THE ALLOCATION OF TAXING RIGHTS FOR HIGHLY DIGITALISED BUSINESS MODELS: IN SEARCH OF A FAIR AND NEUTRAL SOLUTION

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Título

La asignación de los derechos de gravamen en los modelos de negocios altamente digitalizados: en busca de una solución justa y neutral

Resumen

El objeto de este artículo es analizar el impacto de los modelos de negocio altamente digitalizados en el reparto de los derechos de gravamen. El reto abarca introducir nuevas reglas del nexo y de reasignación de los beneficios, que requiere de una modificación para autorizar a los estados de la fuente/mercado y así cumplir con el mandato post-BEPS de tributar en el territorio donde se ha generado el valor. Los modelos de negocio altamente digitalizados se aprovechan de los datos y contenidos generados por los usuarios para crear valor y obtener beneficios. En opinión del autor, la solución a este problema debe respetar las condiciones establecidas en el acuerdo marco de Ottawa de la OCDE para la tributación del comercio electrónico y especialmente lo establecido en el mismo respecto a la neutralidad y justicia fiscal. Dada la dificultad que supone implantar un nuevo concepto de establecimiento permanente virtual a corto o medio plazo, el autor propone tres alternativas que respectan la neutralidad y justicia fiscal, atribuyendo a las jurisdicciones de mercado el derecho a gravar: 1) Creando un nuevo tipo de ingreso en base al artículo de los servicios e publicidad de los Convenios. 2) Haciendo una interpretación

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expansiva del concepto de cánones en el que se incluya como tales los servicios prestados en la nube. 3) Mediante un nuevo método de distribución del resultado residual que tenga en cuenta factores tanto del lado de la oferta como de la demanda.

Palabras clave

Modelos de negocio altamente digitalizados, potestad tributaria, nexo, reparto de beneficios, BEPS 2.0

Abstract

The aim of this article is to analyse the impact of highly digitalised business models on the distribution of taxing rights. The challenge encompasses the rules on the nexus and the allocation of profits, which require a modification to empower the source/market states and thus comply with the post-BEPS mandate of taxation in the territory where value is generated. Highly digitalised business models take advantage of data and user-generated content to create value and obtain profits. In the author´s opinion, the solution to this problem must be respectful with the OECD Ottawa Taxation Framework Conditions for e-commerce, especially with tax neutrality and fairness. Given the difficult scenario of implementing a concept of virtual permanent establishment in the short and medium term, the author proposes three alternatives that respect tax neutrality and tax fairness, empowering the source/market states more:1. Creating a new income from the provision of advertising services in the Taxation Conventions 2. The expansive interpretation of the concept of royalties to include cloud-based services, and 3. A new Residual Profit *Split* Method that contains supply-side and demand-side factors.

Keywords

Highly digitalised business models, Taxing power, nexus, profit allocation, BEPS 2.0

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SUMARIO

«In today's era of volatility, there is no other way but to re-invent. The only sustainable advantage you can have over others is agility, that's it. Because nothing else is sustainable, everything else you create, somebody else will replicate.»

Jeff Bezos

1. Introduction

Due to the recent, rapid growth in new technologies and the emergence of highly digitalised business models, there remains a problem unsolved by the measures included in the Base Erosion and Profit Shifting (BEPS) Action Plan. This problem is the absence of taxation in jurisdictions where income is generated by digital businesses that work remotely to collect data on users and their preferences as they interact with networks. This requires modernizing tax regulations and the creation of new nexus and profit allocation rules to address this reality and empower market/source states where income is generated. Two different aspects of digitalisation are at play here. One is that digitalisation allows traditional business models to evolve, tackled in BEPS Action 1, while another quite different one is that digitalisation can give rise to highly digitalised models, such as cloud-based services, Facebook, Instagram, Google, etc. This latter aspect is not sufficiently addressed in the BEPS project.

The distribution of taxing rights between market/source states, those in which businesses operate without a physical presence, and residence states, those where companies with purely digital business models are resident, is a challenge that demands novel solutions. Such solutions require new tax nexus and fairer profit allocation rules that align the place of taxation with the territories where value is generated.

This article studies the current impact of highly digitalised business models on the international tax system (Section 2), provides an overview of the new principle of value creation (Section 3), focuses on the problem to be solved and the importance of the users» data and participation in the provision of new nexus and profit allocation rules, with an analysis of the recent Secretariat Proposal for a «Unified Approach» under Pillar One (Section 4), and finally proposes three possible multilateral measures to create an international tax system that is both fair and neutral in dealing with the new digital business models (Section. 5.).

2. Impact of highly digitalised business models on the international tax framework

2.1. Digitalisation and the jurisdictional disconnect

The rapid development and implementation of information and communication technologies in business models has naturally led to discussion of the fourth industrial revolution. The way companies produce goods and provide services is changing and this is even truer in the case of new digitalised business models emerging from the so-called digital economy. The primary impact on national and international tax systems is the proliferation of base erosion and profit shifting (BEPS) scenarios, which was the subject of in-depth analysis in Action 1 of the BEPS Project developed by the OECD, G-20, United Nations and the European Commission. The spread of BEPS in a digital economy is clearly encouraged by the absence of global tax governance and the lack of integrated tax policies across different jurisdictions, which generates underlying BEPS scenarios at international level, which, in turn, ultimately have an effect at national level.[2]

The global economy is now clearly digital. As stated by the International Monetary Fund, «all activities that use digitised data are part of the digital economy: in modern economies, the entire economy.»[3] New information and communication technologies, such as cloud computing and Big Data, the massive analysis of data as a tool to create value creation, and the expansion of additive technologies like 3D printing and artificial intelligence, have generated an intense debate on tax systems.

The international community is governed jointly by national tax systems and an international tax system.[4] The structure and concepts of the international system are the fruit of a consensus reached in the first half of the 20th century, while national tax systems are independently and unilaterally established by each individual state. The challenges of the digital era ultimately affect national tax systems, as they directly suffer the loss of tax revenue. This is the logical conclusion of the connection between a national and an international tax system. The challenges posed by digitalisation are global for two reasons. First, because cross-border trade, in its broadest sense, has felt the greatest impact of digitalisation. Second, and as a consequence of the first, the current international tax regulations fail to provide a response to digital business model. The

2 As suggested by Dourado, the lack of an internal world market means the notion of whether taxpayers eventually pay the total amount of their taxes has been lost. A. P. Dourado, *Gobernaçao Fiscal Global,* p. 52 (Almedina, 2017).

3 IMF, *Measuring the Digital Economy,* p. 7 (International Monetary Fund 2018), available at https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/04/03/022818-measuring-the-digital-economy (last access: 14.06.2019). During the present work, the terms «digital economy» and «digitalization of the economy» are used to refer to the same concept: the emergence of new information and communication technologies that have created new business models and transformed the traditional ones.

