility of making and confirming the reservation in that other language, mention of telephone numbers with an international code, outlay of expenditure on an internet referencing service in order to facilitate access to the trader's site or that of its intermediary by consumers domiciled in other Member States, use of a top-level domain name other than that of the Member State in which the trader is

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<sup>644</sup> Recast Brussels Regulation, art 17(1)(c); see also *Pammer* (n 627). A directing test has also been invoked in trademark and copyright protection cases in the EU, where the application of substantive rather than jurisdictional rules is in question. See *L'Oreal* (n 636) (trademark case); *Football* (n 636) (copyright case). For a general overview of case law on the EU directing test see Peter Stone, 'Territorial Targeting in EU Private Law' (2013) 22 *Information & Communications Technology Law* 14.

<sup>645</sup> *Pammer* (n 627) [92] (emphasis added).

established, and mention of an international clientele composed of customers domiciled in various Member States.<sup>646</sup>

It has been suggested that, when assessing intent to target a particular jurisdiction, the location of a computer server that the supplier used, the location of goods or the residence of the supplier itself should not be considered as primary factors showing whether a trader was able to target a particular jurisdiction. In this regard, justifying the directing nexus test, CJEU explained in the context of trademark infringement on eBay that trademark protection rules would be ineffective:

if they were not to apply to the use, in an internet offer for sale or advertisement targeted at consumers within the EU, of a sign identical with or similar to a trade mark registered in the EU merely because the third party behind that offer or advertisement is established in a third State, because the server of the internet site used by the third party is located in such a State or because the product that is the subject of the offer or the advertisement is located in a third State.<sup>647</sup>

The targeting nexus appears to have been further reflected in CJEU judgments concerning trademark and copyright infringements on the Internet. Firstly, it has been confirmed that the factor that could indicate that the supplier, through an intermediary, has targeted a particular jurisdiction is online advertising targeted at the destination jurisdiction.<sup>648</sup> Although the CJEU held that in consumer cases the conditions for asserting jurisdiction are worded broadly and do not require the trader to have addressed an invitation to the consumer or to have advertised in the jurisdiction, the court, nevertheless, confirmed that wording covers a broader range of activities which may

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<sup>646</sup> *Pammer* (n 627) [93]. Similar criteria have been proposed as part of the virtual nexus proposals – see, for instance, OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 109.

<sup>647</sup> *L'Oreal* (n 636) [63] (emphasis added). See also similar arguments in *Football* (n 636) [45].

<sup>648</sup> *I-800 Flowers Inc v Phonenames Ltd* [2001] EWCA Civ 721 [138] in the context of trademark use: '[T]he very idea of "use" within a certain area would seem to require some active step in that area on the part of the user that goes beyond providing facilities that enable others to bring the mark into the area. Of course, if persons in the United Kingdom seek the mark on the Internet in response to direct encouragement or advertisement by the owner of the mark, the position may be different; but in such a case the advertisement or encouragement in itself is likely to suffice to establish the necessary use'.

include advertising or specific invitation.<sup>649</sup> CJEU, it appears, accepts that if a trader incurs expenses associated with buying an Internet referencing service (keyword advertising) from an online search engine, such as Google, to facilitate access to the trader's website by consumers, this could indicate that the trader intended to target the jurisdiction.<sup>650</sup>

The CJEU seems to accept, however, that the use by the trader of an intermediary with an international outreach, through which the trader accesses the foreign market, is one of the factors underlying the targeting test, but not a decisive one. It is argued in this regard that ‘there must be a link between the trader and the intermediary which the national court must assess, but the mere international activity of the intermediary is insufficient; other evidence should also suggest that the trader targeted the jurisdiction’.<sup>651</sup>

Hence, it has been confirmed in *Football Dataco* that, if an intermediary is capable of establishing that residents of a particular jurisdiction have been targeted through geolocation technologies, it may be possible to argue that the principal has actually targeted the jurisdiction via this online intermediary. In this respect, the court in *Football Dataco* explained:

The fact that Sportradar granted, by contract, the right of access to its server to companies offering betting services to [the UK] public may also be evidence of its intention to target them, if ... Sportradar was aware, or must have been aware, of that specific destination. *It could be relevant ... that the remuneration fixed by Sportradar as consideration for the grant of that right of access took account of the extent of the activities of those companies in the United Kingdom market and the prospects of its website ... subsequently being consulted by internet users in the United Kingdom.*<sup>652</sup>

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<sup>649</sup> *Pammer* (n 627) [59]–[61].

<sup>650</sup> *Pammer* (n 627) [81].

<sup>651</sup> *Pammer* (n 627) [89]–[90].

<sup>652</sup> *Football* (n 636) [41] (emphasis added).

This may cover such cases as online targeting via marketing agents that act under performance-based contracts. In these cases, the agent would be remunerated for actual clicks or purchases completed in a specific jurisdiction, making it possible for the agent to know which jurisdiction is targeted. This conclusion, therefore, seems to indicate a general acceptance of the idea that targeting nexus may be established based on sufficient evidence that a state has been targeted using online marketing techniques.

### **2.3. Interim conclusions**

Overall, it can be seen that reaching consensus on the set of proxies for the virtual nexus standards may be challenging. Courts have struggled to adapt the offline concepts of purposeful availment and minimum contacts nexus and, thus, produced diverging sets of rulings that point in completely opposite directions. Whilst some authorities would find jurisdiction on the basis of mere effects, others would struggle to establish jurisdiction unless there was specific evidence of actual targeting, which could be manifested through physical contacts or traceable online targeting.

As discussed below, the targeting nexus standards proposed in the tax context might, therefore, struggle to achieve the required certainty in terms of allocation of jurisdiction to tax the globalised digital economy. The final chapter, therefore, discusses possible modifications of the targeting tests that could be implemented within the framework of the current and proposed models.

## **3. Assessment of the destination-based targeting tax models**

### **3.1. Significant business presence nexus**

#### ***3.1.1. Nexus uncertainty***

The business presence nexus, proposed as part of the qualitative virtual PE, would look at making sales together with some other contacts with jurisdictions, including

advertising, contract solicitation and maintenance of assets.<sup>653</sup> This standard would essentially mirror the targeting test requiring not only pure intent but also ‘something more’ for the courts to establish purposeful availment.

Arguably, such a proxy would be too vague for tax purposes and might create uncertainty for businesses operating in multiple jurisdictions.<sup>654</sup> The key issue in applying such qualitative standards is that they may give rise to virtual PEs in multiple states because of the conflicting interpretations of arbitrary thresholds that countries might endorse. It has been noted in this respect that ‘qualitative economic presence tests lead to business uncertainty and onerous compliance obligations for firms that can never be certain whether they have filing obligations in jurisdictions where they maintain no physical presence’.<sup>655</sup> Moreover, it has been argued that qualitative tests ‘make less sense, because there is no world tax authority or world tax court’, and therefore ‘tax authorities and courts throughout the world will develop their own interpretation of the factors that meet the requirements for source state taxation’.<sup>656</sup>

In this regard, India has attempted to develop the underlying nexus theory in the tax context, relying on the effects nexus standard. In the Indian case of *Vodafone*, the court accepted the argument put forward by the tax authorities that the Indian capital gains tax may apply to a foreign transaction if it has an indirect effect in the Indian

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<sup>653</sup> See text to n 551 above.

<sup>654</sup> See OECD, *Comments on BEPS Action I Draft* (n 35) 74, noting that ‘[t]he virtual PE proposals would add uncertainty to the determination of whether a PE exists. For example, businesses may not know where the servers hosting its operations are located. Businesses may have difficulty identifying where contracts are concluded and to the extent there are thresholds, it may be difficult to have reliable information’.

<sup>655</sup> Cockfield (n 71) 651.

<sup>656</sup> Cockfield (n 71) 651.

territory via a transfer of an Indian capital asset.<sup>657</sup> The first-instance court reasoned that a ‘foreigner cannot enter into a transaction which has an effect on Indian properties and still contend that the executive, legislature or judiciary in India cannot exercise extra territorial jurisdiction’.<sup>658</sup> The court further held that ‘in the present case it is fallacious to contend that extra territorial jurisdiction is being exercised as it would be begging the question’.<sup>659</sup> Having generally accepted the right to exercise jurisdiction in relation to a transaction that has an economic effect in India, the court, in support of its position, referred to the effects doctrine:

[T]he American principle of 'Effects Doctrine' is as follows: Any state may impose liabilities, even upon persons not within its allegiance, for conduct outside its borders that has consequences within its borders which the state represents.<sup>660</sup>

The court further elaborated that the Supreme Court of India accepted the doctrine in its jurisprudence.<sup>661</sup> Despite the concept actually being employed in antitrust law, the court

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<sup>657</sup> See *Vodafone International BV v Union of India and Another* Bombay High Court, 3 December 2008, Writ Petition No 2550 of 2007; *Vodafone International Holdings BV v Union of India* [2010] 329 ITR 126; *Vodafone International Holdings BV v Union of India and Another* Civil Appeal No733 of 2012 (arising out of SLP (C) No 26529 of 2010); [2012] 204 Taxman 408 (SC). The transaction between non-resident entities involved the sale of shares in a foreign company, which has been brought to tax charge in India. The tax authorities contended that the foreign transactions resulted in an indirect transfer of shares in an Indian mobile operator and were therefore subject to tax in India as having a visible economic link with the Indian territory. Whilst the case involved a complex corporate structure and set of transactions that deserve a separate and detailed discussion, for the purposes of this section it suffices to examine the general principles underlying the case. For a detailed discussion of the case see Nishith Desai and Mahesh Kumar, ‘The Vodafone Saga – An Analysis of the Indian Supreme Court’s Decision’ (2012) 66 Bulletin for International Taxation 366; Mark M Levey and others, ‘Vodafone: An Analysis Under Internationally-Recognised Tax Principles’ (2012) 40 Intertax 477; Nikhil Mehta, ‘Vodafone International Holdings BV v Union of India: Vodafone's Short-Lived Tax Victory in India’ [2012] British Tax Review 262; Anindita Jaiswal, ‘Taxation of Foreign Institutional Investors in India: The Hanging Fire’ (2013) 41 Intertax 319.

<sup>658</sup> *Vodafone Bombay High Court 2008* (n 637) [99].

<sup>659</sup> *Vodafone Bombay High Court 2008* (n 637) [99].

<sup>660</sup> *Vodafone Bombay High Court 2008* (n 637) [100], [165].

<sup>661</sup> *Vodafone Bombay High Court 2008* (n 637) [166]: ‘The above “Effects Doctrine” has been upheld and followed by our Hon'ble Supreme Court ... [I]t was held that even if an agreement is executed outside India or the parties to the agreement are not in India and the agreement may not be registrable ..., being an outside agreement, nevertheless, if there is a restrictive trade practice as a consequence of outside agreement [being] carried out in India, then the Monopolies Restrictive Trade Practices Commission in India will have jurisdiction’.

upheld the tax authorities' position that an economic effect can produce a tax charge, explaining that 'in the present case, there may be no doubt that the transaction ha[d] effect on a property in India and involve[d] transfer of controlling interest in an Indian company'.<sup>662</sup>

In 2012 the Supreme Court of India reversed the decision, effectively confirming the established principle that there must be a legal and internationally acceptable proxy that would enable a sovereign to exercise its right to tax non-residents, a *substantial territorial nexus* between the income and the territory that seeks to tax that income.<sup>663</sup> Exactly what a particular jurisdiction would mean by substantial nexus is a question of judgment, as demonstrated earlier in the Internet context.

### **3.1.2. Income characterisation issues**

Further, under the significant business presence model for virtual PEs, income characterisation issues may also be in point. If the distinction between business profits and other types of income were maintained, tax authorities would not find it difficult to challenge digital enterprises' position, as there is no definitive line between passively earned royalties and business income:

One of the issues surrounding the taxation of international e-commerce is that cross-border transfers of e-commerce goods often blur the lines among different types of income ... The problem is that international tax rules and treaty principles seek to categorize different types of income to determine the appropriate tax treatment. A possible deficiency of the gross sales threshold is that multinational firms may argue that all their sales should result in royalty income and are already subject to gross withholding taxes under tax treaties.<sup>664</sup>

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<sup>662</sup> Although the High Court upheld the position of the tax authorities in 2008 and 2010, the 'effects' principle did not resurface in subsequent court decisions, with the focus having shifted to considering the case in the light of more conventional anti-avoidance principles that would allow bringing the transaction into a CGT charge in India. See *Vodafone Appeal 2010* (n 637), reversed in 2012 by the Indian Supreme Court (see *Vodafone Supreme Court 2012* (n 637)).

