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VALUE CREATION IN THE BEPS ERA AND A NEW APPROACH TO TRANSFER PRICING FOR INTANGIBLES

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1. Some General Notions concerning the Enterprise in its foreign dealings.

Within the general discipline of business income, foreign relations have a unique relevance, such as the relationship between the national enterprises and the foreign countries where they carry out business activities.

Such kind of foreign relations can arise from different types of relationships (for instance, participative, contractual, or other) and pose the three main general questions of international taxation, such as "who to tax", "where to tax", and "what to tax".

First of all, the foreign relationships require that double international taxation - which is one of the main obstacles to transnational relations and to the functioning of the market – should be avoided and in order to satisfy this goal the solutions are different

depending on the tax models chosen by the states to tax the income produced abroad[1].

Secondly, the transnational relations pose the need to identify the criteria for the localization of the income in the space.

In this regard, the globalization has raised a complex issue, since it has favored a broad reflection on the crisis of the traditional connection criteria of the income (state of residence and source state)[2] and the tax sovereignty of individual countries. This is mainly due to the fact that the existing tax models are unsuitable for the new economic environment. The multinationals enterprises (MNE), indeed, are able to operate in several countries regardless of the physical presence[3] and

[1] The solutions for eliminating double taxation vary according to whether the transnational income is taxed in the country of residence (based on Capital Export neutrality or Home neutrality) which is the approach that has always been adopted in our legal system but considered to be in conflict with the EU system by some scholars (for example, see CIPOLLINA, *CFC Legislation and abuse of freedom of establishment: the Cadbury Schweppes case*, in Riv. dirt. Fin., 2007, p. 20 and PISTONE, *Diritto tributario internazionale*, Turin, 2017, p 11) or in the country of the source (based on Capital Import Neutrality). While in the first case, generally, the tax credit is used (and in some cases the refund of taxes paid abroad), in the second case prevails the criterion of exemption. Both schemes ensure neutrality, although the effects are different, as the rates between the two countries are different.

[2] Cf. SACCHETTO, *Territorialità (dir. trib.)*, Enc. del dir., XLVI, Milano, 1992; Fransoni, *La territorialità del diritto tributario*, Milano, 2004, p. 375; BAGGIO, *Il principio di territorialità ed i limiti alla potestà tributaria*, Milano, 2009; CORDEIRO GUERRA, *Le fattispecie con elementi di estraneità*, in Cordeiro Guerra, *Diritto Tributario internazionale,* Padova, 2016, p. 52 where it is stated that «da qualche anno, tuttavia, il problema della dialettica del principio di residenza vs. principio della fonte ha acquisito nuovo vigore, e ciò non più a causa di discussioni relative a particolari aspetti di composizione dell'equilibrio tra esigenze di prelievo sottese ai due criteri, quanto nell'ottica di un radicale ripensamento della validità, nell'attuale contesto internazionale, del principio di tassazione in base alla residenza del soggetto».

[3] See, L. CARPENTIERI, *La crisi del binomio diritto-territorio e la tassazione delle imprese multinazionali*, Riv. Dir. Trib., 2018, p. 351, who properly points out that the real economy imposes rapid adjustments to the rules and unrelated to pre-established territories. Indeed, even the European law tends to replace the concept of "territory" with that "space without frontiers"; CERIANI-RICOTTI, *Riflessioni sul coordinamento internazionale della fiscalità d'impresa*, Rass. Trib., 2019, p. 30.

thanks to their flexible organizational models that are difficult to appreciate in the various territories unlike in the past.

As a matter of fact, although the OECD model is still strictly anchored to the taxation of the residence state, in recent years the jurisdiction to tax of the source country is becoming increasingly relevant in the face of the need of identifying new centers detached from the formal subjectivity to which attribute legal effects and, finally, appreciating under a modern perspective the connection between income and the place of production.

Thirdly, in recent years, the need has been felt to adopt common anti-avoidance rules in the belief that some phenomena can be contrasted more profitably at both European and international levels.

In addition, it is worth noting that transnational relations which take place between independent subjects are generally inspired by the price applied in conditions of free competition, while within the parties that pursue a common interest, prices can be adapted to the convenience of the group in a tax planning logic. For this purpose, the transfer pricing discipline plays a central role within foreign relationships which are established between the different entities of a group, since it ensures that elements of income deriving from transactions with companies that are not resident in the state that either, directly or indirectly, control the company, or are controlled by it or are controlled by the same company that controls the company, must be determined according to the conditions and the prices applied between independent parties that operate in free competition and in comparable circumstances (so-called arm's length principle).

These brief notes highlight the growing importance of the international tax law – after all, confirmed by the multiple interventions of the European institutions (such as the European Commission, the Council and the Court of Justice) and the international ones (the OECD)

– with the aim to favor a uniform discipline and to satisfy the need for a tax coordination in an economic context characterized by continuous transformations[4].

2. *Brief Notes on the evolution of the International Tax System in recent years: the objectives and the methodology of the thesis.*

The present thesis focuses its attention on the second and third typical questions of international tax law mentioned above, that is "where to tax" and "what to tax".

This choice is due to the fact that the recent phenomenon of the digitalization of the economy is putting in a deep crisis the traditional criteria of localization for the identification of the tax jurisdiction of a state, due to the decreasing relevance of the physical presence, the increasing importance of "new kinds of intangibles" and the high degree of integration of the value chain.

Since the release of the Base Erosion and Profit Shifting (BEPS)[5], the OECD has given a strong impetus towards a new approach for the international taxation, given the growing centrality of the intangibles within the multinational enterprises. As a matter of fact, the presence of such intangible assets has resulted in the spread of profit shifting practices that gave rise to an evident misalignment between the territories where the companies carry out their economic activities and the territories where they ultimately report the profits generated by them for tax purposes.