4 Regional systems, such as the so-called EU Tax law can be included among the national and international tax systems. In this author's view, the European tax system corresponds to a hybrid category.

reason is simple: the current regulations were conceived for the so-called brick--and-mortar economy, a world economy based on physical elements and territorial connections. However, the economy is now digital and such regulations have become obsolete.

The constant evolution of the digital economy highlights the shortcomings of the international tax system, directly impacting on national tax regimes. The pressure on national governments led the OECD to undertake the BEPS Project in February 2013. The outcomes of BEPS Action 1, which was intended to find a solution to the updating of tax regulations for the digital economy in order to counter the effects of BEPS scenarios, are widely known. Following six years of debate in the international community, no political consensus has been reached on the measures to be implemented at international level. This only serves to heighten the pressure on governments, which, in view of the ineffectiveness of the multilateral solutions, are now opting for unilateral measures, such as equalization levies.

Companies continue to follow the same traditional formula to generate business. They acquire resources, which they process, thus adding value, and then sell the product or service generated. The emergence of new technologies has led to the dematerialization of economic activity, meaning that a company's physical presence in a market country has become optional. In other words, digitalisation has promoted the physical disconnect between economic activity and the territory in which it is developed.

The *OECD Interim Report about Tax Challenges Arising from Digitalisation*, published in March 2018, categorizes current digitalised business models into four types.[5] These are characterised by an extensive global value chain, the importance of intangible assets and the use of Big Data. Companies may also work with a combination of two or more of these types of business models, as is the case of Amazon. The first group of businesses are multi-sided platforms, such as Uber, Facebook, Airbnb, Amazon Marketplace or BlaBlacar, where the companies operating the platforms allow end-users to exchange goods and services and interact across market sides, generating powerful network effects. The second group is that of resellers. In this business model, companies acquire products from third-party suppliers and resell them to buyers. Typical examples of this business line are Netflix, Spotify and e-commerce Amazon. The third group is made up of vertically integrated firms, in which businesses have acquired ownership of the entire business process from production to the sale of goods or services to customers. Examples of this model include Netflix (film and series production) and Huawei (hardware and cloud computing). The fourth and last group is that of input suppliers. These are suppliers of goods or services provided by other businesses, such as components produced by Intel. These input suppliers only interact with the companies providing services and never with the final customers.

5 OECD, *Tax Challenges Arising from Digitalisation – Interim Report,* pp. 30-31 (OECD 2018).

2.2. Principal characteristics of highly digitalised business models that impact on the international tax system

The digital economy has facilitated greater expansion and globalization of cross-border business activities. The suppression of different costs present in traditional economic models has exponentially stimulated the development of economic activities in other jurisdictions. Due to the qualities and advantages of new technologies, the physical presence of companies in the territories where economic activity is undertaken, be it providing services or selling goods, has decreased. This scenario raises doubts about the adequacy of the classic concepts of international taxation, such as the concept of permanent establishment, embedded in a traditional concept of trade. Business models such as those of social networks or the collaborative economy, evidence the ineffectiveness of current rules on profit sharing. Without the need for a physical infrastructure in the countries in which they operate, these businesses generate value and income that constitute a clear economic presence. Consequently, they are not subject to the application of the threshold of permanent establishment, thus avoiding taxation in the source state. However, their economic presence is, on occasions, greater than that of other companies that do not operate with digitalised business models.

The Action 1 Final Report underlined a series of wide-ranging taxation challenges presented by the digital economy, which, since its publication, have been forcefully reiterated. There are three challenges: nexus, use of data and the attribution of value and the characterization for tax purposes of payments made for the acquisition of digital products or services.[6] These three main problems overlap with each other, occurring in conjunction in certain digital business models. The reciprocal interaction of these three challenges has a significant impact on two pillars of international taxation. These pillars are the rules that determine, on one hand, the nexus between an economic activity and a jurisdiction for purposes of taxation, and on the other, the rules that distribute profits between the different states with taxing rights.

The *OECD Interim Report* of March 2018 specifically identifies three common characteristics of highly digitalised business models, which, in this author's opinion, are an *ad hoc* restatement of the three wide-ranging challenges reported in Action 1 Final Report of October 2015.

The first of these characteristics is referred to as scale without mass. Highly digitalised business models have no need to be physically present in the market country in which they do business with customers: their economic relationship with their customers is directly digital and cross-jurisdictional. Consequently, the market country experiences a loss of taxing power over the profits the digital company is generating in their jurisdiction. Despite a significant economic presence, the current nexus rules do not enable the market countries to subject this economic presence to taxation.

6 *Cfr.* OECD, *Addressing the tax challenges of the digital economy – Action 1 Final Report.,* p. 99 (OECD 2015).

The second characteristic is the presence in these business models of intangible assets, such as trademarks, algorithms or *software*, which are central to the profitability of digital companies. Given the ease of the intragroup mobility of these assets, the separation between the legal and economic ownership of these intangibles frequently gives rise to challenges when sharing profits between the groups» companies in line with at arm's length principle. It is largely expected that this second challenge will be gradually countered by the recommendations included in Chapter IV of the OECD Transfer Pricing Guidelines developed under BEPS Actions 8-10.

The third characteristic is the most peculiar and exclusive to highly digitalised business models, that is, data and user participation. On many occasions, users indirectly contribute to companies» value creation at source. This interactive relationship results in companies» creating value. However, current nexus rules provide no answer to this problem and the value created is not subject to taxation in the market country. The rules on profit distribution also fail to provide a solution to this problem and these elements of value creation are not considered when profits are shared across a group's different companies.[7]

2.3. Focusing on the problem: nexus and profit allocation. A «unified approach» under Pillar One

As previously stated, broadly speaking, the problem lies in the remote participation in a jurisdiction's national economy by digitalised companies without the source or market country having taxing rights on the income generated.

This problem comprises two more specific challenges, those of nexus and profit allocation. The taxing rights across the different states in which the value chains of highly digitalised business models interact must be shared in a fair but neutral way so as to avoid discouraging the growth of this new form of value creation in the worldwide economy. These two pillars[8] are at the centre of the work being developed by the 129 countries involved in the OECD/G20 Inclusive Framework on BEPS (hereinafter, Inclusive Framework), which aims to find a consensus solution to new nexus and profit allocation rules to satisfy the principle that income should be taxed in the jurisdictions where the value is generated.

The problem revolves around two highly concrete elements. In this author's view, the solution to these problems should follow the order now described. First, it is necessary to establish new nexus rules that manage to «capture» the economic and digital presence in the market or source state that generates

7 As stated by Petruzzi and Buriak, users are «*unconscious contributors to the business value of a highly digitalized company*». Cfr. R. Petruzzi & S. Buriak, *Addressing the tax challenges of the digitalization of the economy – a possible answer in the proper application of the transfer pricing rules*? 72 Bulletin for International Taxation 4 (2018).

