Master Thesis

Beat the Bit and here is how!

How to deal with the Digital Economy in International Taxation

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Table of Content

1.	Introduction	4
2.	Historical development of Digital Economy and its taxation	6
	2.1. Beginnings of the Digital Age and the Hour of E-Commerce	
	2.2. New Digital Age meets old Approach	
	2.3. Main Tax Issues of the Digital Economy	8
2	Recent Developments at the level of the OECD and the European Union	0
	3.1. OECD BEPS Project and Action 1	
	3.1.1. The BEPS Project in General	
	3.1.2. Action 1 – Tax Challenges of the Digital Economy	
	3.1.2.1 Definition of Digital Economy E-Commerce	
	3.1.2.2. New Business Models	
	3.1.2.3. Key Features and Interaction of Main Actors	
	3.1.3. Action 1 – Options and Evaluations	
	3.1.4. Direct Taxation Options	
	3.1.4.1. Amending Article 5 PE Exceptions	
	3.1.4.2. New Nexus – Significant Digital Presence3.1.4.3. Virtual PE	
	3.1.4.4. Final Withholding Tax	
	3.1.4.5. The Bandwidth or 'Bit' Tax	
	3.1.5. Indirect Taxation Options	
	3.1.5.1. Treatment of low Valued Goods	
	3.1.5.2. Destination Principle for Cross-Border Digital Transactions	
	3.1.6. Evaluation of the Options by the Task Force for Action 1	
	3.2. Developments within the European Union	
	3.2.1. New EU VAT Rules – B2C	
	3.2.2. Proposal Günther Oettinger – DG Digital Economy	
	3.3. Interim Conclusion	21
4.	Direct and Indirect Tax Legislation in European and Other Countries	21
	4.1. The Piracy or Copyright Tax	
	4.2. The Internet Advertisement Tax	
	4.3. Link Tax or Ancillary Copyright Tax	
	4.4. The Bit Tax	
	4.5. The Diverted Profit Tax	
	4.6. Internet Tax on Personal Data	
	4.7. Netflix Tax or the New VAT/GST Tax Regimes	
	4.8. Interim Conclusion	28
5.		
	5.1. Destination-Based Corporate Taxation - DBCT	29
	5.2. A Bit Tax on Bandwidth Usage	31
6.	Contributions of Proposals to deal with the Digital Economy	
	6.1. Internet Advertisement Tax	
	6.1. Piracy or Content Tax	
	6.2. Ancillary Copyright Tax or Link Tax	
	6.3. Tax on Data	
	6.4. Diverted Profit Tax	35
	6.5. Measures in Relation to the PE concept	
	6.6. Final Withholding Tax on Digital Goods and Services	37
	6.7. Bandwidth or 'Bit' Tax	38
	6.8. Netflix Tax	
	6.9. Destination Based Corporate Income Tax	
	6.10. Interim Conclusion	39

7.	Turnin	g Point for a Radical Change	
		Ideal Tax for E-Commerce and the Digital Economy?	
		What shall be Achieved by the Tax?	
		Who will be Affected and who Should Bear the Burden?	
	7.1.3.	Who has the Right to Tax and how to Enforce it?	
8.	Conclusion		
9.	9. Bibliography		

1. Introduction

"It cannot be helped, it is as it should be, that the law is behind the times." <u>Oliver Wendell Holmes</u>¹

How to beat the 'bit'? A new digital age has arrived, however great uncertainty how to cope with it exists among the international legal sphere. Only recently in 2015 the number of Internet users exceeded the three billion mark, a number three times higher than in 2005² that shows the growing importance of the cyber space. The rapid spread and development of Information and Communication Technologies (ICT) as well as the constant access to it, led companies to adopt new business models, consumers to change their behaviour and E-commerce to take on completely new forms. This development of a Digital Economy and along with it the drastic increase of E-commerce has reached a level that caught much attention in the last decades.

Such connectivity and new opportunities to optimize not only the sale of goods and services but to revolutionize production, management, logistics, and above all profit generation, had a significant impact in particular for international taxation. Nowadays in this area domestic and bilateral tax legislation appear unable to deal with the new challenges. Countries more and more realize that their tax legislation and the traditional approach to taxation do not meet the needs to tax profits arising in the digital age, leading to huge losses in tax revenue. As a result of the 2013 G20 conference in St. Petersburg the OECD launched the Base Erosion and Profit Shifting (BEPS) Project with 15 Action Plans to address the current challenges of international taxation. One of those Actions, namely Action 1, deals with tax matters surrounding the Digital Economy. Four predominant issues have been identified up until now, those include (1) problems to fall under the permanent establishment (PE) classification, (2) the characterization of income generated from goods and services over the Internet, (3) the identification of the taxable income, and (4) the issue of establishing a relevant nexus with a tax jurisdiction³. In September 2014 the OECD published the first Deliverables for Action 1, in which potential solutions are evaluated, which however still appear far from being feasible.4

¹ Oliver Wendell Holmes, Law and the Court, in Speeches 98, 101, 1934.

² Internet Users in the World; ICT Revolution; The World in 2014.

³ OECD (2014), Addressing the Tax Challenges of the Digital Economy, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, pp.15-16, 125; Garrigues (2014), Legal Framework and Tax Implications of E-Commerce in Spain, 2014.

⁴ OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, p. 159.

Meanwhile, various countries have been trying to address parts of the challenges on a unilateral basis and proposed or adopted own tax legislation, many of which with international implications. Big announcements ranging from a Diverted Profit Tax (DPT)⁵, a 'Bit' tax to a Piracy or even a Google tax made it to the newspapers' headlines, especially in the wake of the current tax scandals surrounding global players such as Google, Starbucks, Apple and Amazon.⁶ However, not only the countries but also academia devoted much work to address these challenges. Approaches towards a Destination Based Corporation Tax (DBCT), a Bit tax or a Bandwidth tax were discussed and critically reflected by various academics. From all this, it becomes clear that to find a solution for the challenges imposed by the Digital Economy a reformation of the old habits in national and international taxation is inevitable. Exactly those circumstances encouraged the author of this research paper to analyse in how far the past and recent developments nationally and internationally contributed to finding a solution or an ideal measure to overcome the challenges posed by the Digital Economy including E-commerce. Therefore, the remainder of this paper is as follows:

The second chapter goes through the historical developments concerning the Digital Economy its impact on international taxation over the last decades. These are relevant in order to acknowledge the increasing importance of the cyber space for the chapters to come. The investigation continues in the third chapter, where the current international initiatives and progress in relation to the BEPS Project, but also recent developments within the European Union (EU) are discussed. The fourth chapter evaluates some of the domestic measures proposed and implemented in the past and very recently. Hereby, the main focus is put on the EU and its Member States, but also other states are considered, due to interesting new proposals and their significance in those jurisdictions. Approaches from academia and their potential impact and probability of success are dealt with in the fifth chapter. To continue, taking into consideration the findings of the previous chapters, chapter six analyses in how far the different approaches contribute to find a suitable measure that addresses the issues resulting from the taxation of the Digital Economy and E-commerce. Then in chapter seven the author's proposal towards a solution for the taxation of the Digital Economy is introduced

⁵ Luca Cerioni (2015), *The New "Google Tax": The "Beginning of the End" for Tax Residence as a Connecting Factor for Tax Jurisdiction"*, European Taxation, 2015, Vol. 55, No. 5.

⁶ C. Fuest et al., *Profit Shifting and "Aggressive" Tax Planning by Multinational Firms: Issues and Options for Reform*, World Tax Journal, Vol. 5, No. 3.

based on the foregone analysis. Finally, the last chapter provides a conclusion for the main findings and suggests interesting topics of further research.

Before advancing to the historical context of the emergence of the Digital Economy in taxation, certain limitations for this research paper have to be mentioned. The proposals evaluated from the different countries and from the academia only entail the once that caught most attention in the newspapers. Furthermore, the reliance is placed on mainly English sources that could be found on the web as well as in various databases as the scope of the paper did not permit a thorough research in each countries own language, which might reveal more detailed results. Lastly, it should be noted that the proposal for the ideal tax and its evaluation is mainly construed as a result of the efforts already undertaken mixed with the author's own opinion and shall serve as food for thought to take the next step in finding a proper solution to the taxation of the Digital Economy.

2. Historical development of Digital Economy and its taxation

The rise of the Digital Economy heralded a revolution affecting all aspects of people's lives and businesses. It influenced not only the way to acquire and exchange information, but also opened up countless new opportunities and forms to conduct business globally. What first was thought to be a controllable progress turned out to have an unpredictable impact on, amongst many other areas, international taxation. To understand the full magnitude of the current development it is helpful to chronologically elaborate on the emergence and main issues surrounding the Digital Economy, which entails the evolution of E-commerce.

2.1. Beginnings of the Digital Age and the Hour of E-Commerce

It all began in 1969 when the US employed the first form of an Internet network called ARPANET⁷ enabling the first host-to-host messages. This first step to improve and enhance communication velocity was intended amongst others for defence purposes. Not long after the introduction and expansion of the first Internet network, it reached the public and found its way into private households. Already in 1995 the Internet was dominated by applications such as the World Wide Web and browsers like Internet Explorer or Netscape.

Through those means the general public gained access to the Internet triggering the era of Ecommerce. E-commerce can be defined as the selling and buying of products and services via electronic systems and should be considered as comprising part of the Digital Economy. In

⁷ Barry M, Brief History of the Internet.

contrast, the Digital Economy is regarded as an umbrella term that includes not only Ecommerce but also the digitization of businesses in general through technology⁸.

E-commerce started booming in 1996 with the fast growth of Yahoo and the building up of the Dot.Com bubble⁹. The traditional commerce, which was marked by "brick-and-mortar" presence and where economic activity was attributable to factors of production has been more and more supplemented and replaced by the digitization. This development facilitated the segregation of business functions. As a result it became more difficult to determine where in E-commerce the income is actually generated and going to.¹⁰ Due to the accelerated spread of the Internet, E-commerce sales amounted to around 26 billion US Dollars (USD) in 1998, which increased within 14 years to over 1 trillion USD.¹¹ This rapid development did not remain unnoticed and questions on how to deal with E-commerce and digitization in tax matters started to concern governments.

2.2. New Digital Age meets old Approach

Initial work in the 1990s came from the US, which analysed the impact of E-commerce and how to deal with it in relation to sales taxes. Above all the nexus problem raised concerns. Shortly after, following autonomous proposals of US states for specific Internet taxes the Internet Tax Freedom Act was adopted in 1998¹² to ensure that no consumption tax on bits can be introduced. The 'Bit' tax was an approach, which at that time was strongly supported by the United Nations, not however by the US. Eventually in 1998 countries engaged in multilateral discussion at the OECD Ministerial conference in Ottawa to decide how to handle the taxation of E-commerce.¹³

⁸ Noah Gaoua (2014), *Taxation of the Digital Economy: French Reflections*, European Taxation, 2014, p.11; OECD, *Hearings: The Digital Economy;* OECD, 2002, Glossary of Statistical Terms: Electronic Commerce.

⁹ Cockfield, Arthur J. and Hellerstein, Walter and Millar, Rebecca and Waerzeggers, Christophe (2013), *Taxing Global Digital Commerce*. Wolters Kluwer Law & Business, 2013, p. 3; Reimar Pinkernell, *Internationale Steuergestaltung im Electronic Commerce*, Ifst, 2014, No. 494.

¹⁰ C. Latham, *Internet Commerce: The internet as a Commonwealth tax challenge*, 4 The Tax Specialist, Vol. 4, No. 2, 2000, pp. 65-73; John Box, *E-Commerce and Tax – An Australian Perspective*, Asia-Pacific Tax Bulletin, 2014, p. 114.