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[4] SACCHETTO, *La tassazione delle società in Europa tra grandi scenari e realizzazioni concrete*, in Amatucci, *Gli aspetti fiscali dell'impresa*, Torino, 2003, p. 137; G. MELIS, *Coordinamento fiscale dell'Unione Europea*, Enc. dir. Annali, Milano, 2007, p. 394.

[5] OECD, *Action Plan on Base Erosion and Profit Shifting,* OECD 2013, see: https://www.oecd.org/ctp/BEPSActionPlan.pdf.

In this context, the BEPS Project has renewed the international tax system by allowing for the alignment of taxation with the creation of value, in the sense that cross-border profits must be taxed in those countries that contribute to creating value for the company, breaking up into a some sense the traditional binomial residence vs. source jurisdictions.

The digitalization of the economy has for its part exacerbated the implications of the BEPS Project, since the new digital business models - especially the so-called "web giants" (like Facebook, Google, Netflix etc.) - are proving to be able to create value not only in the place where they have a physical presence, as happens for the traditional business models, but also and above all in jurisdictions where their physical presence is limited or, as happens in most of the cases, completely absent. This is mainly due to the key role of "new kinds of intangibles", such as data and users, which contribute to the creation of most of the value within the digital multinational enterprises.

In view of the inadequacy of the traditional criteria for the localization of business income in the space, for some time, both within the international and European panorama, possible solutions are being studied for the elaboration of new nexus rules.

Modern thinking, in particular, tries to justify the allocation of taxing rights by reference to the concept of value creation, since in the recent years it emerged as a politically influential benchmark.

With this thesis, accordingly, the author wants to offer an analysis of the new "value creation" paradigm in order to verify whether, indeed, it can represent a profitable criterion for the attribution of cross-border income and, consequently, its specific implications for the taxation in the new context of the digitalization of the economy.

In this last perspective, moreover, the analysis will focus on the effects that the "value creation" paradigm may have on the transfer

pricing analysis. We will see, in particular, that in the context of the BEPS project, for the purposes of transfer pricing, the OECD - firmly anchored to the arm's length principle as the common international tax principle - assimilated "value creation" to the performance of functions, use of assets and assumption of risks.

The digitalization of the economy, in this sense, on the one hand, seems to have definitively highlighted the strong interaction of the value chains of the various entities of the group, questioning one of the founding pillars of the arm's length principle, such as the "separated entity approach"; and, on the other hand, as already mentioned above, it has given rise to "new forms of intangibles" (data and users) for which it is necessary to verify the practicability of the DEMPE analysis or, on the contrary, whether it is desirable to shift towards a new approach characterized by the introduction of formulary apportionment.

In order to conduct this analysis, we will make use of a number of comparative studies both legal and economic, along with academic publications, legislation and case law relating to a variety of domestic tax regimes of an undetermined number of states. We will also refer to the OECD and UN Model Conventions.

With specific regard to the Chapter V, concerning the taxation of the digitalization of the economy, we will offer an updated excursus of the different proposals advocated by the OECD and European Commission, thus including the proposals issued in the last few months at the time the thesis was written.

Chapter II –

General Principles of International Tax Law for the localization of Cross-Border Income in the Space

TABLE OF CONTENTS: 1. General International Law of Jurisdiction; 2. The definition of Tax Jurisdiction; 3. Residence Jurisdiction; 3.1. The right to tax Individuals; 3.2. The right to tax Corporations; 4. Source Jurisdiction; 4.1. The concept of Permanent Establishment; 4.1.2. The Permanent Establishment's discipline and the BEPS impacts; 4.1.3. The Attribution of Profits to a Permanent Establishment; 5. The crisis of the traditional models of connection.

1. General International Law of Jurisdiction.

Before turning our attention to the peculiarities of jurisdiction to tax, it is worth pointing out some fundamentals of the general international law of the jurisdiction.

The latter, indeed, becomes a concern of international law when States adopt laws that govern matters of not merely domestic issue[6]. In

[6] H. E. YNTEMA, *The Comity Doctrine*, Michigan Law Review, 1966, p. 19, referring to «the principle definitively established by Justinian, that the first attribute of the *imperium* is the power of legislator»; G. HANDL, *Extra-territoriality and transnational legal authority*, in G. HANDL – J. ZEKOLL – P. ZUMBANSEN, *Beyond Territoriality: Transnational Legal Authority in an Age of Globalization*, Leiden, 2012, p. 3, noting that globalization brings with it a «fundamental change of time and space dimensions of human existence» which «brings into sharp relief a growing discrepancy between the transactional, indeed, non-territorial nature of the problems and challenges posed by interconnectedness in a globalized world and traditional state-based; i.e., territoriality focused, legal tools, structures and processes to manage interdependence»

the last century, States have increasingly faced with the global problems which do not respect traditional State boundaries and for which effective regulation may require legal solutions that transcend the States geographies[7].

The term jurisdiction stems from the Latin *ius dicere* which translates as "speaking the law". In its widest sense, the jurisdiction of a State «may refer to its lawful power to act and hence to its power to decide whether and, if so, how to act, whether by legislative, executive, or judicial means»[8]. The concept of jurisdiction is closely related to the idea of sovereignty which entails the right of the State to prescribe the laws in force and to enforce those laws on its own territory[9] and represents the theoretical underpinning to the whole body of public international law[10].