8 See OECD, *Programme of work to develop a consensus solution to the tax challenges arising from the digitalisation of the economy,* pp. 11 and ff. (OECD 2019), available at http://www.oecd.org/tax/beps/programme-of-work-to-develop-a-consensus-solution-to-the-tax-challenges-arising-from-the--digitalisation-of-the-economy.htm (last access 17.06.2019).

value. This would involve adapting the current rules in permanent establishment or the introduction of new taxes whose points of connection are not factors associated with physical presence in a jurisdiction, but rather nexus that take into account the dematerialization of cross-border economic activities. Second, once a consensus-based solution on the nexus rules to be implemented has been found, the new rules on the allocation of profits across states could be established. This author finds this would be a way to tacitly share taxing rights between the states involved in the value creation of highly digitalised business models. Without a consensus on the new nexus rules for a digital economy, the problem of how to quantify and allocate the value created across the participating states cannot be addressed. Without a nexus, a state has no taxing rights on the income proportionally corresponding to the value generated by the digitalised company in its jurisdiction.

The rules on nexus and profit allocation are grounded in traditional principles from the first half of the 20th century. They were designed to respond to the distribution of tax sovereignty between states in order to avoid scenarios of double taxation. Moreover, they revolve around immobile factors of production, such as land, work and capital. Currently, while recognizing the continuing presence of such factors, the value of many business is generated from intangible assets.

There is a need to modernize tax law to provide responses to today's challenges. Many proposals have been put forward to solve the two problems mentioned above, such as equalization taxes,[9] withholding taxes on base-eroding payments,[10] personal establishment criteria based on significant economic activity,[11] among others. The taxation of new, highly digitalised business models is unfair under the current rules of international taxation. This is not a particular problem in a specific group of states but affects nearly all countries given the high level of expansion of these models. Consequently, the solutions to the problems of nexus and profit allocation must be coordinated and multilateral if they are to avoid disparities and scenarios of harmful tax competition between states.[12]

It will not be easy to find a consensus solution accepted across the whole international community. The positions of the 129 countries analysing new rules on nexus and profit allocation under the Inclusive Framework currently fall into three large groups.[13]

9 See Proposal for a Council Directive on the common system of a digital services tax on revenues resulting from the provision of certain digital services, COM (2018) 148 final, 21.03.2018.

10 See A. Báez Moreno & Y. Brauner, *Withholding taxes in the Service of BEPS Action 1: address the tax challenges of the digital economy (*IBFD, 2015), available at https://www.ibfd.org/sites/ibfd.org/files/content/WithholdingTaxesintheServiceofBEPSAction1-whitepaper.pdf (last access: 17.06.2019).

11 See P. Hongler & P. Pistone, *Blueprints for a new PE nexus to tax business income in the era of the digital economy (*IBFD 2015), available athttps://www.ibfd.org/sites/ibfd.org/files/content/pdf/Redefining_the_PE_concept-whitepaper.pdf (last access: 17.06.2019).

12 Cfr. S. Moreno González, *Alternativas para la tributación de la economía digital. El establecimiento permanente virtual*, in *4ª Revolución Industrial: impacto de la automatización de la Inteligencia Artificial en la sociedad y la economía digital,* p. 73 (C. García Novoa ed., Thomson-Reuters 2019).

13 OECD, *Tax Challenges Arising from Digitalisation – Interim Report,* supra n.4 at p. 171-172.

The first group, which includes the European Union, share the view that there exists a series of characteristics in highly digitalised business models, especially those related to data and user participation, which may generate a misalignment between the location where profits are taxed and the location where value is created. This misalignment is not the result of any aggressive tax planning strategy but rather the absence of taxation on the market or source jurisdiction is produced because the international tax framework fails to capture these new forms of value creation derived from user participation. Thus, for these countries, it is necessary to reconsider the rules on nexus and profit allocation.

The second group of countries, headed by the United States, recognizes the present scenario and the problem of the absence of taxation at source of highly digitalised business models. However, the countries in this group do not take the view that the challenges are exclusive to these disruptive business models, but are more general problems which underline the ineffectiveness of the international tax system. In addition, they reject the idea that data and user participation are forms of value creation that should be captured in the jurisdiction where the user is located. Thus, it could be said that this group agrees with the first group on the diagnosis of the problem, but diverges on the solution.

Finally, the third group of countries is generally satisfied with the existing tax system and see no need for reform. They hold that the BEPS package currently being implemented in the international community is sufficient to mitigate the possible challenges of highly digitalised business models.

As a reflection, the two problems are clearly identified. Nonetheless, the positions with regard to how to establish solutions are considerably divergent while discussion in the OECD centres on the role and value given to the data and content generated by users. Thus, it is necessary to build bridges across these divergent positions over the coming months in order to find a consensus-based solution in 2020 to avoid the adoption of unilateral measures.

In January 2019, the Inclusive Framework published a short policy note in which the proposals to correct the mismatches that digitalisation causes between the place of value creation and the territory of effective taxation were considered in two pillars, following the published interim report in March of 2018. Pillar one aims to articulate new rules about the nexus and the profit allocation rules that go beyond the arm's length principle. Those proposals are: «user participation», «marketing intangibles» and «significant economic presence»[14].

The user participation proposal would create a new justified nexus in the active participation of users in the generation of value of highly digitised business models. The data that companies collect from users derived from participation in their networks contribute to the generation of value and the development of the business model.

14 Cfr. OECD, *Public consultation document. Addressing the tax challenges of the digitalisation of the economy* (OECD, 2019).

The marketing intangibles proposal defends the modification of the nexus and profit allocation rules taking as a central axis the role that intangible assets play in the business model. This proposal is intended for remote participation or through a limited local presence of a company in a jurisdiction, which uses its brand and other marketing intangibles to develop a customer and user base that ultimately generates income that currently they escape taxation in the market state.

Finally, the significant economic proposal implies the creation of a nexus for non-resident companies that have a significant economic presence in the market jurisdiction in which they offer their services to users digitally. It is proposed to create a revenue threshold that, if exceeded, would result in the subjection of the non-resident company to the tax authority of the market state. The tax base that would correspond to each market state would be determined through a distribution formula based on factors such as sales, assets and employees.

These three proposals share several characteristics. First, they seek to reallocate taxing rights to tax the income that highly digitised companies enter into the market jurisdiction. Secondly, they introduce new nexus rules that are not justified in a physical presence in the state where the users access to the virtual platform where services are provided. Thirdly, the proposals are aware that an effective response to the current profit allocation challenge must go beyond the arm´s length principle. Finally, these proposals seek simplicity, stability of the tax system and tax certainty for taxpayers.

Nonetheless, among these three proposals there are some differences, such as that only the user participation proposal is designed to counteract the tax challenges of the digitalised business models or that only the significant economic presence proposal brings together all the profits —routine and non-routine— in its distribution formula for the multinational enterprise. For this reason, recently the Secretariat has published its proposal for a «unified approach» under Pillar One which seeks to offer a unitary approach to face the challenges on the nexus and the profit allocation of highly digitalised companies, starting from the points in common of the abovementioned proposals[15].