¹¹ Scoffield, H. (1998), E-commerce Expected to Explode, OECD Says, Globe & Mail, Sept. 29, 1998; Clark Friedricksen (2012), *Ecommerce Sales Topped \$1 Trillion for First Time in 2012*.

¹² Fetzer (2000), Die Besteuerung des Electronic Commerce im Internet, 2000, p. 33; U.S. Department of the Treasury(1996), Selected Tax Policy Implications of Global Electronic Commerce, November 1996.

¹³ OECD Committee on Fiscal Affairs, Electronic Commerce Taxation Framework Conditions, 1998; Portner (2001), *Ertragsteuerliche Aspekte des E-Commerce*, ifst-Schrift, 390, 2001, p. 13; Kreienbaum (2003), *Steuern und Electronic Business*, Strunk, Vol. 2. 2003, p. 16; Cockfield, Arthur J. and Hellerstein, Walter and Millar, Rebecca and Waerzeggers, Christophe (2013), *Taxing Global Digital Commerce*. Wolters Kluwer Law & Business, 2013, p. 3; EY Indirect Tax in 2015, p. 11.

The conference resulted in what came to be known as the Ottawa Framework Conditions for the taxation of E-commerce. Five conditions have been laid down, those are: (1) Tax neutrality, (2) Efficiency, (3) Certainty and Simplicity, (4) Effectiveness and Fairness and (5) Flexibility.¹⁴ However, the main emphasis for the taxation of E-commerce was put on tax neutrality, which underlined the OECD's opinion to rather adapt the existing tax rules instead of developing new specific tax rules for E-commerce and the Digital Economy. Tax neutrality requires that neither traditional commerce nor E-commerce should be discriminated against within the existing taxation rules. In the aftermath of the Ottawa conference various Technical Advisory Groups (TAGs) were established in order to analyse and develop new methods to cope with the challenges imposed by the newly emerged E-commerce and later Digital Economy. Those challenges are introduced in the following sub-section.

2.3. Main Tax Issues of the Digital Economy

Already in the early beginnings of E-commerce it became clear that the traditional tax rules face challenges, which have to be addressed in order to ensure the proper functioning of the international taxation rules. The possibilities of segregating business functions and the increasing use of intangibles have created problems for direct and indirect taxation especially in cross-border situations. Furthermore, due to technological advancements the access to the global market has been facilitated and many businesses can trade all over the world and sell their products from anywhere to anywhere, without the need to be physically present in the jurisdiction of the customer. Thus, two main challenges relate to the taxable nexus of a business, which is normally governed by either incorporation or place of effective management in order to become a resident. Alternatively, a company established its presence through a PE in another jurisdiction. In addition the increasing use of intangibles and the processing of big data raised the problem to determine where value is created and how it should be characterized.¹⁵

Eventually the question arose, where and how the income should be taxed. All these issues had been identified over the last decades and were taken up again by the OECD BEPS Project launched in 2013 after the G20 Ministerial Conference in St. Petersburg. However, not only the OECD but also the EU, as a main driver of progress in the field, introduced new measures,

 ¹⁴ OECD Committee on Fiscal Affairs, Electronic Commerce Taxation Framework Conditions, 1998, p. 230.
 ¹⁵ John Box (2014), *E-Commerce and Tax – An Australian Perspective*, Asia-Pacific Tax Bulletin, 2014, p. 114;
 OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit
 Shifting Project, OECD Publishing, Paris, pp.15-16, 125; Garrigues (2014), *Legal Framework and Tax Implications of E-Commerce in Spain*, 2014, p. 17.

in particular in the field of Value Added Tax (VAT)/Goods and Service Tax (GST) to deal with the challenges of the E-commerce and the ever-increasing use of intangible products. Therefore, the following chapter introduces the recent developments in relation to the OECD BEPS Project and the efforts taken by EU in more detail.

3. Recent Developments at the level of the OECD and the European Union

Two international driving forces in relation to the taxation of the Digital Economy comprise on the one hand the OECD with its work on the BEPS Project and on the other hand the new tax initiatives brought forth by the EU.

3.1. OECD BEPS Project and Action 1

As already mentioned in the previous section, one of the most relevant recent projects is the BEPS project finalization of which, is awaited fiercely by governments and businesses. The main objective is to help "better align rights to tax with economic activity"¹⁶ in international taxation. In what follows the BEPS initiative and in particular BEPS Action 1 addressing the challenges imposed by the Digital Economy is discussed.

3.1.1. The BEPS Project in General

The BEPS project includes fifteen Action Plans that shall put a hold on the aggressive tax planning structures Multinational Enterprises (MNEs) have developed. In relation to this BEPS shall adapt existing international tax rules to modern tax challenges.¹⁷ Striving for discussions with OECD and non-OECD Members, the project tries to achieve a consensus and if not a consensus a compromise to establish measures that minimize the erosion of the tax base in the countries as well as the vast opportunities to shift profits to low or no tax jurisdictions. Each of the fifteen Actions addresses a particular problem statement however as will become clear many of the Actions are intertwined and complement each other.

3.1.2. Action 1 – Tax Challenges of the Digital Economy

Action 1 of the BEPS project specifically deals with the tax challenges imposed by the emergence of the Digital Economy. However as is referred in the deliverables from September 2014¹⁸, most of the challenges addressed by Action 1 are also dealt with in other Actions, which include the artificial avoidance of a PE (Action 7), the combat on harmful tax

¹⁶ OECD (2013), Action Plan on Base Erosion and Profit Shifting, OECD Publishing, Paris, p. 11.

¹⁷ Raymond Doherty (2013), G20 Leaders Back OECD Tax Plan, 2013.

¹⁸ OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris.

practices and strengthening of CFC legislation (Actions 5 and 3), interest deductions and other financial payments (Actions 4 and 9), transfer pricing issues (Actions 8-10) and hybrid mismatches (Action 2). It appears from the wording in the report that the OECD is awaiting the outcome of these Actions to verify whether the steps taken already in those Actions solve the major part of the issues raised by the Digital Economy or whether there is pressure to resolve them separately.¹⁹

Taking a closer look at the deliverables, they offer a good recent overview of what the OECD considers to fall within the scope of the Digital Economy. For the analysis following the later chapters, it is therefore useful to clarify the definition of the Digital Economy used, what new forms of business have evolved and are of most relevant to deal with, as well as to shortly outline what the key characteristics of the Digital Economy are.

3.1.2.1. Definition of Digital Economy E-Commerce

Trying to find a proper definition of the Digital Economy, one can read through the report back and forth and still would not find a clear definition. This however seems to have been done on purpose by the working group. The Action per se does not provide a definition of the Digital Economy, as this appears to be impossible at the moment. Rather the OECD tries to analyse the impact of digitization by means of evaluating the impact newly evolved business models have on the economy.²⁰ Therefore, to better understand how digitization impacts the economy it is indispensable to shortly address its components. Those include the definitions of the personal computing devices, telecommunications networks, software, content, use of data and cloud-based processes.

At the beginning of the digital age a personal computer was consider 'the innovation' and the main market evolved around manufacturers developing best compatible hardware and software to attract customers. The fast progressing of technology has changed this and now not only innovative hardware and software is the trick, but price competition emerged. Furthermore, what started out with personal computers, evolved into devices involving the customer through inventions such as smartphones or tablets. Those allow the creation of even closer relationships to customers. For the connection of all the developed devices access to the Internet is necessary. Internet Service Providers (ISPs) granting the Internet connection for the computing devices became a central part in the emergence of the digital age. However,

¹⁹ Ibid., p. 151.

²⁰ Ibid., p. 73.

limited predominantly in providing access to the Internet and therefore being regionally dependent on the network, over-the-top providers emerged, which are the providers that offer access to content over the Internet. Not constrained by any locational dependence they could offer worldwide services and therefore compete in various markets. The development of software played also a very important role in the emergence digitization. Websites being one of the first Internet powered applications, the range of software opportunities greatly increased leading companies to compete in price and innovation.

Another important aspect surrounds the content and the use of data. Those two value drivers should be considered separately but are to some extend closely related. Various forms of content exist, may it be copyrighted or non-copyrighted, enterprise or user generated. In fact, content builds the foundation to attract customers to retain users and build up an Internet presence. An updated website with the right content is likely to attract more visitors and users. The tendency in recent times encourages and shows a strong increase in user generated content. Some of the content provided by users is used by enterprises in order to improve their own products or services. Especially personal data is often used in order to develop tailor made solutions that attract specific customers.

The last but definitely not least and most recent development is the cloud-based processes. Cloud computing is a revolution that uses the means of hardware, software as well as global Internet network. What started out to be software locally used on a personal computer or in an intranet, expanded nowadays to a broad range of Internet applications and services that provide low-cost hardware anywhere in the world. Once sold as a good, many software solutions became services combined with executable codes and user participation.

With an increasing velocity the cyber space led to the creation of virtual currencies such as bit coins, 3D printing, advanced robotics and the Internet of things, in which devices are connected with various other devices influencing all aspects of life.²¹

3.1.2.2. New Business Models

The technological repertoire that the Internet offers not only to private households but also to enterprises encouraged new models of conducting business. All forms of conducting business

²¹ OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris

has been affected by the digitization and the emergence of E-commerce, may it be Business to Business (B2B), Business to Customer (B2C) or even Customer to Customer (C2C).

New business models in the area of B2B comprise possibilities to segregate business operations in an easy fashion, outsource functions, or facilitate and support logistics of other firms by offering goods and services for E-commerce. The variety of opportunities and ways of applying E-commerce between businesses seem endless, a couple of them are listed at the end of this section.

One of the earliest forms of E-commerce can be found in the new B2C models. Away from "brick and mortar" sales through physical retailers, the Digital Economy makes the intermediary redundant. The new style is "click and order", where businesses offer products via websites, which the customers can evaluate, choose, customize and buy. Without the middleman, businesses directly approach the customer over the Internet with an emphasis on advertisement and customer care.²²

Other newly emerged business models are to be found in the realm of C2C and comprise directly only trade between two individuals. In those models the Internet occupies the role of an intermediary. Businesses such as online auctions, peer-to-peer file sharing and market platforms for individualized ads have been increasingly established. The businesses that resulted from the emergence of E-commerce include but are not limited to online payments services, app stores, online advertising companies, cloud computing services, high frequent trading and participative network platforms.

3.1.2.3. Key Features and Interaction of Main Actors

From the above overview of the impact on business models but also from the composition of the Digital Economy some of the key features become evident. Among the most obvious is the high mobility of the Digital Economy. It is achieved through the use of intangible products and services, the possibility to globally reach out to users from anywhere and the possibility for businesses to separate and easily relocate business functions. Moreover, as already indicated earlier in the Digital Economy data is collected in vast amounts, which in turn is analysed and used to create value and encourage tailor-made solutions to meet the

²² Paolo Centore, Maria T. Sutich (2014), *Taxation and Digital Economy: Europe Is Ready*, 2014, p.786.

customers' needs. Network effects constitute yet another characteristic of the Digital Economy.

Customers that join a particular network, such as content based movie sharing or social media websites, increase the value of the network by joining it. The other member can profit from the new members without having to pay a compensation for it. Thus, network effects lead to either positive or negative externalities within the Digital Economy. An example of the latter would be when a network becomes too large and in this way loses its value to the others. Decisions that a group of users makes when interacting through an online intermediary, like on a specific platform, can have a positive or negative effect on other peer groups. Use of data in such a way is called a multi-sided business model. This feature, as the others, represents the collection, storage, processing of data to create additional value for the business and the customers.