Even if Professor Mann has pointed out that «although there exists abundant material on specific aspects of jurisdiction, not a single

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[7] D. BETHLEHEM, *The end of geography: the changing nature of the international system and the challenge to international law*, in European Journal of International Law, 2014, p. 9.

[8] See B. H. OXMAN, *Jurisdiction of States*, Max Planck Encyclopedia of Public International Law, 2007; F. A. MANN, *Studies in International law,* Oxford, 1973, p. 6, where the author states that «jurisdiction is concerned with the state's right regulation».

[9] F. A. MANN, *The doctrine of Jurisdiction in International Law*, 1964, p. 30, where he formulated that «jurisdiction is an aspect of sovereignty, it is coexistent with it, and indeed, incidental to but also limited by, the State's sovereignty»; I. BROWNLIE, *Principle of Public International law 3*, Oxford, 1998, p. 289; B. H. OXMAN, *Jurisdiction of States*, *cit.*, for whom «the principles of international law regarding jurisdiction of States reflect both sovereign independence (sovereignty) and the sovereign equality of States (States, Sovereign Equality) and increasingly the human rights of the affected individuals»; C. STAKER, *Jurisdiction*, in M. EVANS, *International Law*, Oxford, 2010, p. 320; S. BESSON, *Sovereignty*, Max Planck Encyclopedia of Public International Law, 2011.

[10] See S. GADŽO, *The Principle of 'Nexus' or 'Genuine link' as a Keystone of International income Tax Law: A Reappraisal*, in Intertax, 2018, p. 196; R. S. MARTHA, *The Jurisdiction to tax in International Law: Theory and Practice of legislative Fiscal Jurisdiction*, Boston, 1989, pp. 23-24.

monograph seems to have been devoted to the doctrine as a whole»[11] and such statement still seems to hold true, as an overarching study of the theory of jurisdiction is lacking[12], under the current public international law we can distinguish two main approaches that could be taken to the question of jurisdiction.

The first approach is represented by the Permanent Court of International Justice (PCIJ) in the 1927 *Lotus* case[13]. In its statement the PCJI, after having distinguished between enforcement and prescriptive jurisdiction[14], has set that the enforcement jurisdiction is based on the principle of territoriality: under international law, a State is not allowed to exercise its enforcement outside of its territory without specific permission derived from either international custom or from a convention[15]. Conversely, States could exercise their law-making powers outside of their region, in the absence of any international rules prohibiting them from doing so[16]. In other words, according to the

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[11] F. A. MANN, *The doctrine of Jurisdiction in International Law, cit.*, p. 23.

[12] See C. RYNGAERT, *Jurisdiction in International Law: United States and European Perspective*, Oxford, 2013, p. 1.

[13] Permanent Court of International Justice, *S. S. Lotus, France v. Turkey,* Judgement, 1927 PCIJ Series A no 10, ICGJ 248 (PCIJ 1927), 7 September 1927.

[14] Specifically, a State has unlimited prescriptive jurisdiction which means that the legislature can create, amend or repeal legislation covering any subject or any person, irrespective of the person's nationality or location. The ICJ stated that «in these circumstances all that can be required of a State is that it should not overstep the limits which international law places upon its jurisdiction; within these limits, its title to exercise jurisdiction rests in its sovereignty» (par. 47).

[15] «The first and foremost restriction imposes by international law upon a State is that – failing the existence of a permissive rule to the contrary – it may not exercise its power in any form in the territory of another State. In this sense jurisdiction is certainly territorial; it cannot be exercised by a State outside its territory except by virtue of a permissive ruled derived from international custom or from a convention» (par. 18b).

[16] See par. 46 and 47, «it does not, however, follow that international law prohibits a State from exercising jurisdiction in its own territory […]. Such view would only be tenable if international law contained a general prohibition to States to extend the application of their laws and the jurisdiction of their courts to persons, property and

Court, a State may always exercise its jurisdiction in the absence of any prohibition on its exercise.

Even some States continue to rely on it, as it is the only judgment of an international court directly relating to the issue of jurisdiction[17], *Lotus* judgment has been vehemently criticized in the doctrine for the discretion granted to States in the exercise of jurisdiction which can lead to an inflation of possible assertion of concurrent jurisdiction by different States[18].

Critics of *Lotus*, indeed, argue that general international law requires a qualifying connection being established between a State asserting a jurisdictional claim and the subject matter at hand. This

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acts outside their territory […]. But this is certainly not the case under international law as it stands at present […] ».

[17] P. J. KUIJPER, *The European Community and the US Pipeline Embargo: Comments on Comments*, in German Yearbook of International Law, 1984, where the Author stated that «insufficient research has been done so far to decide with any degree of certainty whether or not the *Lotus* decision has been set aside by subsequent developments in international customary law».

[18] L. REYDAMS, *Universal jurisdiction: International and Municipal Legal Perspectives*, Oxford, 2010, for whom «this discretion left to States by international law explains the great variety of rules which they have been able to adopt without objections or complaints on the part of other States; it is in order to remedy the difficulties resulting from such variety that efforts have been made for many years past, both in Europe and America, to prepare conventions the effect of which would be precisely to limit the discretion at present left to States in this respect by international law, thus making good the existing lacunae in respect of jurisdiction or removing the conflicting jurisdictions arising from the diversity of the principles adopted by the various States». See also F. A. MANN, *The doctrine of jurisdiction, cit.*, for whom *Lotus* countenances «a most unfortunate and retrograde theory» which «cannot claim to be good law»; R. HIGGINS, *Problem and Process: International Law and How we Use it*, Oxford, 1994, p. 77, «I do fell that one cannot read too much into a mere dictum of the Permanent Court. This is, another example of the futility of deciding law by reference to an unclear dictum of a court made long years ago in the face of utterly different circumstances. We have better ways of determining contemporary international law»; A. V. LOWE, *Blocking Extraterritorial jurisdiction the British Protection of Trading Interests Act*, in American Journal of International Law,1980, p. 75, who believes that it is «likely that the Court in the *Lotus* case only intended the presumption to apply in cases such as that then before it, where there is a clear connection with the forum»; J. VERHOEVEN, *Remarques critiques sur les loi (belges) du 16 juin 1993 et du 10 février 1999*, in J WOUTERS and H. PANKEN, *De Genocidewet in internationaal perspectief*, Brussel, 2002, p. 188.

requirement has been commonly described in terms of "sufficient", "close", "genuine" or "substantial" connection or link between a State's legal order and a given State of affairs[19].