<sup>663</sup> *Vodafone Supreme Court 2012* (n 637) [168].

<sup>664</sup> *Cockfield* (n 71) 653. See, for example, *ITO v Right Florists Pvt Ltd* ITA No 1336 (Kol 2011), where it was held that a search engine would not constitute a PE in India unless it has a substantial connection with India by way of being hosted on a local computer server.

Hence, the introduction of a virtual PE or a qualitative WHT on e-commerce may require abolishing the royalty category and merging it with business income; this, however, would require overhauling the entire system of income characterisation, which may result in a reallocation of tax revenues to developed countries and, as a result, may be opposed by developing countries, thereby creating additional scope for international disputes.<sup>665</sup>

For example, in order to avoid complications with attribution of profits, a number of source countries have implemented gross withholding tax regimes applicable to other categories of income that are outside the scope of business income taxation. Hence, it has been suggested within the UN model tax treaty that the so-called fees for technical services, as a separate category of income, should be subject to withholding taxation at source on a gross basis.<sup>666</sup> In addition, countries have extended their royalties taxing rights and impose withholding taxes on payments related to intangibles instead of exempting royalties at source as recommended by the OECD Model.<sup>667</sup> There is, therefore, a persistent trend where developing countries increasingly rely on gross withholding taxes, which do not require allocation of profits, and further extend the scope of such tax regimes, blurring the line between business and portfolio income taxation.<sup>668</sup> The ambiguity of the passive and active income distinction may thus undermine the reliability of the significant business presence test.

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<sup>665</sup> Pinto (n 24) 205.

<sup>666</sup> See n 668 below.

<sup>667</sup> OECD, *Model Treaty Commentary* (n 107) art 12 para 36: a number of countries, including Australia, Chile, Mexico and Portugal reserve their right to tax royalties at source despite the general rule providing for the residence taxation of royalties.

<sup>668</sup> Withholding taxation of fees for technical services discussed in Brian J Arnold, 'Report on the Tenth Session of the United Nations Committee of Experts on International Cooperation in Tax Matters' (2015) 69 *Bulletin for International Taxation* 131, 135; Rajarshi Sen, 'Withholding Tax on Foreign Remittances – the GE India Case and Its Implications' (2011) 65 *Bulletin for International Taxation* 319; Mahmoud Mohamed Abdellatif, 'Withholding Tax and Cross-Border Intellectual

## 3.2. Sales nexus issues

### 3.2.1. Sales diversion

As regards sales nexus, it is usually argued that from an administrative viewpoint a relatively high *quantitative* threshold may be more feasible than a qualitative test because it would apply an objective standard, focusing on large multinationals that would inevitably exceed a substantial threshold for sales:

[A] quantitative test might be relatively easy to administer and enforce. A firm without a traditional PE in a source state would not have to incur compliance costs and file a tax return in the source state unless the firm surpassed the stipulated threshold. The proposal would catch only large multinational firms with significant global sales and the resources to comply with foreign income tax obligations in countries where they have no physical presence.<sup>669</sup>

While such a threshold would refocus on major digital enterprises, avoiding additional compliance pressure on small and medium-sized businesses, the threshold itself is arbitrary and may, therefore, appear unfair to borderline taxpayers that are caught by the rules.<sup>670</sup> Further, specific thresholds could be associated with planning opportunities, whereby it would be possible to arrange business operations such that revenue recognition rules allow deferral of sales to subsequent accounting periods.<sup>671</sup>

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Property Transactions in Developing Countries: The Example of Egypt and India' (2011) 65 Bulletin for International Taxation; Amar Mehta, 'The Microsoft Case: The International Taxation of Software Transactions in India' (2011) 65 Bulletin for International Taxation 307; withholding taxes on transfer of shares of overseas discussed in Kennedy Munyandi and others, 'Tax Policy Trends in Africa – Commentary on the Major Tax Developments in 2013 and 2014' (2015) 69 Bulletin for International Taxation 154, 158–159.

<sup>669</sup> Cockfield (n 71) 651.

<sup>670</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 18, noting in this regard that 'a concept of imposing a taxable nexus based on the concept of a "virtual permanent establishment" could in fact cause double-taxation for all digitalized firms'.

<sup>671</sup> See, for example, IAS 18 *Revenue Recognition* [18.20], which provides that services revenue should be recognised based on relatively subjective criteria, including probability of future benefits, reliability of measurement in respect of the amount of revenue, costs incurred and stage of completion. On the Tesco scandal relating to the timing of income recognition see disclosures in Tesco PLC, *Annual Report and Financial Statements* (2015) 33. On issues arising when accounting standards applied to tax see generally Peter Harris, 'IFRS and the Structural Features of an Income Tax Law' in Geerten MM Michielse and Victor Thuronyi (eds), *Tax Design Issues Worldwide* (Kluwer Law International 2015) 95, arguing that 'IFRS can never be a complete answer to calculation of the tax base for an income tax law'.

The proposed sales nexus would also be theoretically justifiable on the basis that demand significantly contributes to value creation in the digital products market, and therefore there is a valid reason to argue that tax revenue should be taxed in destination jurisdictions, where sales occur.<sup>672</sup> Sales would be less mobile than other production factors, such as assets and personnel, although it is still possible to divert them.<sup>673</sup> Although sales may be diverted in business-to-business supplies to head offices and associated enterprises, this can be addressed using proxies, bringing foreign transactions back within the jurisdictional net.<sup>674</sup> Finally, as regards sales to final consumers, they are the least mobile factor, as noted in the context of the financial industry.<sup>675</sup>

Even with sales-only nexus standards, however, significant issues will remain. The application of sales nexus within may also resemble consumption taxes and thus become unacceptable to jurisdictions that apply destination-based sales taxes.<sup>676</sup>

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<sup>672</sup> Hellerstein and McLure Jr (n 69) 210, arguing that ‘[a] destination (demand)-based factor such as sales would serve better to apportion profits linked to markets, such as those resulting from tariff protection and advertising. (Note that, unlike the cost of capital, sales automatically reflect profits; they do not, however, indicate whether profits are attributable to production or market activities)’.

<sup>673</sup> McLure Jr (n 145) 596: ‘It would be possible to attribute royalties and other payments for intellectual property and many sales of intangibles ... to the jurisdiction of destination of the sale. The obvious exception involves sales of digitized content to customers whose location the taxpayer does not know and may not easily be able to identify. In addition, some digital content may initially be transmitted to a central location for electronic retransmission to the customer’s branches and subsidiaries in other jurisdictions. As in the case of the location of debt obligations, the destination of “sales” of investments is not obvious’.

<sup>674</sup> Schon (n 69) 1079, noting that ‘[t]he problem lies in the manipulation possibilities for enterprises to identify the place where services or goods are delivered. Does it make a difference whether the French market is supplied with goods directly from a German production facility, from a French marketing company, or a PE in Luxembourg?’

<sup>675</sup> See Benshalom (n 34) 201: ‘A formulary allocation method relying on sales would provide taxpayers with incentives to finalize deals in tax havens. Tax authorities would find it practically impossible to track where the economic sale of each transaction occurred. This analysis has one important exception: retail ... services to individuals. It is relatively easy to observe the location of retail transactions because the vast majority of individuals borrow, lend and consume financial services where they live. This is very different from corporations, which can create subsidiaries anywhere without incurring substantial costs’.

<sup>676</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21), noting consumption taxes will address the same issues: ‘[I]t is expected that the measures developed in the BEPS Project will have a substantial impact on BEPS issues previously identified in the digital economy, that certain BEPS measures will mitigate some aspects of the broader tax challenges, and that consumption taxes will be levied effectively in the market country’.

Further, despite the fact that sales to final consumers are the least mobile factor among those usually included in allocation formulae, sales to ultimate *business* customers can be legitimately restructured within multinational groups under global framework agreements.<sup>677</sup> For this reason, an entity-by-entity approach may not be effective for establishing nexus with digital enterprises, which has been noted in the context of formulary allocation to sales-only nexus points:

If limited to separate entities, FA [formulary apportionment] would do little to deal with economic interdependence, transfer pricing problems or tax havens, which are based on less-than-arm's-length dealings between separate but affiliated corporations. At most, it would deal with the problem that is deemed to arise when a foreign corporation makes sales in a market country without establishing a PE there; that is probably not reason enough to shift to FA.<sup>678</sup>

In the context of destination-based transactional taxes applicable to cash sales, such as withholding taxes on e-commerce payments and cash flow taxes, similar sales nexus issues would apply.

Additionally, even if the digital enterprise is supplying services domestically, there is a risk that sales intended for domestic businesses may be diverted to other jurisdictions that have not implemented the proposed nexus.<sup>679</sup> These problems may be particularly notable in the context of the cash flow and WHT proposals if the tax is set at a high rate.<sup>680</sup> For example, if a UK company supplies online advertising services to its UK business customer – a multinational with a branch in Ireland – the services can

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<sup>677</sup> See text following n 402.

<sup>678</sup> McLure Jr (n 145) 591.

<sup>679</sup> Grubert and Newlon (n 568) 638: 'Although it is relatively straightforward to impose a tax on merchandise imports, it is not so easy in the case of imported services. For example, foreign software, advertising, or consulting services could be transmitted by report, disk, or over a satellite'. Further it is noted that '[a]n additional level of complexity would be added in cases in which a service was provided partly domestically and partly from abroad' and '[c]ompliance problems would also arise in identifying true exports'.

<sup>680</sup> Grubert and Newlon (n 568) 638: 'These problems [in identifying true exports] would be particularly severe if a destination-principle VAT was imposed at a high rate, such as would be required to replace the income tax entirely'.

be artificially billed in Ireland rather than the UK to avoid the cash flow tax on domestic sales but the effects of the advertising campaign may still be enjoyed in the UK free of tax.

As a result, the group will benefit from the marketing campaign targeted at the UK residents but the cash flow will remain outside the scope of the UK tax. Of course, the cost of the advertising campaign may be included in the final price of products sold to ultimate consumers in the UK, and that way the diverted advertising revenue will ultimately be brought within the UK tax charge. However, this may not necessarily happen in the same accounting period and not necessarily in relation to the entire cost of the advertising campaign. This may cause a delay in producing taxable revenue in the UK.

### ***3.2.2. Profit allocation issues***

One of the issues to be addressed when choosing the tax model is whether deduction for costs would be permitted as it is under the current profits tax models. Gross sales taxes proposed in the literature would be borne by final consumers, making them difficult to implement from a political perspective.<sup>681</sup> In addition, the taxes would apply regardless of the volume of sales into a jurisdiction, potentially imposing additional burden on smaller businesses.<sup>682</sup>

If a sales nexus were implemented, allocation issues would arise relating to transfer-pricing abuse, whereby potentially inflated intra-group charges could legitimately become deductible in source countries where tax authorities may have

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<sup>681</sup> On tax incidence see Don Fullerton and Gilbert E Metcalf, 'Tax Incidence' in Alan J Auerbach and M Feldstein (eds), *Handbook of Public Economics*, vol 4 (Elsevier 2002) 1822.