Another key feature of the Digital Economy has proved to be the tendency that the market is controlled by a monopoly or oligopoly. This is the case because often when a new business penetrates and immature market and combines low costs and network effects, then a dominant position is likely to arise. Patents and IP rights additionally foster such a development, providing the innovative business with exclusive exploitation opportunities. However, as the last decades have shown the Digital Economy comprises a volatile market in which barriers to entry are low and monopolies can suddenly be lost.²³

Resulting from all these characteristics and different aspects the Digital Economy comprises a hierarchy of interaction within the ICT sector can be constructed. Understanding of this hierarchy is vital to accurately evaluate the proposed solutions to deal with the tax challenges brought about by the Digital Economy. On top of the hierarchy is the user and on the very bottom the infrastructure. The infrastructure consists of the cables, routers and switches through which ISPs are able to supply an Internet connection, above which the software resources are located. Those entail servers, data centres or other storage facilities. The next step on the latter is the accessibility that allows the development of applications, which are the next in line in the hierarchy. Between the applications and the users is only the user interface left. The user interface constitutes the link between the program and the user and is of vital

²³ EU Expert Group (2014); Working Paper: Digital Economy - Facts & Figures, 2014, p. 4.

importance as it enables the user to be able to execute the application. Figure 1 provides a short overview of the hierarchy and levels of information exchange.



Figure 1²⁴

Having regard to all the points mentioned the Digital Economy is affecting many different business sectors including but not limited to retail, transport and logistic, financial services, manufacturing and agriculture, education, healthcare as well as broadcasting and the media. From this it becomes apparent that the traditional economy more and more evolves into the Digital Economy. Particularly due to this reason the OECD and various other countries acknowledged that it is impossible to ring-fence the Digital Economy and establish separate tax rules only for it. This has also been supported by the United States²⁵ and the Netherlands.²⁶ After having established the foundation based on which the tax issues in relation to the Digital Economy should be evaluated, it is worth to have a look at the potential solutions discussed in the 2014 deliverables of BEPS Action 1.

3.1.3. Action 1 – Options and Evaluations

Following the 2013 Draft Report on BEPS Action 1, the OECD issued a discussion draft for the public in order to receive input from governments, businesses and experts on how to handle digitization in international taxation. The outcome of the working group together with the input received from the discussion draft led to the publication of the 2014 deliverables on BEPS Action 1. In total a number of seven options to address the Digital Economy proposed

²⁴ Taken from: OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris.

²⁵ Colm Keena (2014); Net closing on tax affairs of multinationals, Irish Times, 25 April 2014.

²⁶ Dutch Government (2013); Letter to the European Parliament on the action against tax fraud, 2013,

[&]quot;Nederland ziet geen aanleiding om bij belastingen een onderscheid te maken tussen de digitale economie en de 'normale economie'".

by the public and evaluated in the report. Five of these options deal with direct taxation issues and two options are dedicated to indirect taxation.

Looking at the options discussed in relation to direct taxation, the OECD considered, (1) an amendment to the current PE definition inherent in Art. 5 of the OECD Model Tax Convention (OECD MC), (2) the creation of a new nexus rule taking into account significant digital presence, (3) a set of different virtual PE possibilities and (4) the introduction of a final withholding for digital transactions or (5) a bit tax on bandwidth use. In relation to indirect taxation the possible options analysed mainly concern the B2C situations and include (1) the elimination or reduction of the threshold for a VAT exemption on low valued goods and (2) the application of the destination principle for cross-border supplies of digital products and services.

3.1.4. Direct Taxation Options

3.1.4.1. Amending Article 5 PE Exceptions

The first option that is suggested by the working group is to modify or eliminate the PE exemptions included in Art. 5(4) of the OECD MC. Paragraph 4 of Article 5 lists various activities that a business can have in a jurisdiction without triggering any tax consequences as they constitute exceptions to the rule. Those can be found in Art. 5(4) (a-d) and include mainly activities that entail, storage, display, delivery or mere purchasing of merchandise as well as the collection of information or general activities of a preparatory and auxiliary nature (Art. 5(4)(e)). However, it is perceived that there are businesses, which have those activities as their core activities and through the exemptions escape tax liability in that state. Therefore, it is suggested to modify this provision either by eliminating paragraph 4, or modify it by including that the nature of the activity must be auxiliary or at least to exclude delivery from the scope of the exemptions, an activity building the core of many e-tailers.²⁷

3.1.4.2. New Nexus – Significant Digital Presence

The second option surrounds the allocation of taxation rights to a jurisdiction based on significant digital presence for fully dematerialised digital activities. Therefore, businesses that rely on solely or predominantly digital goods, which do not involve physical elements or activities, are deemed to have a PE in the source jurisdiction when exceeding a certain

²⁷ OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, p. 143.

threshold. Those activities can be expressed by business activities that include the remote conclusion of contracts, the reception of payments mainly via electronic payment services or credit cards, the establishment of customer relationships exclusively via websites, the making of profits to an overwhelming amount from digital goods or services, independent from a legal or tax residency. If all or a set of those criteria are fulfilled and a threshold, which still needs to be agreed upon, is exceeded, then the business conducted amounts to have a digital presence PE.

The conditions of the threshold could include, the total number of remotely concluded contracts, active level of user engagement or overall level of consumption of digital products or services. Another possibility is to deem a significant digital presence PE where the core activity of the business relies on the regular or systematic monitoring of users to attract other users by processing the collected data. This would be the case in multisided business models.²⁸ This option would add another layer to the PE definition in Art. 5 OECD MC focusing only on the digital activities conducted through a business. The report however does not indicate how the profits would be allocated once the threshold is exceeded. It merely suggests introducing a parallel possibility to have a PE, which would in this constellation still be governed by the existing transfer pricing rules.

3.1.4.3. Virtual PE

The third option mentioned in the Deliverables takes up a proposal that was first conceptualized by Luc Hinnekens in the 1990s²⁹ and envisages the expansion of current PE definition with a new form of virtual PE definition, which in part still relies on physical aspects. What becomes of vital importance here is the closer and more interactive relationship between the business and the customer. Those relationships shall govern the threshold of the PE and could entail, (1) the long term relationship with customers or users over a period of six months coupled with some physical presence in the country directly or via an agent, (2) the sale of goods or services through a website with local language, delivery options from suppliers in the jurisdiction, the use of banks and other facilities from the suppliers country or source based suppliers offering goods and services in the jurisdiction, as well as (3) the supply

²⁸ Ibid., pp. 144-145.

 ²⁹ Luc Hinnekens (1998), Looking for an Appropriate Jurisdictional Framework for Source State Taxation of International Electronic Commerce in the Twenty-first Century, 26 Intertax, 1998, Vol. 7, No.6, p. 192 (1998);
 Pinto, D. A. (2006), The Need to Reconceptualize the Permanent Establishment Threshold, Bulletin for International Taxation, Vol. 60 No. 7, p. 266-279.

of good or services based on systematic and regular data-collection or contributions from customers in that country³⁰.

This option basically suggests three different types of virtual PE. The first one being an "Onsite Business Presence PE", which provides digital goods or services via electronic means but maintains an interface in the jurisdiction of the customer. Second, a "Virtual Agency PE", extending the dependent agency PE to habitually concluded contracts through websites and third a "Virtual Fixed Place of Business PE", where the connecting factors are the website and the data gathered in the jurisdiction of the customer. Again, these measures are not accompanied with any comment in relation to the attribution of income, once the virtual PE threshold is met.

3.1.4.4. Final Withholding Tax

Another serious option discussed in the report elaborates on a final withholding tax (WHT) for digital goods and services transactions. This tax would be imposed on payments made for digital goods or services. The collection of such a tax could be ensured through a cooperation with the financial institutions that are best equipped to monitor those transactions and withhold the correct amount. It is further suggested that such a WHT can be used in order to enforce the newly suggested nexus in the previous options.³¹

3.1.4.5. The Bandwidth or 'Bit' Tax

The last option mentioned in the report is a bit tax on bandwidth use by businesses active in the trade of digital goods and services. A minimum threshold to trigger the tax would have to be introduced in order to ensure equity between traditional businesses and the digital businesses. The tax would be levied based on the amount of bytes consumed with progressivity introduced put into relation to the turnover received.³² However, it should be noted that the report does not provide any further suggestions on how to design or implement such a tax.

³⁰ OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, p. 146.

³¹ Ibid.

³² Ibid., p. 146-147.

3.1.5. Indirect Taxation Options

3.1.5.1. Treatment of low Valued Goods

A measure proposed in order to tackle the challenges in relation to indirect taxation, in particular VAT/GST, suggests that the exemptions for low valued goods need to be revised. Lowering the threshold would enable countries to collect VAT revenue that was lost due to the digital facilitation of trading vast amounts of low valued goods below the present thresholds. To be able to lower the threshold more efficient collection mechanisms and clear and easy registration mechanisms will have to be introduced.³³

3.1.5.2. Destination Principle for Cross-Border Digital Transactions

The other option proposed in indirect taxation concerns the introduction of coherent international vendor collection mechanisms for VAT/GST in the country of the customer. This measure directly relates to the place of supply and consequent collection of VAT for digital goods and services. It is perceived that the best possible solution would be that a nonresident vendor has to register in the country of the customer to remit the VAT in that jurisdiction. Necessary actions to be taken include the facilitation of VAT registration in the countries as well as the possibility to use third party intermediaries that could act on behalf of the non-resident vendor. Additionally, this goal can only be achieved through international cooperation, a foundation of which can be found in the Convention on Mutual Administrative Assistance on Tax Matters.

3.1.6. Evaluation of the Options by the Task Force for Action 1

From the working groups own evaluation, the option to amend the PE exemptions in Art. 5(4)is awaited to be dealt with in Action 7 and the potential measures for VAT/GST are analysed in working group 9. Therefore, no in-depth and feasibility analysis is provided. Furthermore, the issue of physical presence and the possibility of a final withholding tax needs further investigation before initial conclusions can be provided.³⁴

3.2. **Developments within the European Union**

The other driving force to deal with the issues raised by the Digital Economy has been the EU so far. Algirdas Šemeta Commissioner responsible for Taxation and Customs Union

³³ Ibid., p. 147. ³⁴ Ibid., p. 153-156.

commented in a speech that "[d]igital companies must be prepared to play by EU rules in order to benefit from our 500 million consumers. And this means paying their fair share in taxes".³⁵

The expert group established to analyse the impact of the Digital Economy on taxation started questioning the importance of the physical presence in direct taxation and reinforced the changes that occurred in EU VAT.³⁶ The importance of the changes in VAT are expressed in losses the EU suffered over the past, which amount to about 200 billion in revenue each year.³⁷ Actions undertaken in the field of EU VAT show that the time for change has come and the EU does not want wait any longer.

3.2.1. New EU VAT Rules – B2C

In terms of measures adopted and options proposed to deal with the Digital Economy the EU was one of the first to adopt the new place of supply rules for digital goods. In 2003 the EU VAT Directive³⁸ was amended providing that non-EU suppliers of digital goods have to register in the EU and remit VAT in the country of the customer. This place of supply rule for electronic services, however, was only applicable to trade from a non-EU vendor to an EU customer. Within the EU the place of supply rule remained the state of the supplier of the digital service or product up until January 2015.

From 2015 onwards, with the entering into force of the new implementing regulation³⁹, the new place of supply rules following the destination principle are now applicable also throughout the EU.⁴⁰ In addition the mini-one-stop-shop (MOSS) mechanism is put to action that allows a company to register in one of the EU member states to collect and amount for the VAT payable within the EU. Subsequently the VAT can be determined in the country where the company is identified and is then paid to the respective member state of the

³⁵ Press Release EU Commission (2013), Algirdas Šemeta's speech on: *Digital Taxation: An EU reflection in a global context,* Commissioner responsible for Taxation and Customs Union, Statistics, Audit and Anti-fraud, 2013.