States are both territorial units exercising sovereignty over a certain portion of the planet's surface and they are constituted by a number of human beings who are linked to it by the special bond of nationality. In this respect, according to such an approach, the main bases of jurisdiction accepted by international law are represented by the territorial and nationality principle[20].

The principle of territoriality, correctly, as the most often invoked basis of jurisdiction, implies that a State has jurisdiction over everything materializing in its territory[21]. However, it is worth noting that the exercise of territorial jurisdiction is far from straightforward in many cases, as human acts can be very complex phenomena with different aspects manifested in different States[22].

On the other hand, the principle of nationality (or personality) endowing a State with jurisdiction over its nationals, that is, the person linked to it by the bond of nationality. As verified for territoriality principle, also the principle of nationality is not always so linear. Indeed, it might be a person has dual or multiples nationalities and thus

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[19] See B. SIMMA – A. TH. MÜLLER, *Exercise and limits of jurisdiction*, in J. Crawford– M. KOSKENNIEMI, *The Cambridge Companion to International law,* Cambridge, 2012, p. 137; M. B. AKEHURST, *Jurisdiction in International Law*, in W. M. REISMAN, *Jurisdiction in International law*, London, 1999, p. 179.

[20] See B. SIMMA – A. TH. MÜLLER, *Exercise and limits, cit.,* p. 137.

[21] HL BUXBAUM, *Territory, Territoriality and the Resolution of Jurisdictional Conflict*, in American Journal of comparative Law, 2009, p. 632 «the factual links between particular conduct and a given territory, or between the effects of that conduct and a given territory, determined a state's lawmaking authority over the conduct»

[22] As illustrated by cross-border criminal offences, for instance, a State can base its jurisdiction either according to the link of conduct (*i.e.* subjective jurisdiction) or the link of the result (*i.e.* objective jurisdiction) realized in a State's territory.

falls within the ambit of personal jurisdiction of several States, opening the possibility of concurring, and competing, jurisdictional claims.

In addition to the principles of territoriality and nationality, it has long been recognized that specific interests of States are so essential that can be able to act against such traditional principles (*i.e.* the principle of territoriality and nationality) and qualify as sufficiently to prompt those State's jurisdiction[23]. Hence, jurisdiction cannot see as a «monolithic or one-size-fits-all»[24], as its main feature is represented by its malleability which is manifested with regard to the "genuine link" since its factors are various and also susceptible to the changes in the economic and political environment.

Consequently, in a globalized era, under international law perspective, jurisdiction is far from being something still strictly linked to the classical principles of territoriality and nationality, as what constitutes a sufficient jurisdictional connection varies depending on the problem at hand.

2. The definition of Tax Jurisdiction.

[23] C. RYNGAERT, *Jurisdiction in International Law, cit.* «link is not necessarily the territory, although it classically was. It can as well be one of the two other constituent elements of the definition of a State, namely its population or its sovereign authority. More generally, it may be submitted that a State may not exercise its jurisdiction when it has no legitimate interest in or when it is not affected by an activity […]»; M. D. RAMSEY, *Escaping international Comity*, in Iowa Law Review, 1997-1998, p. 920; A. JENNINGS, *Extraterritorial Jurisdiction and the United State Antitrust Laws,* in Maryland Journal of International Law, 1957, p. 152, where the Auhor pointed out that «it is reasonable to say […] that international law will permit a State to exercise extraterritorial jurisdiction provided that State's legitimate interests (legitimate that is to say be interests accepted in the common practice of States) are involved […]»; A. T. GUZMAN, *Choice of Law: New Foundations*, in The Georgetown Law Journal, 2001, p. 894, «when an activity has no effect on any person within a jurisdiction, that jurisdiction has no reason to regulate the activity».

[24] See B. SIMMA – A. TH. MÜLLER, *Exercise and limits of jurisdiction, cit.,* p. 147.

For years there were different schools of thought in tax literature about the content and the extent of State's tax jurisdiction. Indeed, four main theories were developed on the notion of tax jurisdiction: *i)* the realistic or empirical theory; *ii)* the ethical or retributive theory; *iii)* the contractual theory; *iv)* and, finally, the theory of sovereignty.

According to the "realistic" or "empirical" theory, jurisdiction is equivalent to physical power. Then, wherever an entity can exercise its physical power it has jurisdiction as a matter of law, including jurisdiction to tax[25]. This can lead to the conclusion that the justification of a State's taxing claim lies solely in the physical power over persons and property. Such argumentation, nevertheless, seems unconvincing, having in mind the fundamentals of international law[26].

The "ethical" or "retributive" theory, also known as "benefit theory", on the contrary, is based on the main idea that taxation is a return for benefits or advantages received from the State[27]. This implies

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[25] Such theory, in particular, has been stated in the most extreme form by E. STIMSON, *Jurisdiction & Power to Tax,* 1933, p. 111, where he explains that « the fundamental principle of jurisdiction is simple enough. Jurisdiction is physical power. A sovereign State has no physical power over persons and property outside its territory».