<sup>682</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 115.

insufficient information and techniques to audit the justifiability of foreign costs.<sup>683</sup> To address this issue, it has been suggested in the literature that the deductibility of such costs could be restricted if they are incurred in low-tax jurisdictions, unless it is proven that the level of effective taxation is similar to the source country tax regime.<sup>684</sup> Alternatively, it has been proposed that ‘profit approximation’ techniques should be used to determine a notional profit attributable to a market jurisdiction.<sup>685</sup>

Restriction on foreign costs, however, could overcomplicate the model and ultimately amount to taxation on a gross basis. Furthermore, this restriction can easily be circumvented using layers of companies with low net margins that are nevertheless legitimately set up in high-tax jurisdictions with favourable regimes, providing special rules for intangible assets and R&D activities.<sup>686</sup> In this regard, a tax on a digital sale associated with high underlying costs may be considered as overburdening digital enterprises and may therefore not be considered suitable for practical reasons.<sup>687</sup>

In the context of net taxation, a more significant issue is allocation of profits to virtual nexus points.<sup>688</sup> This may be problematic within the OECD framework because

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<sup>683</sup> Cockfield (n 71) 653, arguing ‘[a]n economic presence PE may also be difficult for many tax authorities to enforce’ because tax authorities ‘lack the resources to audit the worldwide income of a multinational firm – hence the preference for the use of withholding taxes by some countries’.

<sup>684</sup> Avi-Yonah (n 32) 538.

<sup>685</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21).

<sup>686</sup> See, for example, Michael J Graetz and Rachel Doud, ‘Technological Innovation, International Competition, and the Challenges of International Income Taxation’ (2013) 113 *Columbia Law Review* 347, 362–375.

<sup>687</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 58, contending that denying an opportunity to relieve costs in market jurisdiction would be extortionate for digital businesses, which usually incur substantial expenses elsewhere: ‘For a gross basis withholding tax to be considered appropriate, the income should be of a type the production of which does not require significant expenses ... Gross revenue per employee, even if high, does not mean that those businesses do not incur significant costs. People may be replaced by technology, but technology costs may be expensive. For example, search revenue per employee may be high but traffic acquisition costs (TAC) may significantly reduce the profit opportunity on that revenue’.

<sup>688</sup> Cockfield (n 71) 653: ‘An economic presence PE within source countries would require multinational firms to designate appropriate transfer prices between the head office and the

the allocation principles would need to comply with generally accepted principles for the allocation of profits under Article 7 of the OECD Model. As discussed earlier, this may prove to be challenging given the mobility of profit allocation factors underlying Article 7, with personnel, assets and risks remaining highly transferable within multinationals.<sup>689</sup>

To a certain degree, country-by-country reporting and increased international cooperation in tax information exchange could help address these issues.<sup>690</sup> With more international instruments for obtaining tax information from foreign tax administrations, source tax authorities should be empowered to enforce their tax claims against non-resident taxpayers. However, commercial flexibility of digital enterprises in locating people and assets in desirable jurisdictions would negate the benefits of such reporting if sufficient commercial substance were maintained in target jurisdictions.

### ***3.2.3. International trade restrictions***

Sales taxation in the context of direct taxation, where exports are exempt and imports are taxed, may be viewed as contradicting the WTO rules. The key obligation of the WTO is to minimise and eliminate trade barriers and, for this purpose, it establishes rules regarding border adjustments.<sup>691</sup> Border adjustments take place where a country rebates the amount of domestic taxes paid on exported goods.

WTO rules allow border adjustments for indirect taxes and do not allow them for direct taxes. They define direct taxes as ‘taxes on wages, profits, interests, rents,

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economic presence PE so that the appropriate profits could be attributed to that PE. Transfer pricing and profits attribution to the economic presence PE appear to raise several concerns’.

<sup>689</sup> For a more detailed discussion of allocation issues see Chapter 2 on functional nexus and Chapter 4 on profit splits.

<sup>690</sup> See n 532.

<sup>691</sup> Discussed in Daniel N Shaviro, ‘Replacing the Income Tax with a Progressive Consumption Tax’ (2004) 5 Tax Notes 91, 111.

royalties, and all other forms of income, and taxes on the ownership of real property’.<sup>692</sup>

Indirect taxes are defined as ‘sales, excise, turnover, value added, franchise, stamp, transfer, inventory and equipment taxes, border taxes, and all taxes other than direct taxes and import charges’.<sup>693</sup>

The adoption of a destination-based sales nexus would involve providing export subsidies.<sup>694</sup> This holds true as long as labour costs are deductible since this would make the destination profits tax a direct tax rather than an indirect consumption-type VAT, which would contradict the prohibition on direct tax subsidies. Of course, there are arguments that a destination sales nexus has the potential to survive the WTO scrutiny given that the primary goal of the tax measure is not to give export subsidies but to avoid double taxation.<sup>695</sup> Further, in the context of digital commerce, it is not clear whether digital products would fall within the scope of GATT as they may not qualify as goods.<sup>696</sup>

However, the overall sentiment is that the existence of the WTO obstacle would make this model less likely to gain consensus among countries. Whilst it may be possible to amend the WTO rules, this may be especially difficult to achieve if the US, as one of the WTO’s members, does not agree to change the WTO regulations.

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<sup>692</sup> General Agreement on Tariffs and Trade, art 13, Agreement of Subsidies and Countervailing Measures, Annex 1, Illustrative List of Export Subsidies (e).

<sup>693</sup> General Agreement on Tariffs and Trade, art 13, Agreement of Subsidies and Countervailing Measures, Annex 1, Illustrative List of Export Subsidies (e).

<sup>694</sup> McLure Jr (n 145) 594: ‘Using only sales at destination to apportion income appears to be inconsistent with international trade rules that allow border tax adjustments (compensating import taxes and rebate of taxes on exports) only for indirect taxes. While sales-only apportionment does not involve explicit rebate of tax on exports and application of tax on imports, it has that economic effect. Tax would not be due to the extent products are exported; it would be due to the extent they are imported’.

<sup>695</sup> Shaviro (n 691) 111.

<sup>696</sup> See Sacha Wunsch-Vincent, ‘Trade Rules for the Digital Age’ in Marion Panizzon, Nicole Pohl and Pierre Sauve (eds), *GATS and the Regulation of International Trade in Services* (Cambridge University Press 2008).

### 3.3. Personal data processing nexus

In the context of data processing nexus, one of the key challenges would be the vagueness of the personal data nexus, as can be illustrated by the recent controversies in personal data protection law. In the EU, physical nexus proxies are used to determine data processing nexus. The current Data Protection Directive applies where a personal data controller has an establishment in the EU and processes personal data in the context of the activities of such an establishment.<sup>697</sup> Alternatively, where the controller is not established in the EU, it can have jurisdictional nexus with the EU territory if it makes use of equipment in the EU.<sup>698</sup>

The issue is that substantial data protection rules apply to controllers but not to processors, who merely incidentally handle data without interfering in the flow, a circumstance that may be difficult to distinguish in borderline cases.<sup>699</sup> Further, the concepts of establishment, equipment and making use of such equipment are far from clear and, as such, have caused significant controversy over the years, as data regulators have attempted to extend the scope of their data protection laws.

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<sup>697</sup> Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data OJ 1995 L 281/31 art 4(1) [‘Data Protection Directive’]. Under art 2(b) personal data processing includes ‘any operation or set of operations which is performed upon personal data, whether or not by automatic means, such as collection, recording, organization, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, blocking, erasure or destruction’. On what constitutes personal data for the purposes of data protection laws see W Kuan Hon, Christopher Millard and Ian Walden, ‘The Problem of ‘Personal Data’ in Cloud Computing – What Information is Regulated? The Cloud of Unknowing, Part 1’ (2011) 1 *International Data Privacy Law* 211.

<sup>698</sup> EU Data Protection Directive 1995 art 4(2).

<sup>699</sup> EU Data Protection Directive 1995 art 4. Under art 2(d) of the Data Protection Directive, a controller is defined as ‘the natural or legal person, public authority, agency or any other body which alone or jointly with others determines the purposes and means of the processing of personal data’. Art 2(e) defines a processor as ‘a natural or legal person, public authority, agency or any other body which processes personal data on behalf of the controller’. See Article 29 Data Protection Working Party, *Opinion 1/2010 on the concepts of ‘controller’ and ‘processor’* (WP169, 2010), clarifying that a controller would determine the effective means of processing and establish detailed guidance on such processing. See W Kuan Hon, Christopher Millard and Ian Walden, ‘Who Is Responsible for ‘Personal Data’ in Cloud Computing? – The Cloud of Unknowing, Part 2’ (2012) 2 *International Data Privacy Law* 3.

In this regard it has been clarified that that such an establishment would normally be defined in the same way as an establishment under the CJEU jurisprudence on freedoms to provide services, meaning that the definition would encompass an establishment with sufficient human and technical resources but would disregard the legal form of such an establishment.<sup>700</sup> Equipment nexus has also been clarified to include computer cookies and scripts saved on users' computers.<sup>701</sup> Making use of equipment has, further, been construed very broadly, meaning that data processing that has even a very tenuous connection with the EU presence would constitute nexus, wherever data is actually processed.<sup>702</sup>

The gradual shift in nexus interpretation has culminated in a body of recent cases in which EU data protection authorities have given an overbroad interpretation to the 'making use' prong of the nexus test to challenge the safe harbour provisions, which allow US technology companies to process data overseas without complying with EU laws, and have thus deemed a jurisdictional connection to exist even where all the substantial targeting activities took place outside the EU.<sup>703</sup>

As part of the EU data protection reform, it is envisaged that a further relaxation of nexus standards will take place in the future. Hence, controllers and processors, who process personal data in the context of the activities of their establishments in the EU,

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<sup>700</sup> See Article 29 Data Protection Working Party, *Opinion 8/2010 on applicable law* (WP 179, 2010).

<sup>701</sup> Article 29 Data Protection Working Party, *WP 179* (n 700) 21: 'The Working Party recognized the possibility that personal data collection through the computers of users, as for example in the case of cookies or Javascript banners, trigger the application of Article 4(1)c and thus of EU data protection law to service providers established in third countries'.

<sup>702</sup> Article 29 Data Protection Working Party, *WP 179* (n 700) 14–15.

<sup>703</sup> See Case C-362/14 *Maximilian Schrems v Data Protection Commissioner* (CJEU, 6 October 2015) [237]. Facebook litigation noted in Shane Darcy, 'Battling for the Rights to Privacy and Data Protection in the Irish Courts' (2015) 31(80) *Utrecht Journal of International and European Law* 131. See also the data protection activist Max Schrems's page for a summary of his recent cases <<http://europe-v-facebook.org/EN/Complaints/PRISM/prism.html>> accessed 4 October 2015.

would remain within the territorial scope of the proposed Regulation.<sup>704</sup> However, it is also envisaged that controllers not established in the EU would fall within the scope of the proposed Regulation if they target EU residents by offering goods and services to them and/or by monitoring their online behaviour.<sup>705</sup>

In this regard, it is further clarified that the proposed EU Regulation would apply to controllers not established in the EU where ‘the processing activities are related to the offering of goods or services to such data subjects irrespective of whether connected to a payment or not, which takes place in the Union’.<sup>706</sup> The main criterion for the targeting nexus would be whether ‘it is apparent that the controller is *envisaging doing business with data subjects* residing in one or more Member States’.<sup>707</sup> When ascertaining an intention to target, it is further proposed that the ‘mere accessibility of the controller’s or an intermediary’s website’,<sup>708</sup> accessibility ‘of an email address or other contact details’,<sup>709</sup> or ‘the use of a language generally used in the third country where the controller is established’<sup>710</sup> would not be sufficient to establish nexus. At the same time, such factors as ‘the use of a language or a currency generally used in one or more Member States with the possibility of ordering goods and services in that other

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<sup>704</sup> Proposal for a Regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) 11 June 2015, 9565/15 [‘Data Regulation Proposal’], art 3(1).

<sup>705</sup> EU Data Regulation Proposal 2015 (n 704) art 3(2). See Françoise Gilbert, ‘European Data Protection 2.0: New Compliance Requirements in Sight – What the Proposed EU Data Protection Regulation Means for US Companies’ (2012) 28 Santa Clara Computer & High Technology Law Journal 815; Marc Rotenberg and David Jacobs, ‘Updating the Law of Information Privacy: The New Framework of the European Union’ (2013) 36 Harvard Journal of Law & Public Policy 605.

<sup>706</sup> EU Data Regulation Proposal 2015 (n 704) recital 20.