³⁶ European Commission (2014), *Working Paper: Digital Economy – Facts and Figures*, Expert Group on Digital Economy, p. 17.

³⁷ EU Business (2013), EU loses EUR 200 bn in sales tax fraud, error, 2013.

³⁸ Which is now, Directive 2006/112/EC, amended by Council Directive 2008/8/EC.

³⁹ Council Implementing Regulation (EU) No 1042/2013 for place of supply of telecommunications,

broadcasting and electronic services for Directive 2008/8/EC on the common system of value added tax; Explanatory Note (2014), p. 3.

⁴⁰ European Commission (2014), *Working Paper: Digital Economy – Facts and Figures*, Expert Group on Digital Economy, p. 17; Marie Lamench (2012), *Are 'reverse charging and the one-stop-scheme efficient ways to collect VAT on digital supplies?*, World Journal VAT/ GST Law, WJOVL, Vol. 1, 2012.

customer.⁴¹ The reason for the introduction of these changes is to ensure that consumption of electronic services is taxed at the destination, eliminating the possibility of companies to establish themselves in a low VAT jurisdiction and profit from the old origin principle that was in place for the supplier selling the goods to consumers (B2C).

The new rules require that the company providing the electronic services shall identify the customer and based on the information acquired, charge the respective VAT on the transaction. As explained above the MOSS shall simplify the registration and documentation within the EU as the company will only have to register in one member state. The new Regulation 1042/2013⁴² foresees in Art. 24c that two non-contradictory pieces of evidence shall be used in order to determine the customer's location.⁴³ Evidence accepted for the customer identification includes the billing address, bank details, transport details or other available commercially relevant information.⁴⁴ Introducing such rules is one of the first major steps undertaken in order to effectively cope with the tax challenges that the EU is facing due to digitization of the economy in indirect taxes.

3.2.2. Proposal Günther Oettinger – DG Digital Economy

Another very recent development within the EU concerns the declaration of a new potential proposal for an "EU Google Tax" by the new Commissioner on Digital Economy Günther Oettinger, formerly the Commissioner of the DG Energy.⁴⁵ He explicitly stated that "If Google takes intellectual property from the EU and works with it, the EU can protect this property and can demand a charge for it".⁴⁶ The tax would be a form of ancillary copyright law imposing a fee on providers, such as Google, for the presentation of copyrighted material on their websites. Laws similar to the one Mr. Oettinger is planning for the EU have already been already adopted states including Germany and Spain. Therefore, a more detailed overview of the tax is provided in the following section.

⁴¹MOSS (2013), *Guide to the VAT Mini One Stop* Shop, p. 2.

⁴² Council Implementing Regulation No 1042/2013/EU.

 ⁴³ JP McCarthy (2014), *EU VAT non-compliance: severe penalties await*, Taxamo, 2014; Christopher Jeffery (2014), *Taxing the digital economy – a reminder about upcoming changes to VAT place of supply rules*, 2014.
 ⁴⁴ Article 24e Council Implementing Regulation No 1042/2013/EU: "(a) the billing address of the customer; (b)

⁴⁴ Article 24e Council Implementing Regulation No 1042/2013/EU: "(a) the billing address of the customer; (b) bank details such as the location of the bank account used for payment or the billing address of the customer held by that bank; (c) registration details of the means of transport hired by the customer, if registration of that means of transport is required at the place where it is used, or other similar information; (d) other commercially relevant information".

⁴⁵ David Meyer (2014), *EU digital economy chief downplays "Google tax" reports*, Gigaom, 2014; Greg Sterling (2014); *New European Digital Economy Commissioner A "Google Hawk"*, MarketingLand, 2014.

⁴⁶ Handelsblatt (2014), *EU plant Urheberrechtsabgabe im Internet*, Statement: "Wenn Google intellektuelle Werte aus der EU bezieht und damit arbeitet, dann kann die EU diese Werte schützen und von Google eine Abgabe dafür verlangen".

3.3. Interim Conclusion

This chapter introduced the current international developments, which have been mainly driven by the OECD and the EU. The OECD BEPS Action 1 report and the deliverables provide an excellent overview of potential options that might be followed and more elaborated on in the near future. The EU being one of the pioneers to introduce new rules governing the EU's VAT system shows the urgency of the tax issues and the willingness of international institutions to find a quick solutions for the problems surrounding the Digital Economy. However, many countries have become impatient and were not willing to await the outcome of the BEPS project. This resulted in proposals and introductions of laws on a unilateral basis in order to deal with the Digital Economy. The next chapter addresses a great variety of past and recent proposals of taxes and laws that are supposed to tackle the challenges of the cyberspace.

4. Direct and Indirect Tax Legislation in European and Other Countries

Since there is no agreement on a multilateral solution on how to deal with the evolution of the Digital Economy yet, states around the world abide by the traditional taxation and tax allocation rules. Doing so, those states face precisely the challenges earlier identified, namely issues concerning physical presence in a jurisdiction, problems of characterisation of income and where it is generated.

Despite the international efforts to resolve those challenges, various countries adopted or proposed unilateral measures to tame the cyberspace. Those states either do not agree with or have grown impatient about the still uncertain multilateral solutions still analysed by the OECD. Thus, the following subchapters provide an overview of the different proposals and measures that were introduced unilaterally by countries and caught the most media attention. Hereby the focus is predominantly put on European countries, but also some other non-EU states are considered due to the significance and potential international impact of their proposed measures. To maintain a clear structure the chapters are divided by tax measure identified. Furthermore, the way the measures are supposed to work and the countries that introduced the measures are considered.

4.1. The Piracy or Copyright Tax

The first tax measure that can be discussed is the, as the media calls it, piracy or copyright tax. The tax is supposed to be imposed on the Internet Service Providers (ISPs) with the justification that illegal content traffic is conducted through their networks⁴⁷ or in general as a compensation for the content made available over the internet.⁴⁸ The main objective is to compensate the unauthorised use of copyrighted work, which expresses itself through the various websites that allow the upload, download, sharing and streaming of all kind of data. Since surveillance and counter-measures are complicated to enforce and only function to a certain extent, it is believed that through such a charge the holders of the copyrights are to a minimum degree compensated or that the revenue can be used for internet infrastructure.⁴⁹

The first countries to consider such a tax were the Netherlands, Belgium and UK, but only recently Russia also published a proposal of a sort of piracy tax in form of a global licence for internet content in 2015.⁵⁰ Particularly in Belgium the tax was not specifically proposed by the government, but it rather concerned a legal dispute between 'Société Belge des Auteurs, Compositeurs et Editeurs' (SABAM) and Belgian ISPs. However, the Belgian court decided that SABAM is not allowed to charge royalties for supposedly illicit behaviour of ISPs. Throughout the different countries, the functioning, design and the rate of the proposed taxes varied. Whereas in Belgium a tax rate at 3.4% on each broadband connection was suggested, the Netherlands proposed a rate of 6%. The UK planned to impose a 30 Pounds charge and Russia a flat rate tax at 35 Rubbles (\$0.4) monthly or a yearly fee of 300 Rubbles (around \$5). The Russian licence has a special addition to it, along with the global licence the Ministry of Culture wants to introduce a deep package inspection (DPI) software that ISPs are supposed to mandatorily install. This shall help to track what content users consume in the Russian Net. Furthermore, it shall ensure that the copyright holders are compensated in a fair way.

⁴⁷ Innocenzo Genna (2015), *Internet tax rejected in Belgium*, 2015, radiobruxelleslibera; Ernesto (2015), *Internet Providers Win Court Case Over "Pirate Tax"*, 2015, TF.

 ⁴⁸ Inquisitr (2009), The Netherlands considering internet tax to prop up newspapers, Media Industry,
 2009;Tetyana Lokot (2014), The Russian Internet Is Not Free. A New Tax Might Make It Even Worse, Global Voices, 2014.

⁴⁹ Paul Revoir (2009), Every household to pay £20 internet piracy tax as Government announces 'broadband for all' plan, Mail Online, 2009; supra. 47.

⁵⁰ Peter Spinella (2015), Russian Culture Ministry Keen to Tax Internet Users, The Moscow Times, 2015;

Tetyana Lokot (2014), The Russian Internet Is Not Free. A New Tax Might Make It Even Worse, Global Voices, 2014.

4.2. The Internet Advertisement Tax

Another attempt to unilaterally introduce a new measure to safeguard VAT on digital services, was launched by Italy. A so-called google tax on advertisement was passed by the Italian parliament in December 2013.⁵¹ The measure envisaged that internet advertisements and sponsored links are to be purchased only directly or indirectly from entities that possess an Italian VAT number. This includes media centres and third party operators. It mainly concerned the sale of online advertisement space and links displayed by search engines, hence the headline of a Google tax again. To ensure enforceability the law requested such services to only be remunerated via bank or postal transfer, as this enables the authorities to trace the transactions more efficiently. The law was already repealed however by the new government in February 2014 due to inconformity with EU Law.⁵²

4.3. Link Tax or Ancillary Copyright Tax

An initiative that was in various countries triggered by publishers and governments alike concerns the link tax. This tax is supposed to charge royalties on search engines for the provision of snippets and text excerpts from news websites.⁵³ The debate about such a tax started in France Germany and Belgium⁵⁴ and recently spilled over to Spain as well as thoughts about proposals hit the public in the UK and as earlier mentioned the EU.

Germany as the first country passed the law in 2013, however the design of the tax is rather questionable. Whereas the tax shall address the copyrighted publication of newsfeeds from newspaper websites, the law exempts the royalty charge in relation to small text snippets and individual words. Everything else falling within the scope should be subject to a royalty

⁵¹ Chiara Vasarri (2013), *Italy Approves 'Google Tax' on Internet*, Bloomberg Business, 2013; Giuliano Foglia (2014), *Italy: Italy implements new web tax on internet companies*, International Tax Review, 2014; Luigi Quaratino (2014), New Provisions Regarding the Taxation of the Digital Economy, European Taxation, 2014, p. 211.

⁵² Luigi Quaratino (2014), New Provisions Regarding the Taxation of the Digital Economy, European Taxation, 2014, p. 21;1 Giuliano Foglia (2014), *Italy: Italy implements new web tax on internet companies*, International Tax Review, 2014.

⁵³ David Meyer 2013), German parliament passes 'Google tax' law, forcing royalty payments for news snippets, Gigaom, 2013; Addy Dugdale (2013), *The "Google Tax" In Germany Is A Good Thing. Unless It's Not. Discuss. (Updated)*, Fast Company, 2013; Lisa M. Ruth (2014), *Google News in danger? Spain passes 'Google Tax' on Internet news aggregators*, CDN, 2014; Alex Hern (2014), *Spain moves to protect domestic media with new 'Google tax'*, The Guardian, 2014.

⁵⁴ David Meyer (2012), *Google reaches deal with Belgian publishers, avoids paying 'link tax',* ZDNet, 2012; Harry Jupp (2014), *Should we introduce 'Google Tax' in the UK?,* The Guardian, 2014.

payment.⁵⁵ The proposals in France and Belgium never became reality as Google, who was the centre of the debate, concluded agreements with the publishers and the government⁵⁶ in terms a 6 Million Euro payment and an establishment of a 60 Million Euro fund.