[26] J. MARTHA, *The jurisdiction to Tax, cit.*, p. 19, who stated that «this statement […] does not correspond to reality, because States do exercise physical power […] outside their territory without therefore gaining a right to tax; taxes are even prescribed where the State has no physical power». In the same way, see also J. BEALE, *A Treatise, cit.,* who affirmed that «the power of a sovereign to affect the rights of persons, whether by legislation, by executive decree, or judgment of a court, is called *jurisdiction*. As this has been described as a power, it might be thought that it rests in the last analysis on physical force, and that a sovereign's jurisdiction therefore depends on his puissance. This would be true if the creation of a legal right lay solely in a sovereign's will, and by a mere act of willing a sovereign could affect private rights. Not so, however. The creation of a legal right is an act of law; and law can act only in accordance with itself. The power of a sovereign, therefore, to affect legal rights, depends upon the law; and upon the law must be based all sovereign jurisdiction».

[27] The relevance of the benefit principle in the context of assigning tax jurisdiction was pointed out as early as 1892. See G. VAN SCHANZ, *Zur Frage der Steuerpflicht*, in *Finanzarchiv: Zeitschrift für das gesamte Finanzwesen*, Stuttgart: Mohr, 1892, p. 372, where the Author pointed out that «Jeder, der wirtschaftliche an die Gemeinschaft gekettet ist, d.h. jeder, dem aus der Erfüllung der Aufgaben des Gemeinwesens Vorteile erwarchsen, trägt zu den Lasten bei»; BRUINS, EINAUDI,

that a person who produce income, increases his individual faculty or possess capital benefits from the public expenses incurred by a State which enable him to produce income or to establish and preserve capital and should, therefore, also contribute to those expenses[28]. In its origin understanding, hence, at the basis of such theory was the assumption that there is an exchange relationship between the taxpayer and government[29].

This traditional understanding of the benefit principle has evolved towards more modern views where the correlation between the amount of the tax due and the value of the benefit is not considered anymore a key consideration.

According to the "expanded version of the traditional benefit principle" – which can be traced back to Adam Smith – consider that subjects of every State ought to contribute towards the support of the government in proportion to their ability to pay; that is in proportion to the revenue which they respectively enjoy under the protection of the State[30].

SELIGMAN and SIR JOSIAH STAMP, *Report on Double Taxation*, submitted to the Financial Committee, League Nations, Geneva, 5 April 1923, E. F. S., p. 18, who discussed the benefit principle as part of the faculty principle or the principle of the ability to pay: «so far as the benefits connected with the acquisition of wealth increase individual faculty, they constitute an element not to be neglected. The same is true of the benefits connected with the consumption side of faculty, where there is room even for a consideration of the cost to the government ion providing a proper environment which renders the consumption of wealth possible or agreeable […] ».

[28] C. C. M. KEMMEREN, *Source of income in Globalizing Economies: Overview of the Issues and a Plea for an Origin-Based Approach*, in Bulletin, 2006, pp. 431 – 432.

[29] J. M. DODGE, *Does the new benefit principle (or the partnership theory) of income taxation mandate an income tax at both. The individual and corporate levels?*, Florida State University College of Law, Public Law and Legal Theory, Working Paper, March 2005.

[30] J. M. DODGE, *op. cit.*, p. 399, for whom «the new benefit principle […] holds that the proper index for measuring the benefits received from government by an individual taxpayer is the taxpayer's economic well-being, that is, how well taxpayers do in the market economy, because government, by providing security, law and infrastructure (in the broad sense) enables the market economy»; A. Smith, *An inquiry into the nature and causes of the wealth of nations*, 1776

Second, the "partnership theory" or "economic" version of the benefit principle regards tax as share that governments are entitled to get from the profit of an enterprise like if they were partner or investor in exchange for contributing to the business by means of a public investment[31].

Third, according to the "entitlement theory", instead, a State would be entitled to tax profits originated within its borders insofar as it has economically contributed to the production of such profits and thus ought to be compensated for such contribution.

However, the main weakness of such theory, in its different understanding, appears to be the fact that it does not advance with the nature of the inquiry since it is rooted in a particular view on the philosophical origin and essence of the State [32].

The "contractual" theory, instead, advocates the idea that taxation is the payment for goods and services received from the taxing State on the basis of a (presumed) contract between the holder of fiscal jurisdiction and the fiscal subject[33]. However, such theory has been explicitly rejected by the Appellate Division of the State of New York, which held in *Colorado v. Harbeck*[34] that a State cannot file a suit for the enforcement of its revenue laws on the basis that a tax is due as a

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[31] J. M. DODGE, *Does the new benefit principle (or the partnership theory) cit.*, p. 444 et seq., according to whom this theory «is based on the notion that government should share in national income […] because government, by supplying infrastructure in the broad sense (physical infrastructure, national and domestic security, a capitalism enabling legal system and regulatory structure), "earns" a share of GDP".

[32] See A. R. ALBRECHT, *The Taxation of Aliens under International Law*, in 29 Brit. Y.B. Int'l L. 145, 1954, p. 148.

[33] See B. GRIZIOTTI, *L'Imposition Fiscale des Entrangers*, RdC 1, 1926, pp. 18 – 19. The concept of retribution, furthermore, is the "fiscal face" of the "contract social" doctrine envisaged by political philosophers like Locke and Rousseau, and which counts Hobbes among its supporters, as exemplified in the well-known phrase «every man payeth equally for what he useth». In this respect, see H. Hoftsra, *Inleidign tot het Nederlands Belastingrecht*, 1972, p. 85; T. Hobbes, *Leviathan*, 1651, p. 181.