The current nexus rules are based on a physical presence criteria. Thus, it is understandable that the proposals for a new nexus base on aspects such as digital presence and/or significant economic presence. Notwithstanding, it is not enough to just devise a new nexus on the basis of these criteria, but it is also necessary to update the profit allocation rules, going beyond the arm's length principle and the separate entity principle. In case of maintaining the current profit allocation rules, the solution would be useless because zero profit would be attributed to the market state given the absence of physical presence in them. The unified approach would add formula-based solutions *in situations* where the arm's length principle currently precludes taxing rights of market states. It is expected that for the upcoming meeting of the Inclusive Framework on January 2020 a position will be adopted regarding the acceptance or rejection of this new proposal.

15 Cfr. OECD, *Public consultation document. Secretariat proposal for a «unified approach» under Pillar One* (OECD, 2019).

The scope of this proposal includes only enterprises with a high level of digitalisation in their business models, e.g. multinational enterprises that generate income by remotely supplying digital products and content to consumers in other states. The OECD proposes for the first time a proposal that will exclusively affect digitalised enterprises. Curiously, since the publication of the Action 1 Final Report, the application of solutions that do not ring-fence the digital economy has been defended.

The nexus proposed by the unified approach to market jurisdictions is based on the volume of sales. The new nexus would define a revenue threshold as an indicator of a sustained and significant presence in the market country. In this way, it would be possible to tax non-resident enterprises that operate without permanent establishment in the countries, but enjoy a notable economic presence in them.

Finally, the Secretariat Proposal closes with new profit allocation rules. Once the market states have the right to tax the profits of non-resident enterprises, the profits must be attributed in a different way to the current one. If the allocation is to be carried out under the factors «functions performed», «assets used» and «risks assumed» the profit distributed to the market jurisdictions will be zero.

Three tier allocation mechanisms are proposed. This is an allocation based on a tripartite formula. The «Amount A» allocates the deemed residual profit of a multinational group among the market jurisdictions that have the taxing right thanks to the nexus based on a revenue threshold. The deemed residual profit is the profit that remains after allocating the routine profit derived from certain activities among those group companies in those countries where the activities are performed. «Amount B» addresses a mechanism whereby distribution activities with physical presence that are carried out in the market state would have a fixed remuneration. Thus, the «unified approach» proposal understands that the tax certainty of both taxpayers and tax administrations would be favoured and the current tax disputes resulting from the application of transfer pricing rules would be reduced. Finally, the «Amount C» is a closing mechanism that provides that any tax dispute between the market state and the taxpayer on any element of the proposal is submitted to a binding mechanism for resolving conflicts, i.e. tax arbitration.

In the author's opinion, this proposal is very correct in its approach and would be a powerful weapon to fight against the current tax challenges of highly digitalised business models. Nonetheless, the proposal does not pronounce on the way in which the tax liability of non-resident taxpayers will be executed. Therefore, it would be interesting that, in parallel to this proposal, a reference to cooperative tax compliance measures for enterprises operating highly digitalised business models should be studied., e.g. *Netfix, HBO, Instagram,* etc. How is it going to be ensured that the corresponding portion of income that corresponds to a market state is going to be collected? Would a withholding tax mechanism be effective? What functions performed in the market jurisdiction will be remunerated with a fixed consideration? There are several questions that must be effectively resolved for this recent proposal to be useful in the future.

2.4. Searching for a solution that respects the Ottawa principles

The eventual solution to the problem of taxing income generated in source/market jurisdictions must necessarily respect the principles of fairness and neutrality.[16] Adequate and fair allocation of taxing rights cannot ignore the principles on taxation of e-commerce laid out in the OECD's 2003 Ottawa Taxation Framework Conditions.[17] These principles are neutrality, efficiency, certainty, simplicity, effectiveness, fairness and flexibility. The two most relevant principles in the search for a global solution to problems of nexus and profit allocation rules are those of neutrality and fairness.

The most important principle is that of neutrality, the aim of which, broadly speaking, is to ensure that taxation neither prejudices nor induces taxpayers to undertake or refrain from undertaking economic activities as a reaction to tax burdens.[18] To achieve this neutrality, non-ring-fenced solutions to the problem of the digital economy are needed. The solution adopted must also serve for all other business models, from the most traditional to the most highly digitalised. Not ring-fencing the digital economy from the rest of the economy has always been one of the OECD's priorities. The whole economy is now partially or completely digitalised. An *ad hoc* proposal might adversely affect the principle of neutrality, potentially leading to digital models being treated differently from non-digital ones, which, in turn, could discourage economic operators from investing in the digitalisation of their businesses. In short, their business decisions might be motivated by tax factors more than by purely economic motives.

The principle of fairness is also of great importance in tax systems. There is no generally accepted definition of tax fairness. Indeed, there as many definitions as there are ethical perspectives from which the concept can be analysed, eventually making the expression something of an «umbrella term».[19] The principle of fairness is often invoked by international and supranational organizations[20] to justify proposals intended to correct the misalignments that have arisen in the international tax system as a result of the digitalised economy. In order to find a solution to the existing problem, the principle of justice must be considered from two perspectives.

On the one hand, tax fairness should address the horizontal equity between digital economic operators and those who work without a digitalised business model. The solution must establish equal taxation for similar situations of economic capacity, so that the current imbalance is resolved. As a result of the absence of tax nexus, value created in the source/market state is not taxed. Hence, as regards cross-border trade, non-resident taxpayers with brick-and-

16 Cfr. IBFD Task Force on the Digital Economy, *Comments submitted to the OECD Public Consultation Addressing the Tax Challenges of the Digitalization of the Economy»,* p. 11 (IBFD 2019).

17 OECD, *Implementation of the Ottawa Taxation Framework Conditions* (OECD 2003) available at http://www.oecd.org/tax/administration/20499630.pdf (last access: 17.06.2019).

18 G. Lopes Courinha, *Estudos de Direito Internacional Fiscal,* p. 121 (Almedina 2015).

19 See F. Develba, *Fairness and international taxation: star-crossed lovers?*, 10 *World Tax Journal* 4 (2018).

20 For example, the Communication from the Commission to the European Parliament and the Council: *A Fair and Efficient Tax System in the European Union for the Digital Single Market* COM (2017) 547 final. 21st September 2017.

-mortar business models are subject to higher taxation than non-resident agents operating in the same jurisdiction using digitalised business models. The essential aim of the proposals and initiatives to reformulate international tax rules is to bring taxation on digital business models into line with that on traditional models.

On the other hand, tax fairness should also be understood as inter-nation fairness.[21] Equity between countries could be achieved by means of rules on the allocation of taxing rights that give each state its corresponding share according to the level of value generated within their borders. Aligning taxation with the location of value creation would give source and market states greater powers to include income representing value creation within their jurisdiction in the tax base of their corporate tax systems.