The most recent country to introduce such a tax is Spain. In August 2014 congress passed the law that requires the new aggregator to pay a fee to the original publisher. This law is part of the Spanish Copyright Reform Act⁵⁷ and requires publishers to impose a fee on such content related links. The amount of the fee is however not laid down. From the German experience the new tax only hurt their business and popularity so that most of the publishers waived the possibility of charging royalties. This is not possible according to the Spanish law, which do not provide the publishers with the option to impose or not to impose the royalties, but make it mandatory.⁵⁸ As a result the tax is in Germany not effectively charged and in Spain Google already decided to shut down Google News Spain.

The previous section on the proposals from the EU to tax the Digital Economy, shortly elaborated on exactly this link tax. Günther Oettinger the Commissioner on Digital Economy announced that a proposal for an EU wide link tax is worked on.

4.4. The Bit Tax

One proposal that caught much media attention emerged in Hungary. The government under Viktor Orbán announced to introduce a tax on the Internet in form of a bit tax on data transfers. According to the proposal all data transfers through an ISP is supposed to be taxed at a rate of 140 Forints (\$ 0.60) per Gigabyte. At a later stage of the proposal phase a cap on the amount of tax paid was introduced that forecasted a maximum payment of 700 (\$ 2.80) Forints for individuals and 5000 Forints (\$20) per month.⁵⁹ The tax was supposed to be charged on the ISPs, which would have ultimately added it to the customer bills. Due to mass

⁵⁵ Ibid.

⁵⁶ Paul Sawers (2013), Google sidesteps France link-tax, reaching a \in 60m deal to help publishers move to the digital age instead, TNW News,2013; Matt McGee (2013), *Google Settles With France: No 'Link Tax,' But €60 Million Media Fund*, Searchengineland, 2013; Jeff John Roberts (2012), *Did Google pay Belgian newspapers a \$6M copyright fee? Sure looks like it*, Gigaom, 2012; David Meyer (2012), *Google reaches deal with Belgian publishers, avoids paying 'link tax'*, ZDNet, 2012.

⁵⁷ Pablo Hernández, Elzaburu (2014), *Key Aspects of the New Reform of the Spanish Copyright Act*, Kluwer Copyright Blog, 2014.

⁵⁸ Oscar Williams (2014), Google News Spain to be shut down: what does it mean?, The Guardian, 2014.

⁵⁹ BBC (2013), Hungary internet tax cancelled after mass protests, BBC, 2014; The Guardian (2014), View on protests against taxing the internet in Hungary: Europe needs to show its support, The Guardian, 2014; Nancy Scola (2014), Hungary's crazy-expensive Internet is driving people to throw their computers into the street, Washington Post, 2014.

protests throughout Hungary, the government decided to cancel the planned Internet Tax in October 2014.⁶⁰

4.5. The Diverted Profit Tax

In April 2015 the United Kingdom (UK) government introduced the new Diverted Profits Tax, which the media also branded as the "Google Tax".⁶¹ The tax can in a way be considered as a unilateral anti-abuse rule, which is directed mainly towards aggressive tax planning structures of large companies operating in the Digital Economy. Due to its complexity and in order not to exceed the scope of this paper a narrow simplified overview of the new tax measure is provided. An initial remark shall however be made at this point. This measure, which entered into force in April 2015, can be considered as one of the most significant in the most recent past. It was adopted even though no outcome of the BEPS project has yet been published. Now, how does the new DPT work?

The DPT attacks tax planning structures, which fall under one of the following two situations. On the one hand it shall capture structures where the creation of a PE is deliberately avoided despite the fact of having substantial sales in the UK. On the other hand it shall identify tax transactions or entities that lack the necessary economy substance and impose the tax respectively.⁶² Once the tax is applicable profits arising in the UK based on the volume of sales that are assumed to be made in the UK are taxed at a punitive rate of 25%. The connecting factor hereby is put on the volume of sales and not on physical presence anymore.

As regards the first situation, the avoidance of a PE, for the DPT to be applicable the structure in place must have as its purpose to prevent the formation of a PE in the UK. Furthermore, one of the two other conditions have to be met. Those include a reasonable assumption of tax avoidance or of a tax mismatch. The tax avoidance condition is fulfilled when the arrangement shows that the substance of the activities is separated from where the formal conduct of the activities is done. For the tax mismatch condition to be met, a non-resident company and a UK person under common control must achieve a tax saving of at least 80%

⁶¹Claire Lambert (2015), New U.K. Diverted Profits Tax, A&M, 2015. Taylor Wessing (2014),

⁶⁰ Euractiv (2014), Hungarians protest Internet tax, Euractiv, 2014; Eleanour Goold (2014), *Thousands Take to Budapest Streets over Internet Tax'*, The Daily, 2014.

The UK Diverted Profits Tax - a unilateral approach to an international problem, TW, 2014. PWC (2014), *UK Diverted Profits Tax to be introduced*, PWC, 2014.

⁶² HMRC (2015), Diverted profits tax, HM Revenue & Customs, 2015, pp. 2-4; Taylor Wessing (2014), *The UK Diverted Profits Tax - a unilateral approach to an international problem*, TW, 2014; Luca Cerioni (2015), The New "Google Tax": The "Beginning of the End" for Tax Residence as a Connecting Factor for Tax Jurisdiction?, European Taxation, Vol. 55, No. 5, p. 2.

through their transactions, which would have otherwise be caught by the UK tax system. In addition, it must be shown that the UK person contributes less in economic value than in domestic tax saving to the non-resident companies' activities. If those criteria are fulfilled, then the 25% tax on the profits, assumed to have been made in the UK, applies.⁶³ The second situation concerning the lack of economic substance of the entity or transaction requires the same tests as in the avoidance of a PE situation. Here it is again important that both entities are under common control, that there is a tax saving test of 80% and the financial benefit test.⁶⁴

In order to affect only large multinational enterprises a threshold is introduced including only enterprises with an annual turnover of more than 50 Million Euros or annual balance sheet not exceeding 43 Million Euros and which have more than 250 employees. Interesting is the timing of the newly introduced tax in the UK, with the BEPS project still under way without a possible multilateral measure. It appears that the new tax has much political weight in this electoral year, however, much criticism was expressed towards the adoption of the new tax as such a unilateral measure, it is feared, could motivate other countries to follow suite.

4.6. Internet Tax on Personal Data

France is one of the most dedicated countries to find a solution to the taxation of the Digital Economy. Various reports and studies have been issued and conducted in order to analyse the impact and the development of the Digital Economy to find an appropriate way to tax the large multinational companies operating and using the Internet to their advantage. In January 2013 the so-called Collin Report was published by the French government. The report was supposed to analyse on how tax piracy in the Digital Economy can be counter-acted. The outcome of the Collin Report suggests a tax on the collected data of French users.⁶⁵

It is foreseen that until no multilateral solution on how to deal with the new challenges of the Digital Economy is found, countries should impose a transitional Internet tax levied on the collection and processing of data in the jurisdiction.⁶⁶

⁶³ Claire Lambert (2015), *New U.K. Diverted Profits Tax,* A&M, 2015; HMRC (2015), Diverted profits tax, HM Revenue & Customs, 2015, p. 2-3.

⁶⁴ HMRC (2015), Diverted profits tax, HM Revenue & Customs, 2015, p. 4-5; Claire Lambert (2015), *New U.K. Diverted Profits Tax*, A&M, 2015. Taylor Wessing (2014), *The UK Diverted Profits Tax - a unilateral approach to an international problem*, TW, 2014.

⁶⁵ Collin Report (2013), *Task Force on Taxation of the Digital Economy*, Ministere de l'economie et des Finances, 2013; Noah Gaoua (2014), Taxation of the Digital Economy: French Reflections, European Taxation, 2014, p. 10; Eric Pfanner (2013), *France Proposes an Internet Tax*, The New York Times, 2013.

⁶⁶ Primavera De Filippi (2013). Taxing the cloud: introducing a new taxation system on data collection?, *Internet Policy Review*, Vol. 2. No. 2.; Collin Report (2013), *Task Force on Taxation of the Digital Economy*, Ministere

The reason as to why such a tax on data is encouraged is threefold. First, within the Digital Economy data is of utmost importance and can be monitored and measured. Second, Governments have the right to levy a tax in this area and third, using data as the connecting factor establishes the necessary territorial rationale.⁶⁷ Concerning the functionalities of the tax, it is proposed that there should be a threshold, which needs to be exceeded in order to trigger the tax coupled with a categorization of identified and anonymous users. Then a unit charge per user could be levied on to the company on a compliance and non-compliance basis. This means if a company declares properly about their practices the charge per unit is lower than for non-compliant companies. The declaration could be done by the company itself alongside audits from the tax authorities and another declaration requirement, mandating an external audit to verify compliant behaviour.⁶⁸

4.7. Netflix Tax or the New VAT/GST Tax Regimes

Following the example of the EU and work conducted by the OECD in relation to VAT, many countries all over the world started to implement new VAT/GST tax rules in order to capture E-commerce and the loss suffered through digitization, often dubbed the "Netflix Tax". The system that used to dominate the indirect tax systems of VAT/GST often did not tax the sale of digital goods to domestic customers. Encouraged by the change in the EU to the destination principle for the sale of electronic goods and services and the requirement to register, declare and pay the amount of VAT in the jurisdiction of the customer, led other countries to follow this example.

Whereas digital goods and services formerly were not covered, countries such as Australia, Canada, Korea, Japan, Canada, Albania, South Africa and Turkey now introduced new VAT rules for digital services.⁶⁹ The tax rate varies from country to country and either follows the

de l'economie et des Finances, 2013, p. 113; Addy Dugdale (2013) France Looks at Possibility of Taxing Internet Companies for Data Mining, Fast Company, 2013.

⁶⁷ Collin Report (2013), *Task Force on Taxation of the Digital Economy*, Ministere de l'economie et des Finances, 2013, p. 121.

⁶⁸ Ibid, p. 123.

⁶⁹ Morning Herald (2015), *Government must act on cynical tax operators like Netflix*, Sydney Morning Herald, 2015; Nassim Khadem (2015), *Online digital goods could be subject to GST under OECD global plan*, Sydney Morning Herald, 2015; JP McCarthy (2015), *Japanese eCommerce – new eServices consumption tax*, Taxamo, 2015; Bloomberg (2015), Japan: Significant Changes in Consumption Tax, Bloomberg BNA, 2015; Aaran Fronda (2014), VAT on E-commerce hits foreign suppliers to South Africa, International Tax Law Review, 2014; Daniel Tencer (2015), CRTC Decision On 'Netflix Tax' Expected This Week, Huffington Post Canada, 2015; Yoon Ja-young (2015), Korea moving to adopt 'Google Tax', The Korea Times, 2015; Hazal Ates (2015), Social networking sites to become work places, Daily Sabah Business, 2015; PWC (2015), Albania – VAT registration obligation for non-established B2C e-service providers, PWC, 2015.

national VAT rate or a special rate for digital services ranging from 6%-8%. The sale of digital goods in one of those jurisdictions requires the non-resident company to register in that state and remit the VAT according to the rules. For this purpose the state developed simplified mechanisms on how receive a VAT identification in the respective country. The overall objective of the new regimes is to eliminate unfair competition and the huge losses due to the fact that non-resident digital companies are not subject to VAT. Other countries such as Russia or New Zealand are keen to follow the example set by all those other states.⁷⁰

4.8. Interim Conclusion

As has been shown in this chapter many countries have already proposed or adopted different unilateral measures in order to cope with the Digital Economy. Despite the international efforts of the OECD and the EU, states appear to become impatient with the developments and are acting on their own behalf. However, not only the states are analysing and developing new measures for the issues their facing, also many authors in the academia have written and proposed measures to overcome the challenges by the Digital Economy. Some of the proposal have already been described in the country measures, others have not. The following chapter introduces two other measures that are worth dedicating some attention to.