[34] See 189 N.Y. A.D. 865, 1921.

contractual obligation. Indeed, as pointed out by the main doctrine, this failure is basically due to the fact that the most fundamental aspect of the concept of contract is not present in tax relations: there is, in fact, no *consensus* at the base of the tax relationship between the parties[35].

Finally, the "sovereignty" theory considers that taxation is a mere exercise of jurisdiction, while jurisdiction is an attribute of sovereignty[36]. In particular, the main view of such theory, which was adhered by Martha[37], can be summarized in the attractive statement of Albrecht, for whom the right to tax «is justified in international law essentially as an attribute of statehood or sovereignty, limited by international law […] and exercised in varying manners according to the policies of the states possesses of it»[38].

Of these four theories, only the "sovereignty" and, to a limited extent, the "retributive" theory appear to have found some practical applications.

Therefore, it can be said that, in general, jurisdiction to tax is an essential attribute of sovereignty. It represents the right or rather the competence of States under international law to create internal law (the prescriptive or legislative jurisdiction) and also the right to take executive action pursuant to or consequent to the making of law (executive jurisdiction) and/or upon decisions of courts (adjudicative

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[35] See R. S. J. MARTHA, *The Jurisdiction, cit.*, p. 21; K. VAN RAAD, *Non Discrimination in International Tax Law,* Deventer, 1986, p. 21, where, in the note eleven, he properly pointed out that «whereas this theory is satisfactory in cases in which an alien decides to undertake actions taxable in that states, it becomes harder to accept in case of, e. g., inheritance, where no voluntary action is taken».

[36] This theory is extensively adhered by A. R. ALBRECHT, *The Taxation of Aliens, cit.*, p. 148; E. ALLIX, *La Condition des Entrangers, cit.,* p. 550, for whom fiscal jurisdiction id thus based on the political and economic allegiance. It seems that this allegiance is what he calls sovereignty.

[37] See R. S. J. MARTHA, *The jurisdiction to Tax, cit.*, p. 23.

[38] See A. R. ALBRECHT, *The Taxation of Aliens, cit.*, p. 148.

jurisdiction)[39]. As subjects of international law, moreover, States - although the different opinions among scholars[40] - have to respect the limits which come from the general international law, particularly with regards to regulation of cross-border income taxation.

More precisely, as noted in the previous paragraphs (*supra,* § 1), the general international law requires, in order to legitimate State's jurisdiction, a qualifying connection or *nexus* between the State and the

[39] See R. S. J. MARTHA, *The jurisdiction to Tax, cit.*, p. 62; P. VERLOREN VAN THEMAAT, *Internationaal Belastingrecht,* 1946, p. 38; F. GEYLER, *Steuerliche Mehrfachbelasting und ihre normative Abwehr*, Bd. I., *Mehrfachbesteuerung in Rechtssinn*, 1931, S. BILLE, *La Soveraineté Fiscale de Etats et l'integration Economique internationale*, in II *Publication of the Bureu International de Documentation Fiscale*, Amsterdam, 1958; M. CHRÉTIEN, *L'exercice de la function legislative fiscal en droit de gens*, in *La Technique de droit public. Tome 2. Etudes en l'honneur de Georges Scells*, Paris, 1950 who in turn has been inspired by Scelles. In this respect, see G. SCELLES, *2 Precis de Droit International Public*, Paris, 1934, p. 319.

[40] The basis for this theory of the logical necessity of international law and thus also for international law in relation to taxation can be found in a monumental article by E. ZITTELMAN, *Geltungsbereich und Anwendungsbereich der gesetze*, in A. MARCUS – E. WEBERS VERLAG, *Festgabe der Bonner Juristischen Fakultät für Karl Bergbohm zum 70*, 1919, pp. 207 – 241, where he furnishes a theory of the determination of the spheres of validity of national legal orders; K. FRIEDERICH, *Gibt es eine Völkerrechtliche für die hohe der Besteuerung?,* Köln, 1972, p. 16; A. VERDROSS, *Derecho Internacional Publico*, Madrid, 1975, p. 223, where he notes that «because of international law regulates the coexistence of States, it will primarily have to delimit the spheres of validity of the various national orders; F. A. MANN, *The Doctrine of Jurisdiction, cit.,* p. 15, for whom jurisdiction «is concerned with what has been described as one of the fundamental functions of public international law, viz. the function of regulating and delimiting the respective competences of States». A position amounting to a complete negation of any role of international law in matters of taxation was taken by M. NORR, *Jurisdiction to tax and International Income,* in Tax Law Review, 1962, p. 17, who emphatically asserted that «no rules of international law exist to limit the extent of any country's tax jurisdiction». Indeed, according to the same Author, «within its own legal framework a country is free to adopt whatever rules of tax jurisdiction it chooses»; A. KENECHTLE, *Basic Problems in International Fiscal Law*, London, 1979, where he acknowledges in part the role played by international law in matters of taxation but, at the same time, one misconception is highlighted, which is the fact that «tax (or fiscal) jurisdiction, i.e. sovereignty in the sphere of fiscal law, means "the non-derivative sovereignty of a State"»; J. BEALE, *A Treatise on the Conflict of Laws,* 1935, p. 274, where he contends in effect that «the determination of jurisdiction […] is with us a question of our own law, and not a generally accepted doctrine of the law of nations».

tax subject or object[41]. A particular government has no legal justification and no jurisdiction to tax unless there is a qualifying connection between the State wishing to exercise its taxing powers and a particular set of facts relevant for taxation[42]. Only if this connection is verified, the exercise of tax-imposing and tax-collection of the State shall be lawful[43].