In summary, the principles of neutrality and fairness must necessarily be counterbalanced in the new nexus and profit allocation rules. The principle of fairness can lead to proposals that aim to increase the tax burden on digitalised business models, leading to these being ring-fenced as happens with equalization levies. Thus, the principle of neutrality serves to counteract this possibility, aiming to achieve a solution that is as neutral as possible, one that addresses the entire economy and does not isolate the digital one. In this author's view, the solution to the problem must be one of fair but neutral taxation.

3. The evolution of the benefit principle and the sourcing theory in the new principle of value creation

The emergence of the concept of value creation following the BEPS Project will necessarily be the guiding principle for fair and effective allocation of the rights to tax business profits where the value is actually generated.[22] *a priori*, it is not a classic concept of international taxation,[23] but its philosophical grounding is similar to that of the classic theories of international corporate taxation, such as the sourcing theory or the benefit principle.

The sourcing theory is closely related to taxation based on territoriality criteria. This theory advocates that states should have full taxing rights on any income generated as a consequence of economic activities undertaken within their jurisdictional borders[24]. With the growth at international level of the combined criterion of person-centric taxation, based on residence, or in a few limi-

21 Cfr. IBFD Task Force on the Digital Economy, *Comments submitted to the OECD Public Consultation Addressing the Tax Challenges of the Digitalization of the Economy,* supra n. 13, at p. 12.

22 For example, the Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations, updated in 2017, proposes the alignment of the results of transfer pricing and the location in which value is created.

23 Cfr. J. Becker & J. Englisch, *Taxing where value is created: what's «user involvement» got to do with it?*, 47 Intertax 2, p. 161 (2019).

24 As stated by Hongler and Pistone, «the sourcing theory provides the theoretical background for drawing a nexus with the taxing jurisdiction that moves away from the association with physical presence and more closely reflects value creation in respect of business income in the era of the digital economy». Cfr. P. Hongler & P. Pistone, *Blueprints for a new PE nexus to tax business income in the era of the digital economy,* supra n. 10, at p. 18.

ted jurisdictions, on nationality, and real taxation, the sourcing theory lost its practical significance. However, from a theoretical perspective, in the post--BEPS era, the content of the theory has been invoked again in order to respond to the challenges of the digital economy in such a way that the state in which value is created has the right to tax the income generated.[25]

The benefit principle has been, since 1920, the cornerstone of the allocation of tax sovereignty between states. The principle is related to the concept of economic allegiance[26]. It establishes that companies should be taxed in the jurisdiction in which they benefit from the use of the infrastructure of the state and other public goods or services when undertaking economic activity in a particular jurisdiction. These benefits might include elements such as the use of a stable legal framework, the maintenance of a digital, technological structure allowing a company to operate in a state, communication networks, energy supplies and public subsidies. This principle is grounded in Thomas Hobbes» philosophical tenet that defends the payment of taxes as a form of compensation for ensuring safety, in proportion to the degree of a company's use of a state's infrastructure and services.[27]

The principle of value creation has no hard and fast definition. Despite being a significant concept in the field of international taxation since its emergence in 2013 as a guiding principle to address the challenges of the digital economy, there is no uniform concept of taxation where value is created. The principle gives rise to the following questions: What is value creation? How is value created? Where is value understood to be created? and How can value be quantified? The vague and imprecise nature of the term endows it with a flexible content that allows states, international and supranational organizations and academics to present different proposals to respond to the challenge of aligning taxation with the location of value creation in a highly digitalised economy.

In economic terms, a company creates value when their income exceeds the costs of producing a good or providing a service, with value creation potentially arising along the whole value chain, as described in Porter's theory.[28] As regards a company running a digital business model, value is created along the value chain when, by exploiting user-generated data and content, the company obtains profit when offering their services or goods in the market. It is worth noting that functions such as data collection have traditionally been regarded as another complementary function of the value chain. However, with the emergence of Big Data, it is no longer a routine function but an independent productive factor that creates wealth for a company.

This author is of the opinion that the principle of value creation is not a revolutionary one. The existing international tax rules state that active income –

25 Cfr. E.CCM Kemmeren, *Legal and economic principles support an origin and import neutrality--based over a residence and export neutrality-based tax treaty policy,* pp. 237-315 (M. Lang et al. eds., IBFD Publishing, 2010).

26 As stated by Pinto, «the principle of economic allegiance requires anyone that obtains significant benefits from an economic community to pay tax to that community». D. Pinto, *E-commerce and source-based income taxation,* IBFD Publishing, Amsterdam, 2003, p. 196.

27 Cfr. F. Develba, *Fairness and international taxation: star-crossed lovers?,* supra n. 16

28 *Cfr.* M. Olbert & C. Spengel, *International taxation in the digital economy: challenge accepted?*, 9 World Tax Journal 1, p. 22 (2017)

business profits – are to be taxed in the source state, while passive income – dividends, interest and royalties – shall be taxed in the residence state. Income has always been taxed in the jurisdiction where the value is understood to have been created. Clearly, if a source state exercises its taxing rights, it is because the threshold of permanent establishment is applied, based on a physical presence in the jurisdiction. However, as pointed out by Dourado,[29] in the remaining cases the residence state acts as a «qualified source state» since the residence is understood to be an economic nexus with the jurisdiction. In short, it serves as a way to align taxation with the territory in which companies enjoy benefits and infrastructures and where income is generated from economic activity, as espoused by the sourcing theory and the benefit principle.

The new technologies have now changed the way value is created. The emergence of the principle of value creation is in line with the classic international taxation theories. This means that, in the digital era, it is necessary to ensure that taxing rights are allocated to the states in which the business model can be shown to have a territorial nexus and creates value. This would be the case, for example, of data collected from customers, the location where these data are handled or the jurisdiction in which they are stored. The underlying idea of value creation is the same; to align taxation with the state with the clearest nexus to the income generated. However, the way value is created and attributed is in constant evolution. Consequently, the current process of consolidating the principle of value creation involves designing new nexus and rules of attribution of profits. In short, this author finds that the principle of value creation is a contemporary version of the sourcing theory and the benefit principle.[30]

Among these proposals aiming to establish rules on nexus and tax allocation in line with value creation, the most outstanding is the direction taken by the OECD and initiated in their *Public Consultation Document «Addressing the Tax Challenges of the Digitalisation of the Economy»,* published in February 2019. The report suggests three proposals for the allocation of taxing rights in the market/source state. Firstly, the user participation proposal, which contemplates value creation from the active participation of users in digital business models, such as social networks, search engines or online marketplaces. Secondly, the marketing intangibles proposal, which advocates value creation through the network of users/customers that a company generates remotely thanks to its intangible assets –trademarks, customer lists– in a particular state. And thirdly, the significant economic presence proposal, which advocates value creation when there is a remote, but economically significant presence, through economic activity in a particular jurisdiction. These proposals take into account supply and demand factors in value creation. If users did not exist, these digital business models would not work and there would be no value creation.[31]

29 A.P. Dourado, *Digital taxation opens Pandora Box*, 46 Intertax 6/7, pp. 566-657 (2018).

30 Other authors, however, reject the alignment of the benefit principle and the principle of value creation M. Deveraux & J. Vella, *Value creation as the fundamental principle of the international corporate tax system*, European Tax Policy Forum Policy Paper, p. 6 (2018).