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<sup>710</sup> EU Data Regulation Proposal 2015 (n 704) recital 20.

language, and/or mentioning of customers or users residing' in the EU could indicate that the controller 'envisages offering goods or services' to residents.<sup>711</sup>

In addition, it is proposed that the processing of personal data of data subjects, which relates to 'the monitoring of their behaviour taking place within' the EU, would constitute nexus for the purposes of the EU data protection regulation.<sup>712</sup> When establishing whether EU residents have been targeted, it would be necessary to determine:

whether individuals are tracked on the internet with data processing techniques which consist of profiling an individual, particularly in order to take decisions concerning her or him or for analysing or predicting her or his personal preferences, behaviours and attitudes.<sup>713</sup>

Given the controversies surrounding personal data nexus as seen in the data protection law, it is not unreasonable to expect that similar issues could arise in the international tax realm. Further, suppose that a PE is established in a source country based on the data processing nexus, to which it would be necessary to allocate profits using the arm's length principle. This situation would be even more controversial than allocating profits to a virtual sales PE as it would be difficult to determine what business functions a data processing PE performs and thus estimate the economic value of personal data items.<sup>714</sup> The key issue is that data processing may not necessarily contribute to the profitability of a digital enterprise as a whole:

[D]ata collection itself, however massive, is generally useless. Although data is an important aspect of digital businesses, data itself has no intrinsic value. Value is created by properly analysing data, and knowing what data to throw away.

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<sup>711</sup> EU Data Regulation Proposal 2015 (n 704) recital 20.

<sup>712</sup> EU Data Regulation Proposal 2015 (n 704) recital 21.

<sup>713</sup> EU Data Regulation Proposal 2015 (n 704) recital 21.

<sup>714</sup> OECD, *BEPS Digital Taxation Report 2014* (n 13) 130, stating that 'the value of data collected by a business, like other self-created intangibles, would generally not appear on the balance sheet of the business, and would therefore not generally be relevant for determining profits for tax purposes'.

This analysis will be done by people or, possibly, in part by people and in part by algorithms designed by people. The crucial question is thus where the significant people functions analysing the data or creating the analysis tools exist.<sup>715</sup>

For example, a social networking platform may be collecting and processing the personal data of UK residents, thus developing or enhancing its intangibles using the pool of personal data. However, the value of this asset is not quantifiable until the social networking enterprise starts exploiting the personal data it has collected by selling an online advertising service to clients interested in targeting advertisements at UK consumers. Until the actual targeting becomes manifest through a sale transaction, it may be difficult to argue that a proportion of the social networking enterprise's profits should be allocated to the country where the personal data was collected.

To address profit allocation issues, WHT may apply to personal data processing in the same way as gross withholding taxes apply in the context of portfolio income.<sup>716</sup> The tax would be imposed on any enterprise processing personal data as part of their business and would be specifically targeted at online advertising platforms, with Internet service providers acting as collecting agents. While this model may be justifiable if one assumes that personal data derives its value through interaction with consumers, it is not immediately clear how the proposed model would apply in practice.

The data processing WHT is, to a certain extent, reminiscent of a bit tax proposed almost two decades ago, which may provide a useful insight into how the personal data tax is envisaged to operate and why it would not achieve a positive effect in practice.<sup>717</sup> The bit tax would have been charged on the volume of data, measured as the number of

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<sup>715</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 114.

<sup>716</sup> See Sheppard (n 73) 299–300.

<sup>717</sup> The idea of a bit tax was introduced in the 1994 Report of the Club of Rome – see n 73 above. Discussed in Doernberg (n 108) 384; Soete and Kamp (n 73).

bits transmitted over the Internet per single digital product.<sup>718</sup> The proponents of the bit tax argued that the economic value produced by digital enterprises could be measured by the number of bits that they processed and transmitted via computer networks.<sup>719</sup> Similarly, the supporters of the bit tax argued that Internet service providers would become efficient tax collectors since they possess sufficient and reliable information about Internet traffic per user.<sup>720</sup>

However innovative the bit and data taxes may seem, they fall short of offering a feasible and practical solution to taxing digital enterprises. These models erroneously assume that the value of digital products can be measured using such indicators as processed data or network traffic. The issue is that these factors are of limited use on their own, since bytes do not have any economic value until they are logically linked with some underlying intangible assets such as personal data, digital content or software.<sup>721</sup> Hence, if applied to bytes rather than the underlying assets or commercial transactions, the taxes in question would be blind to the context in which taxable operations take place. This may impose a disproportionate burden on digital enterprises, potentially taxing those activities that do not generate any economic value.<sup>722</sup>

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<sup>718</sup> Soete and Kamp (n 73) 5, noting that ‘a "bit tax" would not be related in any direct way to the actual “value” of a communication, rather it would focus on the transmission of information. From this perspective it is the number of bits that “count”, whether transmitted at a constant rate over time as in a telephone communication or in packages over the broadband as on Internet. In practical terms a "bit tax" proposal would thus involve the introduction of "bit measuring" equipment on all communication equipment ... thus enabling consumers and users the monitoring in volume terms of bits whether they are transmitted by line or satellite’.

<sup>719</sup> Soete and Kamp (n 73) 5.

<sup>720</sup> Soete and Kamp (n 73) 5.

<sup>721</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 19, arguing that ‘none of the examples suggest that data has an intrinsic value – rather the value is created when data is transformed into information, knowledge and action; not where data is collected. Even if it were accepted that raw data has a value in and of itself, it is clear that this value cannot be determined with reference to the number of bits that storing and transmitting the data consumes’.

<sup>722</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 20: ‘[D]ata localization is not a way to address the taxation of intangible assets or to create a taxable nexus or virtual permanent establishment. The

### 3.4. Lack of enforcement infrastructure

Reaching international agreement on all the proposed measures may be more difficult in the short term.<sup>723</sup> More specifically, if a tax measure is implemented on a unilateral basis or in a limited number of countries, issues may arise with renegotiating double tax treaties with other countries to ensure that the tax payable in the destination country is creditable in non-switching countries.<sup>724</sup> In the context of cash flow taxes, this may prove even more difficult than renegotiating double tax treaties for the purposes of introducing withholding taxes since countries may not be prepared to provide a credit for a tax that is not familiar to their tax regimes.<sup>725</sup> While this issue could be addressed through negotiating credits across all major jurisdictions, it may be improbable that this can be achieved in the short term.

When implementing virtual nexus standards, automated enforcement and credit mechanisms would need to be in place. Given that the key tax infrastructure in digital commerce relates to either the movement of digital products or the movement of

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location in which data is stored is not relevant to the economic activity that occurs as a result of that data. We would reiterate that economic value is located where intangibles are created and developed, not performed’.

<sup>723</sup> General negative attitude towards relaxed source nexus standards can be observed in the OECD Comments on the digital commerce Action Plan 1. See, for example, OECD, *Comments on BEPS Action 1 Draft* (n 35) 14, 18, 75.

<sup>724</sup> In the context of cash flow taxes, for instance, see discussion in Grubert and Newlon (n 568) 642; Reuven S Avi-Yonah, ‘Comment on Grubert and Newlon, "The International Implications of Consumption Tax Proposals"’ (1996) 49 *National Tax Journal* 259; Harry Grubert and Scott T Newlon, ‘Reply to Avi-Yonah’ (1996) 49 *National Tax Journal* 267; Reuven S Avi-Yonah, ‘From Income to Consumption Tax: Some International Implications’ (1996) 33 *San Diego Law Review* 1329.

<sup>725</sup> Charles E McLure Jr and George R Zodrow, ‘International Prospects for Consumption-Based Direct Taxes: A Guided Tour’ in John G Head and Richard Krever (eds), *Tax Reform in the 21st Century: A Volume in Memory of Richard Musgrave* (Kluwer Law International 2009) 59: ‘Consumption-based direct taxes ... differ significantly from a common definition of income ... Any country that adopted a consumption-based direct tax of either of these types might thus need to renegotiate its tax treaties – a daunting task, not only because negotiating a treaty ordinarily takes many years, during which time international transactions would be conducted under a cloud of uncertainty, but especially because the negotiators would be operating in unknown territory where there would be no guidelines, thus exacerbating the uncertainty. It has thus been long recognized that a consumption-based direct tax might not qualify for relief from double taxation’.

payments for such digital productions, it has been proposed in the literature that either online intermediaries or payment intermediaries are natural choices for tax nexus enforcement. However, for tax purposes these intermediaries do not possess sufficient reliable expertise and resources and therefore from a practical perspective a better solution would be to utilise existing infrastructure, such as one-stop shop facilities or mandatory legal representatives. Other, more advanced solutions are arguably a matter of longer-term reforms.

It has been suggested that Internet service providers could become enforcement third parties, collecting and remitting taxes to destination countries.<sup>726</sup> It is argued that ISPs are technically able to keep track of all Internet transactions of their customers as trusted third parties and to charge, collect and remit sales taxes. The key issue with using ISPs as intermediaries is that they lack sufficient expertise in the area of taxation. ISPs cannot determine exactly where transactions take place without invading privacy. Establishing such facilities within the structure of ISPs would be too costly, which would make them unreliable for the purposes of collecting and remitting taxes in market jurisdictions.

Alternatively, as controllers of payment infrastructure, financial institutions could use similar software developed by third parties and be entrusted with tax collection powers.<sup>727</sup> Under this option, transaction taxes on digital sales could be withheld

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<sup>726</sup> See Basu (n 32); Luc Soete and Bas Ter Weel, 'Globalization, Tax Erosion, and the Internet' <<http://arno.unimaas.nl/show.cgi?fid=331>> accessed 8 April 2012.

<sup>727</sup> For a detailed discussion of the model see OECD, *Report by the Technology Technical Advisory Group* (2000) 18–19, 40–48; OECD, *Report by the Consumption Tax Technical Advisory Group (TAG)* (2000) 27; Austan Goolsbee and Jonathan Zittrain, 'Evaluating the Costs and Benefits of Taxing Internet Commerce' <<http://ssrn.com/paper=175666>> accessed 9 April 2012; Charles E McLure Jr, 'The Taxation of Electronic Commerce: Background and Proposal' in Nicholas Imparato (ed), *Public Policy and the Internet: Privacy, Taxes and Contract* (Stanford: Hoover Press 2000) <<http://www.egov.ufsc.br/portal/sites/default/files/anexos/20477-20478-1-PB.pdf>> ; Duncan Bentley, 'A Model for Electronic Commerce Tax Collection' Seminar presentation at the City University of Hong Kong, 24 October 2001 (Hong Kong) <[http://epublications.bond.edu.au/law\\_pubs/36/](http://epublications.bond.edu.au/law_pubs/36/)> accessed 8 April 2012; Jinyan Li, 'Consumption

through financial intermediaries at the time of the sale, depending on the applicable tax rate in the location of the purchaser and the type of purchaser. Such a real-time system would require the financial institution to maintain a database of the tax bases and rates of each state and local jurisdiction, with vendors submitting essential information on the sale and the parties involved.<sup>728</sup>

The involvement of financial institutions in consumption tax collection raises the issue of anonymity.<sup>729</sup> Further, although the withholding of transaction taxes may be an effective and administratively simple way to collect taxes on transactions that pass through the banking system, such a system would not enable banks to distinguish digital transactions from other payments and would not capture transactions paid for in another way – for example, using digital cash.<sup>730</sup> Moreover, it can also be envisaged that without any form of compensation, this system would not be commercially viable for financial institutions as they would have to bear the costs of adjusting their IT systems to be able to track transactions and collect taxes, and therefore the system does not find support in the international community.<sup>731</sup>

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Taxation of Electronic Commerce: Problems, Policy Implications and Proposals for Reform’ (2003) 38 *Canadian Business Law Journal* 425, 460–61.

<sup>728</sup> Under some of the VAT regimes in Latin America it is possible for banks to enforce VAT on B2C transactions, whereby banks block a VAT amount on the consumer’s current account if the transaction falls within the specified monetary threshold, usually set at a relatively low level as the measure is limited in its application to low-value B2C trade – see SP van Zyl and WG Schulze, ‘The Collection of Value Added Tax on Cross-Border Digital Trade – Part 2: VAT Collection by Banks’ (2014) 47 *Comparative and International Law Journal of Southern Africa* 316.

<sup>729</sup> OECD, *OECD Technology TAG Report* (n 727) 40.