Tax literature usually divides the connecting factors amounting to the income tax *nexus* into two groups, depending on whether the taxpayer owes "political" or "economic allegiance" to the country[44]. Nationality and fiscal residence of a person are typical factors symbolizing his "political allegiance", while the location of activity giving rise to income is a typical factor symbolizing his "economic allegiance"[45].

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[41] Cf. A. H. QURESHI, *The Public International Law of Taxation: Text, Cases and Materials*, London, 1994, p. 24.

The *nexus* principle, in particular, has attained the status of international custom, since it found in relevant norms of tax treaty law and domestic laws. In general, concerning the main features of a customary international law, see M. E. VILLIGER, *Customary International Law and Treaties: A manual on the Theory and Practice of the Interrelation of Sources*, The Hague/Boston/London,1997.

[42] See S. GADŽO, *The Principle of 'Nexus', cit.*, p. 199.

[43] See C. C. M. KEMMEREN, *Source of income in Globalizing Economies, op. cit.*, p. 431.

[44] See K. VOGEL, *Klaus Vogel on Double Taxation Convention*, 1997, p. 11 for whom «current international law permits taxation of foreign economic transactions when a sufficient connection exists between the taxpayer and the taxing State»; K. VAN RAAD, *Non-Discrimination, cit.*, p. 21. With specific reference to the "economic allegiance" theory, it is worth noting that such theory was advanced by Schanz and further developed by Bruins, Einaudi, Seligman and Stamp. See, indeed, G. VAN SCHANZ, *Zur Frage der Steuerpflicht op. cit.*, p. 356; E. ALLIX, *La Condition des Entrangers au Point de Vue Fiscal,*61 RdC, Boston, 1937, pp. 541, 553-554; G. CREZELIUS, *Beschränkte Steuerpflicht und Gestaltungsmißbrauch, Der betrieb*, 1984, p. 533; H. J. WUSTER, *Die ausländische Basisgesellschaft, stuerrechtliche Qualifikation und finanzielle Vorteilhaftigkeit,* Frankfurt, 1984, Sec. 6.1.1.; B. GROSSEFELD, *Basisgesellschaften im internationalen Steuerrecht,* Tübingen, 1974, pp. 171-173.

[45] D. L. Forst, *The Continuing Vitality of Source-Based Taxation in Electronic Age*, Tax Notes International, 1997, p. 1455, for whom economic allegiance was preferred

The following sections, hence, is going to explore the two most significant connecting factors for the identification of a jurisdiction to tax, such as the residence and the source principle.

3. Residence Jurisdiction.

3.1. The right to tax Individuals.

The concept of residence is a cornerstone in international taxation.

In order to define individual and corporate residence jurisdiction, countries often rely on both "formal" test and "facts-and-circumstances" test[46].

Such kind of tests, in particular, differ depending on whether the person is a natural person (an individual) or an entity, such as a corporation.

Starting from the perspective of individuals, briefly, it is worth noting that under "facts-and-circumstances" test the most significant manifestation of relevant connection with a country is given by the maintenance in such country of a dwelling that is available for the use of the individual and his or her family.[47] Some countries, furthermore,

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over political allegiance or citizenship because of the prevailing belief that in modern times -when capital and individuals are mobile – persons often have few, if any, ties to their home country. By contrast, it was thought that the country in which a person had an economic interest the right to tax income.

[46] See L. JINYAN, *International taxation in the age of electronic commerce: a comparative study*, Toronto, 2003, p. 83.

[47] Cf. B. J. ARNOLD, *International Tax Primer*, s ed., United Kingdom, 2015, p. 17, where he states that for the facts-and-circumstances test, the following factors could be relevant, such as: «*i)* the location of the individual's income-producing activities; *ii)* the location of the individual's family; *iii)* the social ties of the individual to the country (e.g. bank accounts, club membership driver's license, etc); *iv)* the

use an arbitrary test, which may be used as a supplement to the facts-and-circumstances test and it is often tied to the number of the days spent in a country in any given period or consecutive periods. In particular, a common presumption, according to the latter test, is that an individual who is present in a country for at least 183 days during the year is a resident for that year. Nevertheless, it seems clear that such kind of test is extremely difficult to apply, especially with regard to those situations in which individuals are frequently entering and leaving the country without border checks, as occurs in countries of the European Union.

Finally, based on the formal test individuals with a citizenship status or perhaps the right to work in a country shall be considered tax resident. Such kind of approach is limited implemented; indeed, nowadays, it is applied merely by United States and Eritrea which bases its residence test on the citizenship[48].

3.2. The right to Tax Corporations.

As well known, corporations are taxed as separate entities[49]. As such, a corporation's residence must be established for tax purposes.

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individual's visa and immigration status; and, *v)* the individual's actual physical presence in the country».

[48] Emblematic, in this respect, was the frequently cited case of *Cook v. Tait* (New York *ex rel.* Cohn v. Graves, 300 U.S. 308, 1937), p. 56, where the U. S. Supreme Court held that the United States had the power to tax the income that a U. S. citizen derived from property located in Mexico, even though the taxpayer was both a permanent resident and domiciliary of Mexico. In so holding, the U. S. Supreme Court affirmed the «principle that the government, by its very nature, benefits the citizen and his property wherever found"; indeed, «the basis of the power to tax» depends on the relationship of the citizen to the United States. Then, the government has the power to tax citizen on his income regardless of his foreign domicile or the foreign source of his income.