31 Cfr. W. Schön, *Ten questions about why and how to tax the digitalized economy,* 72 Bulletin for International Taxation 4/5 (2018).

It is therefore desirable that the principle of value creation evolves and serves a guideline for the allocation of taxing rights, taking into account both supply-side preferences and demand-side preferences.

4. Objective: new nexus and profit allocation rules based on users and data

As previously mentioned, today's method of complying with the mantra of taxing where value is created involves analysing and quantifying the value created by user participation in a particular network and the data they directly or indirectly supply to such a network. Solving the problem of the remote participation of certain business models in a country's domestic economy primarily entails creating, firstly, new tax nexus that substantiate a taxable presence in a jurisdiction in the same way as a permanent establishment. Secondly, once the presence of a tax nexus is provided for, new rules on the allocation of taxable profits must be established. These would, in other words, be rules that tacitly allocate taxing rights among the states in which the company has a taxable presence captured by the new nexus. Thus, the residual profit derived from non-routine functions can be shared between them under formulas taking into account demand-side factors such as the number of users, the volume of data generated or the quality of the data. Nonetheless, despite this being the current direction taken by the BEPS Inclusive Framework, there is clearly a misalignment with the origins of the BEPS Project (the fight against abusive or aggressive practices that prejudiced the taxing powers of states), undoubtedly brought about by the all-pervading presence of digitalisation since 2013, when the ambitious programme to tackle BEPS practices was launched.

4.1. Three actors interested in taxing income: the residence state, the source state and the market state

Data generate an undeniable value in the current digitalised economy. Without the data that users provide to certain business models, such activities could not be launched. Neither would it be feasible to obtain sizeable profits without the generation of so-called network effects. These effects are brought about when the use of a certain network originates a type of «call effect» on other users, such as in the case of Facebook.[32] Consequently, the greater the number of registered users, the greater is the volume of data available to the company, and hence they can sell advertising space to other companies or transfer the data, generating greater profits for their digital business model. In this way, users become a hybrid figure in the supply chain, known as «prosumers». That is, while continuing to consume the services provided, they also tacitly produce value for the company thanks to their interaction with these digital platforms.

32 Cfr. J. Becker & J. Englisch, *Taxing where value is created: what´s «user involvement» got to do with it?*, supra n. 20, at p. 167.

With the emergence of highly digitalised business models, the classic distinction between taxation in the residence state and the source state has opened up to include a new actor, the market state. This refers to the jurisdiction in which the services are provided to a network's users/customers and where the data are collected. In this author's view, the market state arises as a consequence of the dual definition of the theoretical term of source state. On one hand, the source country is the origin of the income, that is, the territory in which the money flow towards the digital company's residence state is generated, while, on the other hand, source state can be understood to be the jurisdiction in which the services are used and value is consequently created. The source state is the jurisdiction in which customers use their devices to access the network (source country as the place of consumption and value creation), directly or indirectly releasing a series of data that help the digital company (residence state) to improve its services and supply advertising space to companies located in other jurisdictions (source state as the origin of income). This is the business model of a social network, which is the model that most clearly demonstrates the triangular relationship between residence state, market state and source state in its strictest sense.

In view of the above, taxing rights need to be distributed between three states. Taking into account supply-side factors such as risks, assets or workers, the existing rules of international taxation fail to allocate taxable income to market states. Hence, it is necessary to open the door to new demand-side factors, such as sales, number of users or volume of data, in order to achieve a fairer distribution of taxing rights across states.

Nonetheless, criticisms have been raised about the consideration of the market state as another actor to be taken into account in the formulas for profit allocation. Schön[33] suggests that the market state is already taken into consideration for indirect taxation, which is attributed exclusively to the use state, proposing therefore the creation of a nexus related to tangible or intangible digital investment in a state. Wherever a company invests, income is expected to be obtained, and thus digital companies would be taxed in the corresponding jurisdiction provided there exists prior investment. Although it is true that the use country partly benefits from the profits in the form of taxation on the volume of business, the present author understands this is not counter to direct taxation of tax nexus based on demand-side factors, since there is no indirect taxation on what is the crux of the challenge under study, the value created by users» participation and data. Hence, the allocation of taxing rights to the states where the users are located, and where a large part of a multinational digital company's value is created, is compatible with the rules of indirect taxation.

Finally, technical difficulties might arise in determining the location of a user in a jurisdiction. The use of VPN networks could camouflage the real market state. An alternative solution might be the use of GPS to determine the location of users» devices. However, the potential impact of this on fundamental rights demands these types of challenges are solved in a more respectful way.

33 W. Schön, *Ten questions about why and how to tax the digitalized economy,* supra n. 27.

4.2. The role of data: value creation based on user participation

The role of data in the value creation process can be considered from multiple perspectives. The raw data companies gather from their customers thanks to powerful algorithms or Big Data techniques require processing and studying in order to determine the best strategy to maximize profits from their exploitation. By this we mean that the data *per se* lack significance and do not crate value just because they are data. It is the subsequent processing, classification, study and use made of such data that helps to create value within the company's supply chain. As underlined by Moreno González,[34] there are certain grey areas in this set of activities and their role in value creation, since simply collecting data could be interpreted as a routine function not involving the generation of value. In addition, as indicated by Becker and Englisch,[35] some doubt exists as regards the place where the data are harvested, since it could be understood to be either the place the user is located or indeed the place where the user's digital footprint is recorded.

The author of the present work feels that this doubt is a result of the current rules on transfer pricing, which are grounded in a functional analysis that gives greater weight to supply-side factors.[36] Chapter VI of OECD 2017 Guidelines on Transfer Pricing (GTP, from hereon in) sets out an intragroup distribution of profits in business operations that involve intangible assets which benefits jurisdictions where there exist persons that perform a series of significant functions, attributing to them the assets and risks inherent in such functions and, consequently, accumulating a large part of the profits. This new approach, which continues in the line of Actions 8 to 10 provides no answer to the problem of the role of users» data in value creation and the subsequent allocation of taxing rights because the collection, processing, analysis and use of such data are completely dematerialised. These functions are performed by computers and not by human personnel.

It is true that the value created by users» participation in business models such as search engines and social networks is not directly generated by the companies, but is value created by an external party, the users. However, this value creation is the result of a prior consideration toward these users. Although, in most cases, this consideration is not monetary, it is so in the sense that the companies provide a «remuneration» in the form of free services provided to the customer in exchange for permission to handle the user's data. This is what happens in networks using the «freemium» model, which provides users with certain estándar services, free of charge, that serve to harvest data. Subsequently, users can expand these services by subscribing to further paid service bundles, as is the case, for example, of cloud-based services that provide, in exchange for a fee, more extensive storage space in the companies» servers.