<sup>730</sup> OECD, *Comments on BEPS Action 1 Draft* (n 35) 14, 32.

<sup>731</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 114.

An alternative option discussed in the literature is to authorise third parties to collect VAT.<sup>732</sup> For example, in the US sales tax context, a private enforcement model has been developed, whereby e-tailers are able to register with licenced private tax collectors to remit sales taxes to states where they do not have sufficient infrastructure to carry out collection in-house.<sup>733</sup> In the EU, a government-backed mini one-stop shop facility for collection and reporting of EU VAT liabilities has been implemented in relation to e-commerce supplies to private consumers.<sup>734</sup>

Arguably, these essentially voluntary mechanisms for compliance with market state tax obligations provide the more effective solution for targeting nexus enforcement as they would be based on already implemented local solutions, whilst ensuring a cost-effective and clear model for compliance with already complex local rules. Instead of designing automated models using ISPs and banks, it is worth relying on tried and tested solutions, as non-compliance in transactional taxes is marginal, especially where larger players choose to comply, taking into account the reputation risks of not doing so. The key issue, however, is that state authorities will rely on voluntary compliance on the part of overseas businesses and thus would have little leverage in relation to overseas digital suppliers.

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<sup>732</sup> For a discussion of automated technology-based third-party models see OECD, *Report on Automating Consumption Tax Collection Mechanisms* (DAFFE/CFA(2003)43/ANN5, 2003); see also Cockfield 2000 (n 43).

<sup>733</sup> OECD, *Consumption Tax TAG Report* (n 727) 24–25; discussed in OECD, *Automating Consumption Tax Collection* (n 732) 10–12; see also Streamlined Sales Tax Project, Executive Summary available at [www.streamlinedsalestax.org](http://www.streamlinedsalestax.org).

<sup>734</sup> Discussed in Chapter 3 at 1.3 and 2.6.

## **Conclusion**

This chapter discussed virtual nexus solutions developed in the literature and proposed within the framework of the BEPS project. The models considered above would relax source nexus rules by introducing less tangible nexus standards for determining business presence in source countries. Broadly, the proposed models would either shift towards a less restrictive ‘business presence test’, which would look at sales or data presence in market countries, or cash movement nexus, in the form of a withholding tax on e-commerce payments or a cash flow tax on net cash movements within a destination country. A certain threshold for business presence or cash movement would thus determine the level of market targeting, which would warrant allocation of taxing rights amongst source countries.

It has been argued that, in the light of wider Internet jurisprudence concerning intangible nexus standards, the non-physical standards for determining tax jurisdiction would be impracticable in the short term, unless they utilise clear nexus proxies. As Internet jurisprudence suggests, however, such proxies can only be determined on a case-by-case basis. Although proxies may theoretically include such familiar categories as maintaining contacts with a pool of local customers, concluding contracts with them on a regular basis, directing online and physical advertisements towards local consumers or processing local customers’ data on a regular basis, such criteria would be too broad and may thus introduce even more uncertainty into the area of source taxation.

In the context of virtual PEs, it has been established that the key issue would be profit allocation to intangible nexus points, as it would be hard to evaluate the economic contributions that local proxies, such as advertisement viewers, make towards value creation. As regards data presence, which may be taken into account in addition to

traditional sales presence, it would be difficult to assign value to raw data without linking it to the resulting sales transactions, which may limit application of such a data nexus to a narrow set of circumstances.

As regards payment nexus standards, be it WHT on e-commerce transactions or a cash flow tax, it has been noted that such transactional taxation would overburden the system by potentially overlapping with other sales taxes. In addition, establishing nexus through location of customers would result in sales diversion opportunities inherent in all transactional taxes. Tax creditability issues may arise due to such taxes falling outside the scope of bilateral tax treaties. It is unlikely, therefore, that such radical measures would be implemented in the near future, as they would require a complete paradigm shift in digital commerce taxation.

Given the uncertainty that the targeting nexus in the form of cash movement or significant business presence would create, it appears likely that the current tax regime will retain physical nexus standards, which would be amended to meet the digital commerce developments. It can be envisaged, however, that the traditional nexus standards would not be completely overhauled in the short to medium term. Profits taxation would still rely on traditional PEs in source countries, albeit with lower thresholds. Allocation rules would also place more reliance on control functions within multinationals, thereby shifting profits towards people and equipment nexus that generate substantial economic value.

In the context of withholding taxation, payment nexus would still be in point in relation to royalties and technical fees, although they would most likely cause issues relating to income characterisation, with most fees qualifying as business profits and thus escaping taxation at source altogether. Sales nexus without substantial physical market presence would still form the basis for VAT and sales taxes, although without

reforms destination countries could lose revenue on complex transactions within multinationals and suffer from sales diversion.

It is nonetheless likely that digital enterprises will continue implementing digital technologies in their supply chains, whereby production factors would become even less dependent on static physical nexus points and become even more mobile in the long run. As noted earlier, the mass adoption of digital technologies across all industries may result in a complete erosion of the profits tax base and hence lead to even more significant reliance on sales taxes to capture wealth generated in market jurisdictions.

The potentially growing mismatch between the economic substance and tax rules may prompt some jurisdictions to fix traditional tax models by placing more focus on the ‘targeting’ elements of jurisdictional nexus standards. This would require the designing of anti-abuse measures to combat possible digital nexus erosion in the medium term. The next chapter discusses options for implementing such anti-abuse targeting standards and discusses a digital targeting nexus as a potential practical solution, which can be further developed as a fully-fledged model for taxing digital commerce in the long term.

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## CHAPTER 6. BLUEPRINT FOR A DIGITAL TARGETING NEXUS IN INTERNATIONAL TAX LAW

### Introduction

In the previous chapters, it was argued that, due to physical production factors becoming increasingly mobile, the traditional nexus standards that the current international tax regime endorses would make profits and consumption taxes difficult to apply in the digitised economy.

Various options for transforming the international tax regime were discussed that would involve moving towards more relaxed but still physical nexus standards focusing on value-producing factors such as people, assets and associated risks.<sup>735</sup> It was argued that, due to the ubiquity of such production factors in the context of the digital economy, current tax regimes would be fraught with uncertainty.<sup>736</sup>

An alternative route would entail adopting a genuine international solution, such as a unitary taxation regime.<sup>737</sup> It was concluded, however, that such a supranational tax regime, even related to business activities conducted over an inherently non-territorial network, would not be viable in the near future, which is particularly true in the light of the power struggle for the control of the technical Internet infrastructure.<sup>738</sup>

It was, therefore, suggested that a more probable scenario would entail national authorities choosing to modify territorial nexus standards and attempting to enforce them using local intermediaries.<sup>739</sup> This approach was recognised as one of the routes

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<sup>735</sup> Chapters 2 and 3 on functional and sales tax nexus erosion and associated BEPS measures.

<sup>736</sup> Chapter 2 from nn 190 and 232 onwards.

<sup>737</sup> Chapter 4 on global nexus solutions.

<sup>738</sup> Text to nn 541–549 in Chapter 4.

<sup>739</sup> Chapter 5 on destination-based virtual nexus standards.

for unilateral reforms as part of the BEPS initiative and might denote a shift towards recognition of less traditional production factors, such as personal data collection and targeting.<sup>740</sup> In this regard, broader Internet jurisprudence relating to targeting nexus principles was discussed.<sup>741</sup> It was argued that such standards would create uncertainty if transposed to the tax reality in the short term, as there is no gold policy standard agreed upon in relation to intangible nexus proxies.<sup>742</sup>

Given the difficulties with implementing supranational or more radical territorial solutions, it can be anticipated that in the short to medium term the international community will attempt to restore traditional physical nexus standards by adopting ad hoc measures to fill the gaps in the international tax design.<sup>743</sup> Whilst such an approach would retain the traditional tax framework for the foreseeable future, it might introduce even more uncertainty into the business world, as it would attempt to transpose economic substance requirements, such as those proposed for IP regimes, to the traditional tax regime, which places emphasis on purely physical connections.<sup>744</sup> In order to combat this uncertainty, the role of international cooperation will increase, with procedures for tax arbitration and mutual agreement, whereby taxpayers would be given an opportunity to explain their economic substance to tax authorities.<sup>745</sup>

It can also be envisaged that the international tax policy will continue to be challenged by the patchwork tax reform lagging behind rapid economic changes. Since it is unlikely that any radical tax reform will take place in the near future at the

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<sup>740</sup> Text at nn 75–76.

<sup>741</sup> Chapter 5 at nn 586–652.

<sup>742</sup> Chapter 5 at nn 653–734.

<sup>743</sup> On the viability of global nexus solutions see Chapter 4 at nn 505–542.

<sup>744</sup> See n 27.

<sup>745</sup> On the current international cooperation initiative see text to n 532.

international level, it may be argued that the digitisation of the global economy warrants an interim solution implementable unilaterally, which has the potential to develop into a longer-term model, once the comprehensive digitisation of the world economy occurs:

Countries could take this approach [involving implementation of alternative digital models] with the intent to address their concerns about BEPS issues in the short term and gain practical experience with the application of the options over time, fostering co-ordinated domestic law approaches and informing possible future discussions. In addition, countries could bilaterally agree to include any of the options in their tax treaties.<sup>746</sup>

The proposed interim nexus model should be implementable within the current framework of the current direct and indirect tax models but at the same time be flexible enough to further adjust to the possible alternative tax models discussed earlier.<sup>747</sup>

This chapter outlines a restricted version of a digital targeting nexus standard that could be incorporated into the current and proposed tax models as a backstop anti-abuse measure. It is suggested that, for digital businesses that exercise control over processing of personal data, the digital targeting nexus would act as a trigger for establishing a tax liability in a destination country where such data processing generates sales.<sup>748</sup> In relation to other digital models, for which data processing is incidental, the digital targeting nexus would be established based on where business customers actually use the digital content sold.<sup>749</sup>

In the short to medium term, these nexus standards could be used as specific proxies for anti-abuse provisions proposed within the framework of the OECD

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<sup>746</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 137.

<sup>747</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 137–138: ‘Adoption [of alternative digital tax models] as domestic law measures would require further calibration of the options in order to provide additional clarity about the details, as well as some adaptation to ensure consistency with existing international legal commitments’.

<sup>748</sup> See n 759 below.

<sup>749</sup> See n 770 below.

measures for countering treaty shopping.<sup>750</sup> In the long term, as digitisation and automation of business processes spread across all industries and complicate determination of value-generating factors, the interim solution might either pave the way for novel destination-based solutions or become a stepping stone to an international formulary apportionment.

## **1. Anti-abuse targeting nexus**

### **1.1. Preliminary considerations**

As discussed in the previous chapters, whilst nexus erosion occurs in the context of digital transactions, the more relaxed nexus standards proposed in the literature would not be viable unless they incorporated reliable nexus proxies.<sup>751</sup> Such proxies should be implementable in the short term, whilst providing a backstop solution for digital supplies that erode market presence nexus.

The targeting nexus proxy proposed in this chapter is, therefore, designed such that it can be implemented in the short term. Although it is possible to structure the model similarly to, for example, virtual PEs, such that targeting nexus would trigger an actual tax charge, the proposed anti-abuse measure is not intended to create an additional tax liability, but only to promote compliance with existing nexus standards in the near future.

The limited scope of the measure stems from the lack of tried and tested enforcement mechanisms, which have to be developed in consultation with the private sector. Generally, any tax model that relies on data as a proxy for territorial nexus requires close cooperation between policymakers and digital businesses. In particular,

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<sup>750</sup> On the current anti-abuse initiative see text to n 52 above.

<sup>751</sup> See discussion on targeting nexus proxies in the tax context in Chapter 5 at n 653.

tax authorities need to understand how digital value creation works, which, in turn, requires businesses to provide insights into how their core technology operates.