5. Proposals from the Academia

The previous chapters clarified the significance of the current developments in relation to the emergence of the Digital Economy and its impact on international taxation as well as domestic tax laws proposed and adopted in relation to it. Not only organisations such as the OECD or the individual countries got engaged with the exploration of the cyberspace and the steps that have to be taken in order to ensure a functioning international system of taxation, but also various authors dedicated academic work to develop potential solutions to the issues. This chapter shall elaborate in more detail about two of the potential proposals for new tax measures.

A proposal for a Destination Based Corporate Tax is the first measure that is introduced in this chapter. An implementation of such a new nexus would constitute a paradigm shift from the current connecting factors of residence and source to a nexus focusing more on sales/turnover in a country. This approach follows many principles from newly established VAT rules and could change the way corporate taxation works completely. Following the

⁷⁰Tom Pullar-Strecker (2015), *NZ online shoppers may face bigger GST burden*, Stuff, 2015; David Meyer (2015), *Google and Apple may be forced to pay more tax in Russia*, Gigaom, 2015.

example of Hungary a bit tax or tax on bandwidth is the second option that is discussed in this chapter. Not on a unilateral basis, the proposal from academia in this respect would aim to establish an international framework for bandwidth tax.

5.1. Destination-Based Corporate Taxation - DBCT

Taking into account all the current developments and the emergence of the digital age, it is often perceived that the old concepts governing international taxation cannot keep up with the pace of new business models and modern value chains. High mobility of production, capital and technological advancement facilitated this tendency. The rules based on residence and source, which were established in the 1920s and manifested thereafter thanks to the work of the OECD, shaped international taxation for a long time.⁷¹

The current BEPS project, being one of the major drivers in tackling the challenges of the Digital Economy, tries to adapt the old concept of residence and source and changing it to fit into the digital age. This shall be achieved, as explained in chapter 3, through a stronger focus on the real source of income and the establishment of a taxable base at the source.⁷² Another objective that the OECD pursues, is to deal with base erosion, including from the Digital Economy, by laying down anti-avoidance rules that counteract aggressive tax planning structures.⁷³ Eventually, the OECD wants to find a consensus on a multilateral instrument that shall prevent base erosion and profit shifting in the ever more globalized world. A radical change or the adoption of completely new rules are not directly pursued.

However, in academia another approach has emerged, which is more radical and necessitates a complete substitution of the current system, particularly in relation to residence and source. Some scholars⁷⁴ suggest that the best way to deal with the 'globalized world' in taxation

⁷¹ League of Nations, *Double Taxation and Tax Evasion*, Report Presented by the Committee of Technical Experts on Double Taxation and Tax Evasion, G.216.M.85.1927.II., April 1927.

⁷² OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris.

⁷³ OECD (2013), Action Plan on Base Erosion and Profit Shifting, OECD Publishing, Paris.

⁷⁴ R. Avi-Yonah (2000), Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State, 2000, Harvard Law Review, Vol. 113, No. 7, pp. 1573-1676, pp. 1670-1671; S. Bond and M.P. Devereux (2002), Cash flow taxes in an open economy, 2002, Centre for Economic Policy Research Discussion Paper Series, Discussion Paper 3401; M.P. Devereux and P. Birch Sorensen (2006), The Corporate Income Tax: international trends and options for fundamental reform, 2006, European Commission Economic Papers 264; European Economic Advisory Group, The EEAG Report on the European Economy (CESifo Group Munich, 2007), Chapter 5, pp. 121-132; A. Auerbach, M.P. Devereux and H. Simpson (2010), Taxing Corporate Income, in J. Mirrlees et al (eds.), Dimensions of Tax Design: The Mirrlees Review, Oxford: Oxford University Press, 2010, 837-893; A. Auerbach (2010), A Modern Corporate Tax, The Hamilton Project, 2010; A. Auerbach and M.P. Devereux (2012), Consumption and Cash-Flow Taxes in an International Setting, 2012, Oxford University Centre for

would be to introduce a Destination-Based Corporate Tax (DBCT) or also called Cash-Flow Tax. The idea behind this approach is to allocate the right to tax based on the net cash flow a company has in each country and then to apply the respective tax rate. Similar to the new VAT rules for E-commerce in the EU, it would mean that a company has to pay taxes on the goods and services provided in the jurisdiction of the customer. The cash flow that is considered to establish the tax base would then include the inflows from the jurisdiction of consumption, however, also allow for a deduction of the cash outflows in the country of residence.

Table 1: Components of the Cash-Flow Tax Base ¹						
Transaction	Inflows (taxable)	Outflows (deductible)				
Real Transactions	- Proceeds from the sale of goods and services	- Amounts paid for plant, equipment, inventory, supplies, and labour				
Financial Transactions	- Sale of financial assets (other than own shares);	- Purchase of financial assets (other than own shares);				
	 Receipt of debt repayment; borrowing of funds; 	- Payments to reduce debts; interest expense;				
	- Interest income;	- Other payments in connection with financial				
	- Dividend income;	instruments (other than dividends paid);				
	- Other receipts in connection with financial instruments;	- Payment of insurance claims;				
	- Receipt of insurance premiums;	- Payment of insurance premiums				
	- Receipt of insurance claims	1				

This sounds very similar to newly implemented VAT rules by the EU, it is different in that it

allows for deductions of corporate expenses and that the charging would not be based on a credit-invoice system, but remain within the current tax report periods. The tax base for financial companies takes into account the R+F (Real + Financial) cash flows, possibly regulated by a financial regulatory authority, whereas only the R-base would be used for all other companies (see Table 1 above).⁷⁵ The tax would be applicable for all companies and

Business Taxation Working Paper Series, WP 12/14; M.P. Devereux (2012), *Issues in the Design of Taxes on Corporate Profit*, 2012, National Tax Journal, Vol. 65, No. 3, pp. 709-730.

⁷⁵ William Baker (2012), A Common Sense Corporate Tax: The Case for a Destination-Based, Cash Flow Tax on Corporations, Catholic University Law Review, 2012, Vol. 61, No. 04, pp. 978-980;

Meade, J.E. (1978) The structure and reform of direct taxation, London: Allen and Unwin, pp. 229-239

ensures neutrality among the various jurisdiction in respect of production and investment. In the end, it aims at taxing the economic rents of companies in the jurisdiction of the customer and thereby the destination. For a proper implementation of such a new tax system international consensus and action is necessary as well as the adoption of a multilateral agreement, such as the one that is envisaged in the BEPS Action 15.

To introduce a DBCT would most likely be a very radical measure and requires careful design before realistically being proposed to the international community. Nevertheless, the outcome of various works from scholars sound promising and a system based on DBCT could be a viable alternative to the current BEPS project. Another approach to address the cyberspace is the tax on bandwidth, which is introduced in the following subparagraph.

5.2. A Bit Tax on Bandwidth Usage

As already discussed in chapter three, the bit tax or bandwidth tax is one measure that was proposed to be introduced by the Hungarian government. The Hungarian government was however not the first to come up with such a tax proposal. Already in 1994, almost 20 years ago, Arthur Cordell⁷⁶ came up with the idea to tax the bit. In a Club of Rome report Cordell (1997) argued in this respect:

"[f]irms using information technologies can issue orders, manage inventories, buy resources, design products, do research just about anywhere in the world. Firms can bring together all factors of production to produce goods and services anywhere on earth: global information and communication technologies mean that corporations can have a virtual presence anywhere. With global brand names the final product is produced anywhere; the final product is sold anywhere." $(p. 2)^{77}$

The result of such possibilities according to Cordell is interconnectivity, which creates a value for each person that wants to be a part of it and use the information available over the Internet. Therefore, the bit tax would constitute a measure that accounts for the value of interconnectivity a person receives for using the Internet. Ever since Cordell's proposal, the significance of the Internet, including the trade of intangibles and E-commerce in general, has exploded. As outlined in chapter 2 the number of users in 2015 exceeded the 3 trillion mark.

 ⁷⁶ Cordell, A.J. and J. Ide, The New Wealth of Nations, Taxing Cyberspace, 1994, Between the Line Publishers.
 ⁷⁷ Arthur J. Cordell (1997), *New Taxes for a New Economy* Government Information in Canada, 1996, Vol. 2, No. 4.

After Cordell other scholars⁷⁸ and also the High Level Expert Group of the European Commission⁷⁹ elaborated on the option of a bit tax and proposed that the bit tax could replace VAT for intangibles and digital services. Different approaches to implement such a bit tax have been suggested. One approach, which was suggested by the Hungarian government is to tax the ISPs for the data transmitted to its customers. As the news have shown this proposal was widely rejected and led in Hungary to heavy protests. Aspects that were not taken into account in Hungary, which might have led to the disapproval of the measure include, potential thresholds for exemption, an element of progressivity, introduction on an international level, as well as balancing revenue objective with impact that the tax has on the Digital Economy sector.⁸⁰Another potential option to impose a bit tax that does not tax the ISPs but instead taxes the enterprises directly through their website usage has been proposed by a French Lawyer in the OECD BEPS Action 1 Discussion Draft.⁸¹ A clear proposal on how that can work out and in how far a multinational agreement for the implementation of such a tax is possible has not been suggested.

6. Contributions of Proposals to deal with the Digital Economy

Now that an overview of international, unilateral, and scholarly proposals was provided, it needs to be evaluated in how far those suggested measures contribute in solving the problems raised by the Digital Economy. Chapter two and chapter three gave an outline about the characteristics of the Digital Economy and the new business models that have emerged. Recapturing those criteria again, the characteristics of the Digital Economy comprise high mobility, fast growth and advancement, reliance on data and the use of network effects. From all those backgrounds five predominant categories of businesses in the Digital Economy can be identified.

As the first category (1) of enterprises, the ones based participation, such as Facebook, Twitter and many more, can be identified. Their main source of income is e-marketing, whereby their services are free for the final user. The second category (2) of businesses comprises the today very popular "click & order" company, among which are Amazon, Bol. Customers simply order tangible goods from a vendor located anywhere in the world, who

⁷⁸ Soete, Luc and Bas ter Weel (1998), *Cybertax*, Futures, Vol. 30, No. 9, 853-871; Luc Soete and Karin Kamp (1996), The "BIT TAX": the case for further research*, MERIT, 1996, pp. 1-14.

⁷⁹ Building the European Information Society for Us All, First Reflections of the High Level Group of Experts, DG V, Brussels, January 199.

⁸⁰ Fric (2015), Tax the bandwidth: practical aspects, Banana Fric, 2014.

⁸¹ Taken from: OECD (2014), *Public Discussion Draft Addressing the Tax Challenges of the Digital Economy*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, pp. 24-27.

then delivers the tangible good to buying customer. Similar to the second type of business, the third category (3) delivers goods and services to the customer, however the products in this business sector concerns content based products and services. Enterprises known in this category are the various App Stores or Kindle on Amazon and others. The fourth category (4) of businesses that emerged from the Digital Economy are the new intermediaries providing better access to information. Enterprises such as Google, Sky scanner, Yahoo, Bing or Booking fall within this category. Their source of income consists on the faster and easier connection of customer and seller or user and information. The last and fifth category (5), which is only to a certain extent an own category concerns e-marketing. It is a tool that is used by literally all of the big Internet giants and companies active in the cyber space.

Taking into account those business types, now each of the proposals for measures are evaluated in the light of finding a solution for the tax issues related to the Digital Economy. Those include again, the lack of a physical presence in the source jurisdiction or the creation of a PE, the characterization of transactions and income or determination where value is actually created. To maintain a clear structure, each measures is shortly evaluated one after the other, thereby remaining short and concise in order to stay within the confines of this research paper.