34 S. Moreno González, *Alternativas para la tributación de la economía digital. El establecimiento permanente virtual*, supra n. 11, at p. 86.

35 J. Becker & J. Englisch, *Taxing where value is created: what´s «user involvement» got to do with it?,* supra n. 20, at p. 168.

36 Cfr. A. Martín Jiménez, *BEPS, the digital(ized) economy and the taxation of services and royalties, UCA Tax Law Department Working Papers* 1, p. 17 (2018).

The way companies generate value has clearly changed, and thus the approach to analysing the concept of value creation must be updated accordingly. The gathering of data derived from users» participation provides companies with an embedded economic value. It is not important that these data pass through various stages to hypothesize an increase in their value. This author's position does not ignore the fact that what a company does with the data it obtains is also important in the process of value creation. Indeed, technologies such as the powerful algorithms which allow companies to aggregate user data and identify patterns of consumer behaviour in order to subsequently target them with specific advertising add to their value creation.[37] Nonetheless, if these volumes of data did not exist, it would be senseless to argue that value is created because data are the «oil» of the 21st[t] century[38]

From the moment the data are harvested as a result of consumers» active or passive participation, the production process is initiated and value creation emerges. Thanks to the data gathered from a particular jurisdiction, the company creates new value. The users form part of this value creation process, and thus it is logical to advocate tax rules that take this reality into account when allocating taxing rights across states. Accordingly, it is necessary to create a nexus and allocate profits between the source/market states, taking into account this new form of value creation by, for example, considering a sustained user relationship with customers in a particular jurisdiction as an intangible asset for the company.[39]

5. Proposals intended to ensure fairness and neutrality in the international tax scenario

As mentioned at several points throughout this work, three characteristics are common to highly digitalised business models that are responsible for the misalignment of the location of effective taxation and the place of value creation. In this type of business model, analysis of the value chain reveals that the data, interaction and synergies propitiated by the users of these platforms are a substantive part of the value creation process. The reality shows that nexus and profit allocation rules are ineffective in taxing this income where it is actually generated.

The author of this works defends the need to update certain elements of tax law to achieve fairer taxation in society. However, this solution must also necessarily be neutral to avoid ring-fencing the digital economy and distorting the decision-making of economic agents who base their business models on the exploitation of information technologies. The solution or solutions to be implemented must fully meet the following two requirements:

37 Congressional Research Service, *Digital Service Taxes (DTS): Policy and Economics Analysis,* pp. 13-14 (2019) available at https://fas.org/sgp/crs/misc/R45532.pdf (accessed 28 June 2019).

38 https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data (accessed 28 June 2019).

39 Cfr. J. Becker & J. Englisch, *Taxing where value is created: what´s «user involvement» got to do with it?*, supra n. 20, at pp. 170-171, and HM Treasury, *Corporate Tax and the Digital Economy: position paper update,* p. 8 (2018).

1. A balance between the tax regimes applied to so-called traditional business models and highly digitalised ones. In other words, the solutions need to take a holistic view of the economy, which is not, in this author's opinion, incompatible with the adoption of new rules as a result of the misalignments that the digital economy has served to highlight. The reason for adopting these proposed holistic solutions that would affect both highly digitalised business models and those with lower levels of digitalisation is the emerging unfairness in the international tax regime. However, the mistake must not be made of adopting *ad hoc* solutions for these business models since this would run the risk of discouraging their development.

2. Multilateralism. Global problems, such as those referring to nexus and profit allocation affecting all states, should be addressed with multilateral solutions that treat all those involved in the same way. Unilateral solutions might be feasible in the short term but would only be provisional stopgaps until the international community achieves a position with the broadest consensus possible, which would then be set out in hard law instruments.[40]

There now follows a presentation of three possible solutions that meet the described requirements and that are fair and neutral: the inclusion of a new type of income in tax conventions for the provision of advertising services, an interpretation of the concept of royalty that broadens out to include income from cloud-based services and the inclusion of demand-side factors in the analysis of transfer pricing. The intention of these proposals is for source or market states to gain greater taxing powers when value creation is generated within their borders.

5.1. Income from the provision of advertising services

Double taxation conventions include a series of incomes, the taxing rights of which are shared between the residence state and the source state. They set out distributive rules that confer prominence to the source states if this is desirable from a tax policy perspective.

The presence of advertisements on users» devices and interfaces is the external manifestation of value creation. This advertising is the result of handling and processing user data harvested in the market state by companies that operate digital business models. Depending on the data, they rent advertising space on their platforms to third-party companies in exchange for payment. Thus, the proposal consists of establishing a special type of income within the tax conventions so as to create rules for the allocation of taxing rights that prio-

40 We have underlined in previous Works that the ideal solution is the creation of a concept of permanent establishment based on significant economic and digital presence. See J.A. Gómez Requena & S. Moreno González, *Adapting the concept of permanent establishment to the context of the digital commerce; from fixity to significant digital economic presence,* 45 Intertax 3 (2017). The present work proposes further complementary solutions.

ritize taxation in the state where such advertising is shown and/or the company advertising makes the payment.

Generally speaking, these types of cross-border payments for the provision of an online advertising service, such as the ads that appear on social networks or search engines, would be characterised as business profits (Art. 7 OECD Model Convention), giving the exclusive taxing rights to the residence state of the company proving the rental service, that is the digital company, provided it has a permanent establishment in the source state, which is problematic given the current definition of this concept at international level.

Hence, it is the author's belief that a new type of income for the provision of advertising services with the proposed taxation shared between the source state and the residence state could help to align taxation and the jurisdiction where value is created. The income generated from companies wishing to advertise is indirectly derived from value created from the data and content generated by users in the source/market state. The proposal here is that when a quantitative threshold is surpassed, following the model for dividends (Art. 10 OECD Model Convention) or royalties (Art. 12 OECD Model Convention), the source state should be given certain limited taxing rights over the income paid to a non-resident company. By establishing an amount under which taxation continues to correspond to the residence state avoids smaller digital business models incurring administrative costs and focuses on digital business models with greater economic capacity and value creation, such as Google, Facebook, Instagram, etc. Moreover, this proposal does not differentiate between the *renting* of online advertising space in the media or physical spaces. It would be applied equally to all types and would be more respectful of tax neutrality and would avoid ring-fencing the digital economy.

5.2. Expanding the concept of royalties to include cloud-based services

Cloud computing is a business model that provides users with a variety of services within a network. These services include, for example, applications, data storage, server rental, supplying a virtual infrastructure to develop a program or the sale of digital products. Providers of cloud-based services supply these services online with no physical presence in the customer's jurisdiction. Thus, the problem mentioned throughout the present study is repeated, the nexus and profit allocation rules grant no taxing rights to the source or market state.