Such cooperation between taxpayers and the state, albeit inevitable and understandable, carries with it certain risks. The main dilemma is this: as policymakers lag behind technological advances, they need to rely on taxpayers' assistance in designing technology solutions; however, businesses pursue a completely different, commercial agenda that rarely involves assisting state authorities in developing novel tax measures.<sup>752</sup> As the parliamentary enquiries into multinationals' tax arrangements show, policymakers may struggle to understand how complex software algorithms generate economic value, and thus fail to respond adequately to aggressive business practices.<sup>753</sup> In this regard, it has been argued that '[t]here is a pressing need to consider how investment in skills, technologies and data management can help tax administrations keep up with the ways in which technology is transforming business operations'.<sup>754</sup>

It can be envisaged that the lack of technological expertise on the part of tax policymakers will be further exacerbated as the state tax machine continues to shrink.<sup>755</sup> HMRC is currently undergoing a major transformation, which entails substantial staff

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<sup>752</sup> See House of Lords, *Tackling Corporate Tax Avoidance* (n 20) 46, arguing, for example, that 'business tax payers and their advisers share an interest in fostering the view that a complex but none-too-onerous corporation tax regime is for the best'.

<sup>753</sup> See House of Commons and Committee of Public Accounts, *PAC Report on Tax Avoidance* (n 20). See also Ting (n 207) 51: 'The analysis of the [Apple's] iTax structure also highlights that the double non-taxation issue is exacerbated by the "unfair" battle between tax authorities and MNEs. The battle is unfair in two ways. First, resources are relatively limited for tax authorities, especially in times of fiscal stress experienced in many developed countries. In contrast, MNEs often have ready access to an army of highly intelligent tax advisors. Secondly, it is a serious challenge to tax authorities to obtain full information about the tax structure of a MNE'.

<sup>754</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 105.

<sup>755</sup> House of Lords, *Tackling Corporate Tax Avoidance* (n 20) 39, suggesting that 'HMRC needs sufficient high quality staff with deep expertise in corporate tax to deal effectively with the tax affairs of complex and well-resourced multinationals'.

cuts and the transition to digital delivery of most public services.<sup>756</sup> This potentially means that fewer in-house specialists will be available to explore the ever-increasing technological complexity of digital transactions.<sup>757</sup> Consequently, tax authorities will be forced to work closely with external experts and business representatives, thereby facing the same risks as when engaging accountancy professionals from private practice to develop tax policies.<sup>758</sup>

It can be nonetheless envisaged that such close cooperation between the digital industry and tax policymakers will be inevitable in the near future. Given the need for assistance from digital businesses in implementing any data-based tax model, it may be suggested that any radical policy measures should be postponed and rolled out over a longer period, so that balanced technological enforcement solutions could be tested in collaboration with the private sector. Otherwise, tax authorities run the risk of policy decisions going against the grain of common commercial practices adopted in the technology sector. Proceeding from this assumption, two options for implementing the targeting nexus proxies, which would only apply as interim anti-abuse provisions, are proposed below.

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<sup>756</sup> HM Treasury, *Spending Review and Autumn Statement* (2015) 105–106: ‘The HM Revenue and Customs (HMRC) settlement includes ... £717 million of sustainable resource savings a year by 2019-20, achieving £1.9 billion cumulative savings over the Spending Review period, representing a headline 21% reduction in baseline resource costs, *delivered through digitisation of tax collection and a smaller but more highly skilled workforce ... HMRC will find significant savings by consolidating its estate from 170 offices to 13 large, modern regional centres*. These centres will bring staff into more cost-effective buildings while making it easier for HMRC teams to collaborate and modernise the way they work’ (emphasis added).

<sup>757</sup> House of Lords, *Tackling Corporate Tax Avoidance* (n 20) 39, noting that ‘concerns have been expressed that HM Treasury and HMRC lack sufficient in-house expertise to design and implement appropriate tax legislation’.

<sup>758</sup> House of Lords, *Tackling Corporate Tax Avoidance* (n 20) 40, observing that ‘the Big Four professional firms second staff to HM Treasury to advise on technical issues in drafting legislation ... The use of staff seconded from the Big Four accountants by HM Treasury and HMRC to help design taxes is counterproductive. The risks are two-fold: that those on secondment will not have any incentive to design robust, hard-to-avoid taxes and that when they return to private practice they will be better placed to advise how to exploit loopholes’.

## 1.2. Data controllers

For businesses that control personal data processing, targeting can be considered as taking place where consumers, whose personal data is processed, reside.<sup>759</sup> If such data processing constitutes a core business function for the enterprise, it would be necessary to ascertain whether or not sales arising from such data processing are subject to tax in the market jurisdiction using either direct or indirect taxes. If not, the targeting anti-avoidance provision would be triggered.<sup>760</sup>

In line with the targeting nexus developed in the Internet literature, it would be necessary to look at the contracts, technology and knowledge to establish targeting nexus.<sup>761</sup> Where technological data and intent contradict contractual and legal arrangements, anti-abuse measures would apply. Under the current tax regime, if there were physical presence in the country, PE rules would be in point. If no such presence is maintained but sales are made, VAT registration requirements would be tested. If either a PE or VAT registration were in place, the anti-abuse measures would be stopped. If neither of those existed in the country whilst the business had targeting presence, anti-avoidance provisions would apply.<sup>762</sup>

For example, if an online business sells advertising services, nexus would be determined based on location of final consumers, whose online activity, such as clicks, ultimately generates advertising fees for the business.<sup>763</sup> Hence, a fee that an online

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<sup>759</sup> Data controllers as defined under the EU data protection law. See n 699 above.

<sup>760</sup> This would be similar to a data PE in that nexus would only arise if there were a traceable sales transaction.

<sup>761</sup> Text to n 635 above.

<sup>762</sup> Whilst it is possible to structure the model similarly to virtual PEs, such that targeting nexus would trigger a source tax liability, the proposed anti-abuse measure is not designed to create an additional digital tax liability but only to promote compliance with existing nexus standards in the short term.

<sup>763</sup> See Prussak (n 250) 53: ‘Unlike in the software and e-commerce contexts, the revenue here is not generated by the sale of a product or provision of a service by the payee (publisher) to the payor (advertiser). Revenue here is only created if and when the end-user, who is neither earning the

advertising platform, such as Facebook, receives from its business customers for showing an advertisement to a UK user would be attributed to the UK if this user's action has generated the fee, which has an objective economic value.<sup>764</sup>

In certain circumstances, it might be necessary for the advertising fees to be apportioned. If residents of multiple countries were targeted as part of an advertising campaign, the relevant commission would trigger nexus proportionally to sales that users' activity has generated in respective countries.<sup>765</sup> In relation to agreements that rely on lump sum fees and do not specify any performance-based rewards on the basis of clicks, views or subscriptions obtained from specific locations, it may be more difficult to apply the targeting nexus as, for contractual reasons, the taxpayer would not always be required to establish location of users.<sup>766</sup>

Even if the contract is not performance-based, however, it is not unrealistic to expect that, for data compliance reasons, advertising agents would be able to produce analytical reports providing a breakdown of user activity per jurisdiction.<sup>767</sup> Where it is

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revenue nor paying for it, has acted in a way that triggers the recognition of income (i.e., viewed a certain Web page, clicked on a sponsored ad, or otherwise acted upon an ad)'.

<sup>764</sup> This would differ from looking at the processing of personal data under data PEs and WHTs, as there will be a link between a sale and underlying data.

<sup>765</sup> See Evans (n 180) 50, explaining that 'advertisers ... know with confidence what content a particular consumer is viewing', which presumably 'allows advertising to be targeted', meaning that '[t]he platform can determine the time of day and location of the view and may also be able to determine certain characteristics of the viewer'. See also State of New York and Commissioner of Taxation and Finance, 'Advisory Opinion' TSB-A-09(5)C (2009) <[http://www.tax.ny.gov/pdf/advisory\\_opinions/corporation/a09\\_5c.pdf](http://www.tax.ny.gov/pdf/advisory_opinions/corporation/a09_5c.pdf)> accessed 22 July 2013, suggesting in the context of state-level income apportionment that 'receipts from advertisers that have a CPC [cost-per-click] price structure arrangement, where the advertiser pays Company A each time an advertisement is clicked on by a subscriber, [should] be allocated to New York when a New York subscriber clicks on the advertisement'.

<sup>766</sup> See Evans (n 180) 50, explaining that, in addition to geographical locations, user profiling can be carried out based on 'data on what people have done online, including their previous searches, what websites they have browsed, and perhaps even what they have purchased online. Those data, together with other information, can be used to target advertisements to people based on their behavior'.

<sup>767</sup> Jatinder Singh and others, 'Regional Clouds: Technical Considerations' University of Cambridge, Computer Laboratory, Technical Report No 863 (2014)

commercially improbable that the level of user activity can be established, as a backstop measure, nexus could be determined in proportion to the total number of users or subscribers resident in relevant jurisdictions.<sup>768</sup> Ultimately, the development of the metering solution would need to be carried out in tune with current commercial practices and in collaboration between digital businesses and tax policymakers.<sup>769</sup>

### **1.3. Data processors**

In relation to pure cloud computing and other businesses that do not exercise control over data processing, i.e. where personal data processing is only incidental, the targeting nexus would be triggered in those jurisdictions where a digital service is actually used.<sup>770</sup> Hence, if a digital enterprise sells a digital service to a group company that actually provides access to users across other jurisdictions, the targeting nexus would be triggered. In that case, it would be necessary to assess the data processor's business presence in the destination market, but the exact methodology would ultimately depend on the tax model in question, as discussed further below.

Suppose a cloud computing enterprise provides services to a customer overseas. The buyer grants access to cloud services to its personnel in a few other countries. In that case, all the countries where cloud services are rendered would be considered as

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<<https://www.cl.cam.ac.uk/techreports/UCAM-CL-TR-863.pdf>> accessed 22 December 2015, 7, explaining that '[i]t is possible to place a user within a geographic location based on their IP address. Although the location can be imprecise, e.g. perhaps the wrong town/city, the way that IP-addresses are allocated means the user's country is fairly certain. As such, it is routine nowadays for services to use geo-location to filter or adapt their content. For example, the BBC does this to stop end-users outside the UK accessing iPlayer content ... The same technique is used for geo-located targeted advertising'. See also Trimble (n 181) 589, discussing the increasing role of geolocation techniques and noting in this context that 'the list of reasons for the voluntary use of geolocation tools goes beyond achieving legal compliance or preventing fraud, and includes purposes such as implementing differential pricing, localizing advertising, and Internet searching'.

<sup>768</sup> See, for example, State of New York and Commissioner of Taxation and Finance (n 765) 2, suggesting that where location of online users is unknown, the taxpayer 'should base the allocation of its internet advertising revenue on the ratio of its New York subscribers to the number of subscribers everywhere'.

<sup>769</sup> See discussion above at nn 751–758.

<sup>770</sup> Data processors as defined under the EU data protection law discussed earlier at n 699.

targeted markets with jurisdictional nexus. The actual provision of digital services would be ascertained on the basis of metering software that takes into account such indicators as data throughput, processor speed, and usage time, by assigning rates to these factors and thus calculating chargeable fees at the end of a billing period.<sup>771</sup> The resulting chargeable fees calculated using the metering software would be attributable on a territorial basis to destination markets in order to assess whether targeting nexus exists, which would trigger anti-abuse provisions if the company maintains some form of physical business presence in the country.

Whilst geolocation techniques are available to determine where data inputs flow from, for subscription-based services metering software does not necessarily require the precise territory where data is generated to be established.<sup>772</sup> However, technologies are becoming available that would allow control of information flows and monitoring of locations from which data is collected, if a data targeting nexus were to be implemented.<sup>773</sup> It is envisaged, therefore, that the comprehensive adoption of geolocation enforcement techniques for tax compliance purposes will require certain

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<sup>771</sup> See, for example, Michael Armbrust and others, 'A View of Cloud Computing' (2010) 53 *Communications of the ACM* 50, 52–53, discussing the economics of cloud computing and explaining the key factors that affect the pricing of cloud services. For a more technical version of this paper see also Armbrust and others (n 173).

<sup>772</sup> OECD, *BEPS Digital Taxation Final Report 2015* (n 21) 60, noting that in 'B2B markets, cloud services are most typically sold by subscription, although "pay as you go" models are increasingly available'.