6.1. Internet Advertisement Tax

The Internet Advertisement Tax, propagated by Italy, put into relation to the big categories of businesses that emerged from the Digital Economy was a rather unhelpful attempt to tax the cyber space. The measure was purely directed towards the e-marketing side of businesses, falling in category one and category five, in order to react fast and derive tax revenue from Internet operating companies. However, this measure classified as being in breach with EU law, would it not have been repealed, shows that action in regard to e-marketing on a unilateral basis and with such a design does not yield the expected result. The focus was only on one particular part of the Digital economy, leaving all the other online businesses aside and thus failed to address the challenges in a holistic manner.

6.1. Piracy or Content Tax

A measure which was proposed by various countries, however nowhere introduced yet. This tax or charge is supposed to be levied on to the ISPs or the customer directly. Either way adoption of such a tax would lead to an increase in price for the ultimate customer. The category of businesses this tax shall address are the category three businesses, generating their

income on content provided to the ultimate consumer. Intended as a compensation for the unauthorized use of copyrighted content, which often accessible for free, this tax is similar to what for instance in Germany is charged for access to television and radio in every household. As Russia put it in its proposal, a 'global content licence'.

This measure however appears to be merely an approach to boost fiscal revenue, without address the actual tax challenges imposed by the Digital Economy. Following an approach like this would not pursue the objective of taxing the profits of the cyber economy, but constraint Internet access by raising the price for it. Again, all the other business categories are neglected in this approach, thus a realistic solution that contributes to establishing a common framework for the Digital Economy has not been achieved.

6.2. Ancillary Copyright Tax or Link Tax

The ancillary copyright tax, or link tax as it is often called, attracted much media attention over the past years. The focus of this tax is predominantly on the fourth category of businesses, focusing on connecting the user with information. Being the intermediary was thought to give rise to royalty payments to the original publisher and therefore, countries such as Germany and Spain implemented such a tax. However, their success speaks for itself. In Germany publishers waived the royalty fee as there digital presence suffered from google delinking their news articles. The same has happened in Spain, where, based on the law adopted, the publishers were required to charge the royalty. This led to the withdrawal of Google News Spain. Again it appears to have a more negative effect on the actors that should have benefited from the tax.

Yet, again looking at the design of the tax only one category of cyber space companies were addressed. Considering the unsuccessful turnout of the measure on a unilateral basis in some states and the non-adoption in other states, it is all the more surprising that Günther Oettinger the new Commissioner for the Digital Economy proposed an EU-wide ancillary copyrights tax. The tax addresses only one particular aspect of the Digital Economy, which is the intermediation of content, in an ill designed fashion and therefore can be considered as not contributing much to finding a solution of the tax challenges imposed by the Digital Economy.

6.3. Tax on Data

The French proposal for a tax on data, which was a result of the Colin report, is directed towards all form of data used from consumers. In its suggested form it is directed towards firms of category one, category four and category five. Companies that have their focus on intermediation or e-marketing utilise the data provided by their customers in order to analyse it and customize their products and services accordingly. E-marketing as earlier mentioned is to some extent part of each of the other four categories identified.

Therefore, a measure along this line certainly affects all of the newly emerged business models. However, the proposal is still in its infancy and as it stands now, it still appears to be difficult in terms of enforcement. A measure based on a compliance or non-compliance basis with a unit that is charge the value of which is hard to determine at least seems on first sight to be unjust. In this respect, apart from introducing a threshold under which the tax does not apply for companies not deriving value from the data, it has to be specifically clarified in how far value is crated from the data collected. Only then a fair charge per unit can be imposed on the companies.

A measure such as the proposed tax on data that affects to a certain extent all the predominant business models in the digital economy can be a viable option to address some aspects of the digital economy. However, general challenges to taxation concerning the lack of a physical presence is left out by this approach. In this regard this tax would deal with one particular aspect of the Digital Economy, that is the collection of and creation of value from data. As is also suggested in the Colin report the tax should be imposed according to data collected in a specific jurisdiction. Hence, a unilateral measure in this respect would not be feasible and consequently a multilateral agreement is necessary also for this proposal to succeed.

6.4. Diverted Profit Tax

An interesting move has been undertaken by the UK with the introduction of the DPT in April 2015. The aim of new tax is to identify and prevent aggressive tax planning structures from continuing to operate untaxed in the UK. This is achieved by scrutinizing whether there is a deliberate avoidance of a PE or the lack of economic substance that allows the UK to impose a tax after all. The focus group of this measure is clearly the 'click & order' companies of category two. Despite the unfortunate timing, that is before the outcome of the BEPS project is published, the DPT can be considered as a domestic anti-abuse measure that counteracts

practices by MNEs such as Amazon currently criticized. Up to this point, it is not clear in how far the DPT interferes with existing DTC between the UK and other countries as being a treaty override, yet time will show. Additionally, concerns can be expressed also in relation to the compliance with EU law, which has defined abusive situations quite clear.

Apart from category two no other category will be affected to a large extent through the introduction of this measure. A potential weakness that can even be perceived is that it does not acknowledge that some companies do not necessitate the presence of a PE and therefore will not fall under the scope of the measure due to the fact that those companies are not deliberately avoiding the creation of PE or deliberately designed the structure in a way that it lacks economic substance in the UK with the intent to avoid taxes. The adoption of the law is a statement that the current PE definition and connecting factors are not accepted anymore by many countries that lose much of their fiscal revenue due to expired concept used in the OECD Model and in DTCs. As contribution to addressing the tax issues of the Digital Economy the new measure is helpful only in a limited way.

6.5. Measures in Relation to the PE concept

The measures earlier introduced in relation to the PE concept are threefold. Firstly, the changing or elimination of the exemptions from PE status in Art. 5(4) OECD MC. Then, secondly, the new nexus based on significant digital presence and lastly the different suggestions for an adoption of a virtual PE concept.

An elimination of adaptation of the exemptions in Art. 5(4) OECD MC would be a useful step to tax the companies currently avoiding tax in category two. The 'click & order' generation in which merely warehouses and delivery is required in the destination jurisdiction has posed many problems. In this way this particular practice can be counteracted. Holistically seen however, only a small part of the Digital Economy would be affected.

Introducing a new nexus for the creation of a PE or even replace it based on significant digital presence for fully digitalized goods needing none or only very limited physical presence in the source jurisdiction is a promising approach in order to capture companies of categories three, four and five. As all those types of companies relate to digital products and services. However, the definition of a fully dematerialized digital activities or of the minimal physical needed would have to be defined in a clear, precise and measurable manner. Without a
consensus about the design of the new requirements or concept, the change will turn out to be ineffective. A combination of the change of Art. 5(4), together with a new nexus or a complete new concept replacing the PE can address major parts of the Digital Economy. Questionable only remains in how far once a PE is created the attribution of income is dealt with, since the current transfer pricing rules are based on significant peoples functions.

The third suggestion of a virtual PE in one of the three forms of either a 'On-site Business Presence PE', a 'Virtual Agency PE', or a 'Virtual Fixed Place of Business PE' all target the category two companies, looking for a link of customer and e-tailer based on presence of a website or interface of some sort in the jurisdiction. Factors such as language, data gather and the like are taken into account in this respect. However, as previous proposal the entire scope of the Digital economy is not address by including a virtual PE definition. Moreover, the three possibilities are in their current state only blank suggestions that need a proper design in what regards monitoring, enforcement and again attribution of income. All and all, the approaches towards a new definition or a change of the Digital Economy companies. However, care should be taken on what exactly the changes are going to be as this is directly related to their potential success or failure.

6.6. Final Withholding Tax on Digital Goods and Services

A withholding tax on payments made by customers for certain digital products, which do not require physical presence, levied and monitored by financial institutions constitutes a proposal targeted towards category three enterprises. Digital Products and Services would then be charged with a small percentage on the payments made for them. A solution which requires a clear distinction between products and services captured by the tax and not captured. Questionable is also whether financial institutions would take on the task of monitoring and enforcing the tax. For those institutions to cooperate an incentive would have to be created. Even if, this measure would only be applicable to a part of the sector and therefore not viable to address the challenges of the Digital Economy per se, a withholding tax may be a useful tool complementing the suggestions made for a PE. This would mean that no attribution of income would have to be calculated, but the transactions are monitored and the charge applied onto the respective payments. Thus, the stand-alone measure might not be very promising, in combination with the changes to the PE there is a potential use for such an approach.

6.7. Bandwidth or 'Bit' Tax

Failure of such an approach was marked in Hungary under the auspice of the Orban government. However, the 'Bit' tax idea is also mentioned in the OECD Action 1 Deliverables and received some attention from the academia as well. The impact of such a tax would be holistic not only including enterprises such as those from category one to five, but potentially also affect all the customers and households. Questions arise in regard to who and how should be taxed are still open and analysed. The approach to simply charge an amount of tax for every bit without any distinction could be problematic in terms of value creation. Furthermore, ultimately such a tax at least imposed on ISP would mean a rise in price for internet connections, however, also ideas to tax the enterprises directly via traffic on their websites might be an opportunity. Considerations have to be made in regards to a potential threshold that needs to be exceeded for the tax to apply and whether the charge of the tax shall be linked to a value the bit has or apply solely universally. If a universal rate is applied it is debatable whether the enterprises pay their fair share in comparison to the ultimate consumer. A negative consequence could be the limitation of internet access due to rising prices for users.

Taking this approach on a multilateral basis might be a promising idea, if well designed. Without a proper design however, protests such as in Hungary could repeat themselves. In what regards the contribution to addressing the tax issues of the Digital Economy, the holistic nature of a bit tax makes it a tempting measure to adopt. One may not forget however that such a measure requires much monitoring of internet activity, which might impede with privacy rights. The value of a bit is yet another problem that needs solving before such a tax may thought to be proposed. Although it is a promising measure the actualization will be complicated.

6.8. Netflix Tax

The Netflix Tax or Destination Based Consumption tax for digital goods represent the most promising approach in terms of indirect taxation. Following the initiative from the EU and various other countries recently, the B2C solution for the Digital Economy can be considered found. Taxing digital products and services in the country of consumption through a proper identification of the customer appears to be the right way forward. With the introduction of the MOSS in the EU a potential foundation for a multilateral approach is provided. Following the EU's example could be beneficial for the international sphere and every state involved. In

the direct tax way this tax would affect all the company categories mentioned above, except maybe category two, which still provides tangible goods through a digital platform. This would be caught under the normal rules of VAT/GST.

6.9. Destination Based Corporate Income Tax

The DBCT is in the opinion of the author the most promising approach that should be followed in order to deal with the challenges that arise out of the Digital Economy. As a cash flow tax, this tax would mean a radical change abolishing the current connecting factors of source and residence. Instead the new connecting factor would be the sales or incoming cash flow that a company receives in each jurisdiction. Focusing on the incoming cash flow of the customers and outflowing cash flow in the state of residence, this tax would affect all enterprises and thus also all the five categories identified earlier. Like with many other measures however it is important to establish a carful design before a real proposal to change the world of taxation is published.

A measure along the lines of a cash flow tax uses one of the last remaining immovable factors that can tie an enterprise to a jurisdiction. Without sales and customers there would be no profit and without profit there could be no corporate tax. Considering this aspect it makes sense to follow the example of the recent VAT developments in VAT for digital goods and create a destination based corporate tax. For such a tax to be successful a multilateral agreement, as is already the intention by the BEPS project (Action 15), needs to be set up that as many countries as possible should agree to. Then and only then such a paradigm shift could even be achievable.