A large number of tax conventions set out the taxing rights on royalties, allowing the source state to tax a part of the revenue by means of a withholding tax. This is arguably an opportunity to help solve the taxation problems derived from digitalisation; income from cloud computing services could be included under the international concept of royalties enshrined in Art. 12 of the OECD Model Convention. This is even truer if we consider that certain tax conventions still in force include the rental of commercial, industrial or scientific equipment under the concept of royalties. The use of withholding taxes on royalties was

originally a mechanism designed to mitigate the absence of tax nexus for countries that imported technological equipment. Following this philosophy of empowering source states, the OECD Model Convention proposes a solution to the challenges of BEPS by establishing in Art. 12 a withholding tax on income from the provision of technical services, which includes services both supplied physically in the source state and those provided online.[41]

Art 12 of the OECD Model Convention is in need of modernization in order to bring about a common, international position on the tax treatment of income from cloud computing services. Although it is true that the rules on taxing *software* are broadly transferable to these services, the characteristics of *Software* as a Service, Infrastructure as a Service and Platform as a Service demand these rules are clarified. The user's level of control in each of these three cloud computing models varies and this has consequences when characterizing the income as royalties or business. In this sense, the author of this work proposes that tax conventions should broaden the concept of royalty to include the payment for the use of *software* supplied in cloud-based services. This solution is neutral because the concept of royalties will continue to affect both cross-border income from both the transfer of intellectual or industrial copyrights and the *renting* of equipment, as well as income derived from cloud computing services. In this way, the taxation of two types of business model, traditional and digital, would be brought into line, thus establishing a fairer tax regime.

5.3. Residual Profit *Split* Method and supply-side and demand-side factors

Once the nexus rules are updated to address the challenges of the digital economy, the problem of allocating the tax bases between states with a legitimate taxing rights on the income from these highly digitalised business models will be finally solved. These nexus would establish connections, such as data generation, number of users or turnover, between a jurisdiction and the income derived from dematerialised economic activities. As advocated by the European Union in the Proposal for a Council Directive on the «virtual permanent establishment»,[42] these nexus would give rise to a permanent establishment in one or more different states. Hence, the next step would be to set out rules on transfer pricing to allocate these profits more fairly than is the case at the moment.

Profits are allocated between companies from the same group or are attributed to a permanent establishment in line with the arm's length principle. This principle involves studying the functions conducted and controlled, the assets utilised and the risks assumed by the associate companies. This analysis is intended to establish value creation and the subsequent allocation of profits among the group's companies with a manifest economic activity derived from

41 Cfr. A. Martín Jiménez, *BEPS, the digital(ized) economy and the taxation of services and royalties*, supra n. 32, at pp. 33-35.

42 Proposal of a Council Directive laying down rules relating to the corporate taxation of a significant digital presence, COM(2018) 147 final, 21 March 2018.

these functions. A series of assets and risks would then correspond to such functions, thus assigning them part of the profit.

However, this method of applying the arm's length under the auspices of Actions 8-10 of the BEPS Project assigns value to the supply side but fails to consider value creation on the demand side.[43] Productive factors, such as labour, assets or human capital, are determinants in profit allocation. Demand--side factors, including, for example, users or sales, are not taken into account in this allocation. Here is the core of the problem, since, as stated in the present work, the new, highly digitalised business models create value thanks to user participation and the quality of their data. Without a focus on the demand side, the supply side alone does not create value and this type of business model would be impracticable. Hence, the allocation system must be modernised to encompass a demand-side approach, while also reviewing the supply side to account for new value creation factors. This author believes that the solution lies in a Residual Profit *Split* Method (RPSM).

The RPSM is a variation of the Profit *Split* Method and its aim is to determine the overall profits and subsequently *split* them among the group's companies according to the same series of factors that would have been used by independent companies engaging in such transactions. It is a method that will play a key role in the post-BEPS scenario, since it strikes a balance between those who defend the arm's length principle and those advocating formulaic profit allocation. It is an appropriate method for cases in which there are no comparable operations and one of the following situations occurs: 1. The parties make unique and valuable contributions, or, 2. There is a high degree of integration in the business model.[44]

The allocation of profits under the proposed RPSM would entail new residual profit splitting factors. Alongside traditional factors like human capital, risks, sales or expenses, this author proposes the inclusion on the supply side of a new type of asset, data, and on the demand side, the number of users of the platform. The profits from routine functions would be *split* according to the existing allocation factors included in the OECD's Guidelines on Transfer Pricing. However, the residual profits from non-routine functions, which represent a large part of the income from highly digitalised business models, such as social networks or search engines, would be distributed in line with a formula containing factors such as the volume of data gathered and the number of users in a particular jurisdiction.

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43 Of the same opinion, A. Martín Jiménez, *BEPS, the digital(ized) economy and the taxation of services and royalties*, supra n. 32, at p. 17; J. Becker & J. Englisch, *Taxing where value is created: what´s «user involvement» got to do with it?,* supra n. 20, at. p. 168; Committee of Experts on International Cooperation in Tax Matters ONU, *Tax Issues related to the digitalization of the economy: report,* p. 9 (2019).

44 Cfr. European Union Transfer Pricing Forum, *The application of the Profit Split Method within the EU,* March, 2019 available at https://ec.europa.eu/taxation_customs/sites/taxation/files/report_on_the_application_of_the_profit_*split*_method_within_the_eu_en.pdf (last access: 10.07.2019). Following this report, unique and valuable contributions are understood to exist when: 1. There are no comparable contributions between independent enterprises in comparable circumstances. 2. They represent a key source of actual or potential economic benefits.

Including a new splitting factor based on data could be a source of controversy depending on the quality of such data and their likelihood of actually creating value. Data can have differing degrees of importance. In this sense, Advanced Pricing Agreements could mitigate this source of conflict, with taxpayers previously agreeing to a selection of the volume of data to be taken into consideration in the formula used to allocate the profits. This proposal is fairer than the existing regime and would allow market states to achieve a greater *split* of the residual profit, which currently falls outside their taxing rights on highly digitalised business models.

6. Conclusions

The problems of nexus and profit allocation in highly digitalised business models require a multilateral solution. The solution should respect the Ottawa Framework Conditions on taxation in the digital economy, especially as regards fairness and neutrality. These principles act as a counterbalance and if respected, will avoid unilateral measures or measures that seek to ring-fence the digital economy, such as equalization levies.

The principle of value creation is a development of the benefit principle and the sourcing theory. Under this scenario, data and user-generated content are elements to be taken into consideration when designing new nexus and profit allocation rules. The international tax system does not take the supply side into account. Nonetheless, it has been demonstrated that digital business models create value thanks to the convergence of supply-side and demand-side factors.

The present article proposes three solutions which, in the author's opinion, are neutral and fair and which are intended to grant grater taxing rights to the market/source state. Firstly, a new type of income is proposed to be included in tax conventions. Secondly, it is suggested that the concept of royalties as enshrined in tax agreements should be broadened. Thirdly, and finally, is the recommendation of an RSPM combining supply-side factors (data as assets) and demand-side factors (number of users).