<sup>773</sup> See, for example, Thomas Pasquier and Julia Powels, 'Expressing and Enforcing Location Requirements in the Cloud Using Information Flow Control' *Proceedings of 1st International Workshop on Legal and Technical Issues in Cloud Computing, IC2E IEEE, 2015* <<https://www.cl.cam.ac.uk/research/srg/opera/publications/papers/2015claw.pdf>> accessed 21 December 2015, proposing techniques for imposing data controls, which would allow cloud providers 'to specify the location from which a service is willing to accept data for processing' in the light of the risk that 'processing data from a certain location may expose cloud providers to scrutiny by the corresponding jurisdiction of all the data processed by the service'. For a more technical analysis of data flow controls see Singh and others (n 767).

adjustments to current commercial practices, which tax authorities and digital businesses will need to agree on in close cooperation.<sup>774</sup>

#### **1.4. Enforcement of the digital targeting nexus**

There should be a de minimis threshold that businesses would need to satisfy before they fall within the scope of the targeting nexus standards.<sup>775</sup> The threshold should be based on revenue, rather than based on volume of personal data processed, and set relatively high to provide relief for small businesses. The simplest way is to ensure enforcement using existing registration mechanisms. For businesses that qualify as data controllers under data protection regulations, enforcement can be ensured through data representatives that such data controllers may have in the country. Alternatively, where a company is registered under the VAT one-stop shop scheme, such registration would be sufficient to exercise enforcement jurisdiction.<sup>776</sup> Finally, if a digital enterprise does not have to comply with mandatory representation requirements in destination markets, nor has a one-stop shop registration, it would be required to appoint a fiscal representative in the territory considered as a targeted market. Such representatives would need to satisfy credibility criteria, such as trading history and solvency tests.

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<sup>774</sup> On cooperation, see above: nn 751–758. The technical and policy feasibility of broader location-specific restrictions in cloud have been considered in W Kuan Hon and others, ‘Policy, Legal and Regulatory Implications of a Europe-Only Cloud’ Queen Mary School of Law Legal Studies Research Paper 191/2015 <<http://ssrn.com/abstract=2527951>> accessed 22 December 2015. It has been argued that ‘it may be possible to seek to apply European laws to certain data that are not intended to be public, but where access is intended to be available e.g. only to employees of a particular organisation or group, not by constraining the data’s physical location to European territory, but by requiring that only those who are subject to European jurisdiction may have access to that data, especially in intelligible form. Although commercial motivations may have hindered their adoption in practice, such access restrictions to enforce a kind of “virtual jurisdiction” may be implemented through technical measures’ (ibid, 20).

<sup>775</sup> In line with most destination-based virtual models discussed earlier – see nn 560–563.

<sup>776</sup> See n 414.

## 2. Implementation of the anti-abuse targeting nexus

### 2.1. Current tax models

#### 2.1.1. Profits tax

It can be anticipated that the BEPS project will result in the retainment of physical nexus standards, together with increased focus on substance requirements using CFC rules and anti-treaty shopping provisions, together with relaxation of PE rules for ancillary activities and dependent agent structures.<sup>777</sup> The rules will nonetheless focus on traditional nexus and allocation keys, such as people and equipment functions, assets and risks, which are highly mobile within multinational corporate structures and may result in erosion of market nexus.<sup>778</sup>

To stop such market nexus erosion, the digital targeting nexus would act as a backstop provision. If it were to be implemented within the framework of the traditional PE rules, as part of PE nexus analysis it would be necessary to establish whether an overseas enterprise has physical presence in the market country through an affiliate or employees, which may nevertheless be claimed as not constituting a PE. If that were the case, a digital targeting analysis would need to be carried out as a final anti-abuse test.<sup>779</sup>

If the digital business were a personal data controller, it would be necessary to ascertain whether it exercised control over processing of personal data of country residents and subsequently generated fees for rendering digital services, such as advertising revenue. If the sales generated as a result of such data processing exceeded a certain quantitative threshold over a period, the physical presence combined with the

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<sup>777</sup> See Chapter 2 at n 316 and n 321.

<sup>778</sup> See Chapter 2 at nn 245–315.

<sup>779</sup> This would be similar to the UK diverted profits tax or anti-abuse measures but with the focus on digital nexus rather than physical / sales nexus.

digital targeting nexus and a tax avoidance motive would trigger PE implications, to which profits would be attributed using traditional allocation approaches. The targeting test would thus provide a specific proxy for anti-abuse rules that may be adopted in domestic corporate tax legislation or in relevant treaties.<sup>780</sup>

The digital targeting test could, for example, develop further the recently introduced diverted profits tax (DPT) model.<sup>781</sup> As discussed earlier, the DPT model looks to combat tax avoidance arrangements whereby taxpayers with substantial business presence in the market reduce their corporation tax liability. The core feature of the model is that the diverted profits tax applies only where a non-resident business has some form of physical presence within the jurisdiction.

If the targeting test were to be incorporated within the DPT structure, data controllers would be deemed to have targeting nexus with the jurisdiction if they had targeted consumers under contractual arrangements with an advertiser, without declaring any taxable presence despite maintaining a physical connection in the country. In relation to data processors, such as cloud providers, the application of the targeting test within the framework of the DPT would mean that maintenance of some physical presence that does not qualify as a PE may be recognised as constituting taxable presence, if it is recognised that digital targeting nexus arises where cloud providers grant access to business customers for the use and enjoyment of their service.

Hence, where traditional profits tax regimes apply, the digital targeting nexus would serve as a backstop provision that would provide specific proxies for the existing anti-abuse measures. Given that the targeting nexus would apply alongside traditional physical nexus standards, it would not affect profit allocation models. The arm's length

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<sup>780</sup> As part of unilateral measures or anti-abuse rules developed in BEPS – see n 46.

<sup>781</sup> See Chapter 2 from n 325.

analysis would still be required to ascertain the functions, assets and risks that the limited physical connection has to be rewarded with a profit. The targeting model would nonetheless trigger a nexus with a source jurisdiction where physical presence is artificially deflated or insufficiently rewarded.

### **2.1.2. VAT**

It may also be anticipated that, given the overarching reliance on physical nexus factors under profits tax regimes, many jurisdictions would be keen to ensure that sales made without such physical presence are securely taxed in destination markets. One of the obstacles for sales taxation identified earlier, however, is the potential for diversion of sales within multinationals, particularly in the context of global framework contracts.<sup>782</sup>

Where such diversion taxes place in the context of EU VAT, currently it is impossible to reallocate VAT payable across fixed establishments that actually utilise or ‘consume’ a digital supply.<sup>783</sup> Businesses, therefore, pay the tax only where the business establishment most closely connected with the supply is located as a proxy for corporate consumption.<sup>784</sup> Where digital services contractually belong in one state but are actually used and enjoyed in other jurisdiction, the anti-avoidance ‘use and enjoyment’ provision can only apply to non-EU supplies and would only allocate revenue to customer residence, ignoring other jurisdictions where digital enterprises may have substantial market presence not qualifying as a place of fixed establishment.<sup>785</sup>

The targeting nexus standards could be used as a proxy for the use and enjoyment test when applied to digital supplies. For business models that act as data controllers,

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<sup>782</sup> Chapter 3 at n 402.

<sup>783</sup> Chapter 3 at 2.3 and 2.4.

<sup>784</sup> Chapter 3 at 2.2.

<sup>785</sup> Chapter 3 at 2.3.

such as online advertising enterprises, the fixed establishment nexus could be redefined to provide that a digital service would be deemed to take place where the service targets consumers through advertisements. Only ‘sales leads’ generated by advertisements would be taxable in destination countries where consumers are resident.

For businesses that act as data processors, it would be necessary to look at where the chargeable supplies are actually consumed, which would be determined by calculating the amount of fees attributable to specific customers located in destination countries. Hence, VAT would be payable where there is an establishment consuming a digital supply, with the fixed establishment defined using quantifiable economic terms, i.e. a place where VAT supplies assessed based on cloud meters exceed a VAT threshold.

Overall, the application of the digital targeting nexus in the context of VAT would establish a specific proxy for the ‘use and enjoyment’ anti-abuse provision and would thus bring within the tax charge specific digital transactions that are currently outside the scope of sales taxes but that contribute to consumption of value in market jurisdictions. The digital targeting nexus would therefore ensure that value generated through data processing and actual rendering of digital services is captured in destination countries.

## **2.2. Virtual nexus solutions**

### **2.2.1. Virtual PE**

As discussed earlier, in order to address the physical nexus erosion a virtual presence nexus could be introduced that would use either qualitative or quantitative nexus standards based on the economic nexus, sales thresholds or data processing nexus.<sup>786</sup>

The proposed targeting nexus could be implemented to build on the virtual PE model,

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<sup>786</sup> See Chapter 5 at 1.2.1.

by implementing digital nexus criteria for establishing nexus and allocating profits across jurisdictions, without resorting to unitary taxation. This can be achieved by assessing which jurisdictions digital enterprises target through a number of proxies.

For digital businesses controlling personal data processing, the targeting nexus would be determined based on the number of residents whose personal data was processed, which resulted in a sales transaction. For example, in the context of online advertising, an advertising agency, such as Google or Facebook, would be deemed to have taxable presence in the jurisdictions where a combination of different criteria is satisfied, such as processing data of a jurisdiction's residents using pay-per-view or pay-per-click payment models, with the total fees exceeding a certain threshold, or completion of a sales transaction through an advertising campaign targeted at particular residents, with the sales transaction exceeding a similar threshold.<sup>787</sup>

For digital businesses that do not control personal data processing, it would be necessary to assess where digital services are actually delivered to users. This approach would look at the countries where actual consumption takes place, which should be established based on cloud metering software, which tracks where access to the digital service has been granted.<sup>788</sup> As a result, the targeting nexus would be established based on where electronic services are actually rendered.

When allocating profits to either of these virtual PEs, the targeting nexus proxies would act as substitutes for profit allocation keys. Hence, for online advertisers allocation would depend on the number of clicks, views or subscribers that have generated advertising fees from a particular jurisdiction. For cloud providers, the

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<sup>787</sup> This would be different to a data tax as nexus would arise only where sales are completed – see Chapter 5 at 3.1.3.

<sup>788</sup> See on geolocation Chapter 1 at 2.3.

number of subscribers or access points allocated per jurisdiction would act as an allocation key to split the cloud computing fee across targeted markets. Given that the model would deem the constant monitoring of users not to constitute nexus with targeted market, and would therefore ignore it, it would avoid issues with valuation of raw data; instead, it would focus on linking sales transactions with the underlying data processing activities.<sup>789</sup>

### **2.2.2. Withholding taxation**

As an alternative solution to virtual PEs, withholding tax models have been considered, which would use qualitative or quantitative nexus standards to tax sales or data processing in the territory, provided that an e-commerce business exceeds a certain threshold. As with virtual PEs, all the WHTs models could suffer from diversion of sales.

For example, a non-EU supplier of digital services, rather than selling directly into the EU, may legitimately make its digital sales to a non-EU business purchaser. The latter would be able to use and enjoy the non-physical supply within the EU through its affiliates under a global framework agreement.<sup>790</sup> Similarly, an online advertising enterprise could sell its services to an offshore entity of an e-tailer group that could sell digital products to EU consumers using targeted advertisements, enjoying the EU market presence without suffering from a WHT burden.

The issue of sales diversion within the framework of WHT models could be addressed using the targeting nexus in the same way as for virtual PEs discussed earlier. In the context of businesses that target private consumers, such as online advertising

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<sup>789</sup> On valuation of data see Chapter 5 at 3.1.3.

<sup>790</sup> In the same way as VAT per Chapter 3 at 2.4.

agents, both the advertising fee and the associated sale of a digital product by the e-tailer would be subject to WHT in the state where the targeted consumers were resident.

Where user activity generates a fee for a digital enterprise acting as a data controller, the fee would be attributable to the market jurisdiction on the basis of the targeting nexus. If a digital enterprise does not control personal data processing as part of its business, relevant service fees would also be subject to WHT but only if the supplier targets a jurisdiction by selling its service to a business purchaser that, in turn, consumes the digital supply in another destination state where personnel actually use the supply.