6.10. Interim Conclusion

Taking a look at all the suggestions internationally and unilaterally it appears that only a few of the ideas can potentially deal with all the challenges imposed by the Digital Economy. Those measures include a complete new concept for the permanent establishment, a complementary bandwidth tax, the new rules for VAT, and a potential radical change through a DBCT. A combination of these measure might be the key to resolve the tax issues that arose out of the Digital Economy. The following chapter introduce some thought about how the ideal way to change the tax system in order to deal with the Digital Economy could be designed.

7. Turning Point for a Radical Change

The previous chapters demonstrated that looking at the current developments only parts of the Digital Economy are dealt with by many of the measures. Often the more fundamental implications of the Digital Economy is ignored, that is, a complete change of how the economy operates. This tendency will continue in the future and the old concepts will not be able to deal with it anymore. Therefore, in the author's opinion it is time for a radical change. Backed by various scholars,⁸² the time has come to abandon the traditional concepts of residence and source and replace it by a destination based cash flow tax or DBCT. This new approach shall however only affect direct taxation, as the author believes, that the current progress in VAT from the various mentioned countries and by the EU constitute follow the right direction to deal with the Digital Economy in indirect taxation.

7.1. An Ideal Tax for E-Commerce and the Digital Economy?

For a new design of DBCT various factors have to be taken into account. A proper tax design necessitates the identification of: (1) what shall be achieved by the tax? (2) Who will be affected and who bears the burden? (3) Who has the right to impose the tax and how should collection and enforcement work?

7.1.1. What shall be Achieved by the Tax?

To answer what the tax shall achieve the nature of the tax should be considered. What makes this tax special and revolutionary is that on the one hand it changes the entire international tax system by introducing a new connecting factor for corporate tax, based on net cash flows and not on residence or source. On the other hand, it adapts to the more and more mobile newly emerged Digital Economy in that it uses one of the still and remaining immobile factors, which are the customers or better put the destination. Therefore, the underlying rationale for the tax would be to meet the requirements of E-commerce and the continuing expansion of the digitization.

⁸² R. Avi-Yonah (2000), Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State, 2000, Harvard Law Review, Vol. 113, No. 7, pp. 1573-1676, pp. 1670-1671; S. Bond and M.P. Devereux (2002), Cash flow taxes in an open economy, 2002, Centre for Economic Policy Research Discussion Paper Series, Discussion Paper 3401; M.P. Devereux and P. Birch Sorensen (2006), The Corporate Income Tax: international trends and options for fundamental reform, 2006, European Commission Economic Papers 264; European Economic Advisory Group, The EEAG Report on the European Economy (CESifo Group Munich, 2007), Chapter 5, pp. 121-132; A. Auerbach, M.P. Devereux and H. Simpson (2010), Taxing Corporate Income, in J. Mirrlees et al (eds.), Dimensions of Tax Design: The Mirrlees Review, Oxford: Oxford University Press, 2010, 837-893; A. Auerbach (2010), A Modern Corporate Tax, The Hamilton Project, 2010; A. Auerbach and M.P. Devereux (2012), Consumption and Cash-Flow Taxes in an International Setting, 2012, Oxford University Centre for Business Taxation Working Paper Series, WP 12/14; M.P. Devereux (2012), Issues in the Design of Taxes on Corporate Profit, 2012, National Tax Journal, Vol. 65, No. 3, pp. 709-730.

7.1.2. Who will be Affected and who Should Bear the Burden?

As regards the question on whom the tax is levied and who will be affected. The DBCT shall apply on to all enterprises and their income derived from the respective net cash flow in the respective jurisdiction. This ensures tax neutrality in the sense that it applies equally to traditional business models and newly emerged business models. Of course as with every tax, if the amount of tax payable rises for an enterprise, it is most likely that the lost money ultimately affects the price of the product and service and is therefore in a way charged on to the customer.

However, considering all the five categories from the previous analysis, a tax such as this would cover all of those categories, as their income is taxed in the country based on the profits they receive from their sale of the products and services there. Hence, as with VAT the tax will be levied on the enterprise itself, however, using a different method than for VAT, which is through an R+F or R tax base (see table 1 above).

7.1.3. Who has the Right to Tax and how to Enforce it?

Two very important aspects in order to properly design a DBCT is how the jurisdiction to tax is identified and how the tax shall be collected. The key to determine the jurisdiction that has the right to tax involves the benefits that an enterprise receives from a state as well as ensuring that identifying the location to tax minimises economic distortions. This can be achieved when looking at the mobility of different business factors.

As mentioned before mobility is the mantra of the Digital Economy. Therefore, it is useful to single out a factor that is still immobile and can be linked to a tax jurisdiction. That is where the destination principle comes into play. One factor that still can be classified as less mobile is the consumers of the products and services. Thus, a DBCT, like in EU VAT on digital products, focuses directly on the benefits that a company derived from society, through the access to the market, and at the same such a tax does not to have any distortive effects on the economy, as it provides relief for business expenses in the place where they incurred. From a structural point of view the tax is economically efficient and taxes economic rents that are inextricably linked to a specific state through domestic consumption.⁸³

⁸³ William Baker (2012), A Common Sense Corporate Tax: The Case for a Destination-Based, Cash Flow Tax on Corporations, Catholic University Law Review, 2012, Vol. 61, No. 04, pp. 1009-1010.

This ultimately leads to the question on which state has the authority to tax and which state should collect the levy. In this respect it is useful to differentiate between substantive and enforcement jurisdiction as has been done by Walter Hellerstein.⁸⁴ Whereas the substantive jurisdiction would represent the state which has the legitimacy to impose the tax, the enforcement jurisdiction has the ability to collect the tax.

In what regards the substantive jurisdiction it can be said that the legitimacy for a tax derives from the fact that income is generated in that particular country (source principle or destination), this would, following a DBCT approach, be the jurisdiction in which products or services are sold to customers. For VAT purposes the OECD defines the destination principle as the "principle whereby internationally traded services and intangibles should be subject to VAT in their jurisdiction of consumption".⁸⁵ This rationale would be applied to corporate taxation as well, where income is derived from sales in a specific jurisdiction and without sales there is not profit. Hence, access to a market and provide the necessary connection a state needs to acquire the right to tax this income resulting from the activities in the country. Although, there may be some pitfalls that still need to be analysed in relation to tax fairness and the assumption that the destination country should have the only right to levy the tax on the income derived in the country, states including India, Brazil, Mexico and Peru are already pursuing a destination based taxation in relation to the provision of services. This shows that initial attempts along the line of source taxation have already been implemented.⁸⁶

The enforcement jurisdiction as mentioned above is the state that has the ability to collect the tax revenue. In this respect a DBCT would encounter the same problems as VAT has encountered in the EU. The first issue is to identify the customer and the respective revenue from the sale. One way to do this as in the EU using proxies (Table 2) in order to verify the cash flow. Once identified, the enforcement jurisdiction would be the state collecting the tax. This could be achieved through a mechanism such as the one the EU employed for their new VAT rules, the mini-one stop shop (MOSS).

⁸⁴ W. Hellerstein, "Jurisdiction to Tax Income and Consumption in the New Economy: A Theoretical and Comparative Perspective" (2003) Georgia Law Review, 2-27.

 ⁸⁵OECD (2013), International VAT/GST Guidelines, Draft Consolidated Version, February 2013, p. 3.
 ⁸⁶ T. Edgar (2003), Corporate Income Coordination as a Response to International Tax Competition and International Tax Arbitrage, Canadian Tax Journal, 2003, Vol. 51, pp. 1079 - 1154.

Tangible Proxies	Intangible Proxies		
(1) the location of goods(2) the location of land(3) the place of performance	 (4) the supplier location (location, residence, or place of business of the supplier) (5) the customer location (location, residence, or place of business of the customer) (6) the consumer location (location, residence, or place of business of the person to whom the thing supplied is provided/rendered/delivered, or by whom it is received) (7) the place of effective use or enjoyment of the supply 		

Table 2⁸⁷

The enforcement state would be collecting the taxes on behalf of the other states and apply the respective tax rate of the destination country. Then a deduction for the business expenses would take place and finally the enforcement jurisdiction could remit the tax collected to the state of destination. However, such collection of tax on behalf of other states would have to be coupled with an incentive for the enforcement jurisdiction, otherwise enforcement would not be encouraged and revenue ultimately not efficiently collected. Therefore, a small compensation fee, for instance a small percentage of the revenue collected, could be charged from the country of collection.

This is only an initial suggestion on how such a tax could be structured. The DBCT could constitute a solution for the issues tax authorities and states are facing due to the Digital Economy. If states were to agree for an implementation of such a tax, as for all the other measures it is of utmost importance that the design is done in a way considering a potential flaws. The table below shows how the system would change from the traditional approach. Not the country of residence would be tax and neither would most of the tax revenue end up in tax havens. Instead the connecting factor shifts to the state of source, where the income from sales originates. This would be a similar approach to VAT in the end.

⁸⁷ R. Millar (2009), Echoes of source and residence in VAT jurisdictional rules, in M. Lang et al (eds.), Value Added Tax and Direct Taxation – Similarities and Differences, Amsterdam: IBFD, 2009.

	Source State	Tax Haven	Residence State
Current Situation	0%	100 %	0%
OECD-Action Plan	0%	0%	100 %
Destination-based cash flow tax	100 %	0%	0%
Comparison with VAT	100 %	0%	0%

8. Conclusion

The above analysis and the previous overview of the Digital Economy and the measures implemented showed that there are many aspects that have to be taken into account when dealing with the Digital Economy. Many diverse measures have been suggested and adopted by various countries and international organizations. It appears that every unilateral proposal surrounding the Digital Economy is branded as so-called "Google Tax" by the media. This is even the case where companies such as Google are the ones not affected by it. For instance, the Diverted Profit Tax in the UK made it to the headlines of the newspapers proclaiming a new "Google Tax". Such a development contributes to the general confusion of the public and makes it hard to understand what is really going on at the moment. Potential Solution as have been introduced are manifold. In order to stay within the old system, however, only few options can potentially be successful. Those include a total replacement of the PE concept, a bandwidth or data tax. The final designs of those measures have not yet been developed and still need improvement. It is questionable however, in how far these measures constitute a holistic solution for the challenges imposed by the Digital Economy.

A good illustration of the current situation can be taken using an example from the medical sector. Imagine you have disease and make a doctor's appointment in order to investigate what is wrong. You inform the doctor about all the symptoms and the doctor in turn tells you what kind of disease it is and how to treat it. In principle, he provides you with a prescription for medicine that will momentarily treat the symptoms, but in order to cure the disease you will have to change the way you are living. Only then will it be possible to fully recover. If you do not change the way you live, you may be able to prolong the point of inevitable change by taking more medicine, but eventually the only solution will be to accept a radical

change to cure the disease. This small example describes very well the current situation that international taxation is facing in regard to the emergence of the Digital Economy.

What happens at the moment is that we are trying to treat the symptoms of the lack of physical presence or characterization of income, by adapting the current system through new measures. Those measures however only represent the medicine. To cure the disease, the Digital Economy, which affects the current fundamental concepts of taxation, a radical change is necessary. Therefore, the best way to address the Digital Economy is to abandon the old concepts that are more and more fading away and replace them with new ones. In this respect the author believes that the current developments in VAT as well as the introduction of a Destination-Based Corporate Tax system could bring the desired results. The suggested design above represents an unripe proposal for a DBCT, which is limited to the scope of the paper. If however more research is dedicated towards the design of a DBCT and One-Stop Shops (OSS) as well as the ideal way to establish an R+F and R tax base, international taxation might be able to catch up with the modern developments. Otherwise, Holmes statement will remain true that *"It cannot be helped, it is as it should be, that the law is behind the times"*.⁸⁸

⁸⁸ Oliver Wendell Holmes, Law and the Court, in Speeches 98, 101, 1934.

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