### **2.3. Radical tax reform**

An alternative to designing a targeted regime aimed at stopping nexus erosion would be to overhaul the tax system and implement a new tax that would attempt to alleviate most profits tax issues and incorporate consumption taxation features in its design. In this context, it has been proposed that a destination cash flow tax would be beneficial in addressing the current challenges of profit nexus and allocation.<sup>791</sup>

As discussed earlier, the tax would apply to net cash flows, on a transactional or cumulative basis. It would be a difficult policy decision as to what cash flows to include within the tax base, but the general consensus is that the destination-based version of the model would exclude all export transactions and exclude capital inflows from abroad, thereby taxing only domestic transactions and returns on capital invested abroad.<sup>792</sup>

As with any sales-based models, there is a risk that sales may be diverted if they are taxed based on pure sales nexus with destination countries, using residence and

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<sup>791</sup> See Chapter 5 at 1.2.

<sup>792</sup> See Chapter 5 at 1.2.

customer location proxies as they exist under the current EU VAT. In order to take digital commerce features into account, it would be necessary to create nexus with destination countries through adopting a digital presence model. This effect could be achieved through the introduction of a targeting nexus for the purposes of implementing the destination profits tax.

Under the targeting nexus, outgoing services supplied to a foreign branch of a business customer could be brought back within the destination cash flow tax net if the ultimate goal is to target customers through the sale of a digital service. If the service does not involve tracking consumers and processing their personal data, the targeting nexus could be implemented, deeming the sale to a customer to target other jurisdictions where digital services are consumed based on a cloud-metering log. This would be similar to the proposed modified use and enjoyment test in the context of VAT, reallocating sales to places of actual consumption whilst preventing diversion of sales to non-switching countries.

As discussed earlier, however, although it may be possible to stop artificial diversion of sales under the destination profits tax, the biggest issue is the viability of the model as a unilateral measure within the EU, where a harmonised system of VAT is in place. Given that the destination cash flow tax would replace the familiar system of international profits taxation, it is likely that the switching countries may be targeted using aggressive tax arrangements, which, while legal, may nevertheless exploit the fluidity of digital commerce. For this reason, in the long term the more likely scenario would involve retaining the profits tax regime, but with a gradual shift towards formulary allocation of profits across jurisdictions.

The US experience with formulary allocation of income for state tax purposes demonstrates how this approach could be implemented in practice. In the State of New

York, where allocation rules for state income tax purposes apply a sales-factor formula, it may be considered justifiable to allocate online advertising revenues to targeted states. A number of published advisory opinions considered a case where an online advertising company contended that its online advertising fees were generated by services performed by its IT personnel and automated servers located outside New York rather than by the sales representatives who executed agreements with business customers in New York. The position of the tax authorities, however, was that the advertising revenue was ‘based on the number of times New York based subscribers click[ed] on or view[ed] an advertisement, and not on the activities of IT personnel and management that [were] directly related to its website, wherever these employees may be located’.<sup>793</sup>

It is envisaged that the digital activities of Internet users would need to be taken into account when designing a comprehensive allocation method as part of a formulary apportionment model. The targeting nexus, which would manifest through digital activity, could act as an additional allocation key for attributing profits of multinationals across source jurisdictions. The proposed approach, however, would be different in that it would only apportion profits to digital nexus points that generate a sales transaction, which can be established based on online tracking software.<sup>794</sup> When more advanced technology is available, allocation of profits to online activity such as clicks and views would also be possible, although this is a matter of longer-term reforms.

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<sup>793</sup> State of New York and Commissioner of Taxation and Finance (n 765); State of New York and Commissioner of Taxation and Finance, ‘Advisory Opinion’ TSB-A-09(8)C (2009) <[http://www.tax.ny.gov/pdf/advisory\\_opinions/corporation/a09\\_8c.pdf](http://www.tax.ny.gov/pdf/advisory_opinions/corporation/a09_8c.pdf)> accessed 22 July 2013. See also Prussak (n 250).

<sup>794</sup> Cf Prussak (n 250), arguing for actual profit allocation to digital activity such as clicks in the context of an online advertising industry.

## **Conclusion**

In this chapter, it has been argued that, in order to develop a more predictable system of digital commerce taxation, a gradual switch towards a more objective standard for determining jurisdictional nexus would be required. This can be achieved if arbitrary people-functions and assets criteria are backed up using a less mobile digital nexus factor. This can be implemented within the framework of numerous tax models proposed in the literature.

It has been concluded that, while sales PEs using qualitative or quantitative criteria would address the issue related to digital enterprises conducting trade distantly, significant problems could arise because of profit allocation methods that will still rely on the controversial arm's length principle or highly fluid allocation keys within the framework of formulary apportionment.

Although withholding taxes on gross payments could help to overcome the issues relating to profit allocation, they would be difficult to implement in the EU given that they would have to apply to domestic transactions and could thus resemble another transaction tax – VAT. Raising proper consumption tax rates, such as the EU VAT, could potentially compensate for profits base erosion. However, VATs are associated with fraud and sales diversion that cannot effectively be addressed within the EU due to the harmonised internal market.

While a radical reform involving a switch to a destination cash flow tax would provide a comprehensive solution to allocation issues and ensure that digital sales proceeds do not go untaxed, this model would only be effective if rolled out in multiple jurisdictions. If implemented on a unilateral basis, it would be possible to book sales in non-switching countries. In addition, there is a risk that the implementing countries

would be exploited by digital enterprises focusing on exporting services to other jurisdictions.

It has, therefore, been argued that an interim solution – a digital targeting nexus – could serve as a short-term model that would serve as a stepping-stone to longer-term tax reforms. The digital targeting nexus would help to restore jurisdictional links with digital enterprises while keeping the traditional profits tax regime intact as a backstop option. The anti-abuse measures stopping the diversion of sales would ensure that destination countries where the market presence of digital enterprises is significant would receive a share of revenue generated in their territory through interaction with customers.

The model would achieve this by introducing a two-fold targeting test. It would attribute the revenue of businesses that target consumers through online advertising to jurisdictions where consumers are resident. In addition, the test would use targeting nexus standards to attribute sales of cloud-type businesses, which do not target consumers, to jurisdictions where their service is actually rendered. Since this is envisaged as an interim measure, a more comprehensive solution can be implemented in the long term, once the targeting nexus preventing sales diversion is tested and more advanced enforcement mechanisms are developed. This is, however, a matter of longer term reforms.

## CONCLUSION

This thesis has considered one of the fundamental challenges that the international tax regime is currently facing, jurisdictional nexus erosion, which has emerged due to the digitisation of the global economy and has undermined the traditional practical compromise relating to the allocation of taxing rights across jurisdictions using physical proxies. The task was to consider the current nexus challenges and analyse the nexus elements of the proposed global and territorial virtual tax models, particularly in the light of broader Internet jurisprudence.

It was argued that the overall digitisation and globalisation of the world economy has led to the emergence of multinational enterprises that enjoy corporate mobility combined with the ubiquity of production factors. This state of global trade has created substantial issues for legislators, who seek to redesign the current regulatory framework so that it reflects the globalised business processes more adequately.

It was established that, in the broader Internet governance context, which looks at the regulation of the technical and social sides of Internet activities, national governments have struggled to create a truly supranational regime and have, therefore, resorted to reinforcing their national legislation using online intermediaries.

In the context of international taxation, it was argued that state tax administrations have struggled to reconcile the traditional tax concepts of source and residence with the highly mobile production base that digital enterprises enjoy. While issues of source and residence erosion have come to the forefront of international tax debate, these are long-standing matters that have affected cross-border taxation over decades.

In the past, certain readjustments to the international tax regime were made to adapt it to economic globalisation. For example, the international tax community recognised the importance of computer infrastructure, intangibles and technical services and, therefore, amended source tax rules to clarify the tax treatment of servers as PEs and to provide more guidance on distinction between business income, royalties and technical fees.

Due to further digitisation of the global economy, international tax challenges have substantially intensified, prompting the tax community to initiate a comprehensive review of the international tax regime that would bring the current tax rules in line with the digital and global economic developments. This initiative has brought about a number of diverging proposals for international tax reforms.

One option would amend the physical nexus standards merely by implementing incremental changes to direct and indirect tax systems, focusing on a complete review of anti-abuse provisions, relaxing physical source nexus and reinforcing residence standards. A contrasting approach would involve an overhaul of the system through implementing formulary apportionment or through shifting towards cash flow taxation that does not rely on accounting assumptions. Finally, some authors suggested ring-fencing the dematerialised digital commerce and implementing specific tax measures for such industries, including global e-commerce taxes, virtual PEs or e-commerce withholding taxes.

While these models are aimed at solving different issues relating to digital economy, they would all require nation-states to establish jurisdiction to tax, or nexus, in relation to digital enterprises. Although jurisdictional issues have been discussed in the context of Internet regulation and e-commerce generally, it was argued that no previous studies had been undertaken to ascertain the possible influence of the broader

Internet governance developments specifically relating to nexus on taxation of Internet activities.

This thesis, therefore, tested the viability of the nexus elements of the proposed tax models, using the Internet jurisprudence and governance literature as an overarching framework for discussion. In this context, the task was to consider why the current nexus rules have come into conflict with digital realities and to discuss whether either the global nexus or the more advance territorial virtual nexus standards would provide a practical solution implementable in the short to medium term.

In this regard, the global models for the substantive and enforcement nexus were discussed in the light of the ICANN global governance regime that regulates the Internet connectivity. It was argued that the appearance of the global Internet governance regime has nothing to do with the practical realities; the US authorities, through a private IANA contract, are behind the governance of the Internet technical infrastructure, with other nation-states opposing this status quo and shifting towards enforcement of their own territorial regimes via local Internet intermediaries.

More relaxed territorial nexus solutions, such as sales and data virtual PEs, and cash movement nexus solutions such as WHTs and cash flow taxes, were discussed in the light of the wider Internet jurisprudence that looks at the issue of nexus erosion in the context of public and commercial cases concerning the Internet. It was established that the targeting and effects nexus standards widely accepted for the governance of online activities would bring uncertainty into tax law. Whilst the Internet jurisprudence provides some guidance as to what proxies could be used to design the jurisdictional test, it was argued that the viability of the tax models that incorporate such theoretical models into the international realm would be highly questionable.

It was, nonetheless, argued that, in the long term, the overall digitisation of the global economy would lead to comprehensive dematerialisation and mobility of the production factors that lie at the core of the digital value chains. It can, therefore, be envisaged that a gradual shift towards the more intangible targeting nexus standards would be inevitable, be it within the framework of direct or indirect tax solutions. It was, therefore, proposed that a restricted version of the targeting nexus standard might be implemented as a backstop anti-abuse solution within the framework of the direct and indirect tax models.

In this regard, it was argued that targeting proxies should be adapted to digital commerce business models. For the models that use data processing, the targeting nexus might be established whenever a sales transaction can be directly linked to a data processing exercise that targets specific country residents. For other digital models, targeting nexus should be determined based on where the actual rendering of digital services takes place rather than where contracts are concluded. Where it is established that a targeting nexus is misaligned with the consumption and profits tax position of the taxpayer in the country, the targeting nexus would be invoked as an anti-avoidance measure, whereby revenue or profits would be re-attributed to the targeted jurisdictions.

In the long term, it can be envisaged that the digitalised global economy will become even more dependent on automated algorithms, rather than a static production base. In order to trace interaction between technology platforms and the ultimate provision of digital content and services, the next step should involve designing a technology solution that would allow both the taxpayers and the tax authorities to track links between digital targeting and jurisdictions more precisely. Until such time as secure software solutions are in place for these purposes, emphasising data processing

or actual rendering of data-intensive services would be too onerous from a compliance perspective.

In practice, therefore, it may be expected that the BEPS initiative will result in the international community retaining substantial reliance on the traditional physical nexus standards and consumption tax proxies, such as permanent establishments denoting significant business presence in the market. It may, therefore, be expected that state tax authorities will become even more reliant on sales taxes to secure tax revenue streams, as the physical business presence of digital enterprises in market countries would gradually reduce.

In the long run, therefore, collection of sales-based taxes should remain at the forefront of the international tax debate. It can be expected that further research into the digital nexus and the ways it can be tracked using software solutions might be required in the future, and would subsequently form the basis for further development of targeting nexus solutions relating to cross-border digital commerce.

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