[49] Cf. R. M. BIRD, *Why Tax Corporations?,* Working Paper prepared for the *Technical Committee on Business Taxation*, Ottawa, Department of Finance, 1996, where he summarizes the pros and cons of taxing corporations. In particular, the Author states

The residence of a corporation is not tied to the residence of its shareholders[50] or the place where a corporation carries out its economic activities.

As pointed out in the previous paragraph, the identification of the residence also for an entity, as well as individuals, could be based on both a formal test and a "facts-and-circumstances" test.

On one hand, according to a formal approach, tax residence for entities is determined with regard to the country of incorporation. Hence, it is concerned with the legal form of the incorporation process. Such kind of approach provides simplicity and certainty to the tax authorities and corporations.

On the other hand, based on the second kind of test, tax residence could be identified with regard to the "place of effective management" which, nevertheless, is not a single and well-defined concept. Consequently, in the absence of any specific definition of "place of management", many commentators have been influenced by concepts used in domestic tax law residence rules, such as "central management and control" and "place of management"[51].

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that economist generally do no to favor taxing corporations, whereas the public generally believes that corporate taxes are among the best of all taxes. He suggests that Canada, like every other country, may impose taxes on corporations « (1) because it is desirable to do so, (2) because it is necessary to do so to achieve certain objectives, (3) because it is convenient to do so, or for some combination of these reasons».

[50] Indeed, this test is difficult to administer. See, in this regard, B. J. ARNOLD, *International Tax Primer, cit.*, p. 20, where the Author highlighted that «however, the application of the shareholders test would present serious problems when residents of more than one country hold large blocks of stock in the company or when the stock of the company is publicly traded and the identity of the shareholders is difficult to determine. Taking this view to its logical conclusion, in effect, corporations would have to be taxed like partnership, with each country taxing the share of the corporate income attributable to its resident shareholders».

[51] Cf. A. R. LANTHIER, *The Concept of Residence*, in B. ARNOLD – J. SASSEVILLE, *Special Seminar on Canadian Tax Treaties: Policy and Practice*, Kingston, 2001, pp. 131-132; L. A. MABRY, *Multinational Corporations and U.S. Technology Policy: Rethinking the Concept of Corporate Nationality*, in the Georgetown Law Journal,

For instance, for some countries, such as in Australia[52], the courts use the concept of "central management and control" to refer to the highest level of management as provided by the board of directors[53]. In other countries[54], instead, such criterion refers to where the actual business operations were located, notwithstanding that the directors'

1999, pp. 563-564; D. R. TILLINGHAST, *A Matter of Definition: Foreign and Domestic Taxpayers,* in International Tax & Business, 1984, pp. 239-72.

[52] See Section (6) of Australia's Income Tax Assessment Act 1936 which provides for that a company is a resident of Australia if: *i)* it is incorporated in Australia; *ii)* or it carries on business in Australia and is centrally managed and controlled in Australia; *iii)* or it carries on business in Australia and its voting power is controlled by shareholders resident in Australia.

[53] In this regard, a leading case establishing this was *De Beers Consolidated Gold Mines (1906) Ac 455*. In that case a company registered in South Africa worked diamond mines, had its Head Office and held its general meetings of shareholders all in South Africa. Its Directors held meetings both in South Africa and in the United Kingdom, but the Directors' meetings held in the United Kingdom were found to be those where a real control of the company was exercised. In particular, the company's residence would be determined by looking at the relative strategic importance to the company of decisions taken in each place. Indeed, the Court stated that «the Directors' Meeting in London are the meetings where the real control is always exercised in practically all the important business of the Company except the mining operations. London has always controlled the negotiation of the contracts with the Diamond Syndicates, has determined policy in the disposal of diamonds and other assets, the working and development of mines, the application of profits and the appointment of directors». Various Canadian cases have also relied on the *De Beers* case in determining the location of central management and control and the factors examined and considered are the following: place of incorporation; place of residence of shareholders and directors; where the business operations take place; where financial dealings of the company occurred; and where the seal and minute books of the company were kept. Regarding this latter statement, see *Birmount Holdings Ltd v R*, 1978, CTC 358, *Tara Exploration & Development Co Ltd v MNR*, 1970, CTC 557; *Capitol Life Insurance Co v R*, 1984, CTC 141.

[54] This conclusion was reached, for instance, in the case of *North Australian Pastoral Co Ltd v* FCT, 1946, 71 CLR 623, where the taxpayer company was regarded to be resident of the Northern Territory where the actual business operation was located. Indeed, according to the court: first, the company's whole undertaking, being, incorporation, registered office, public office and full books of account were located in Northern Territory; secondly, the directors met in Brisbane, Queensland, as a matter of convenience; thirdly, the manager of the property in the Territory took the responsibility for the success or failure of the venture; and, finally, visits to the property by the directors and consultation with the manager were acknowledge to be of importance in reaching policy decisions.

meetings are held in other State or to the place where the manager directors are located[55].

In contrast, according to the main doctrine, the "place of management", which is adopted by a significant number of treaty countries, is similar to that of "place of management" used under the German domestic law[56]. In this perspective, «what is decisive is not the place where the management directives take effect but rather the place where they are given»; namely the center of top-level management, which is the place where a person authorized to represent the company carries on his business managing activities [57].

It is worth noting that the OECD Model Convention gives preference to the "place of effective management". Indeed, according to the Article 4(3) of the OECD Model Tax Convention, which deals with the circumstances that legal entities have their residence in two countries, a corporation is «deemed to be a resident only of the State in which its place effective management is situated». Specifically, paragraph 24 of the Commentary on Article 4 states that the "place of effective management" «is the place where key management and commercial decisions that are necessary for the conduct of the enterprise's business are in substance made. The place of effective management will ordinarily be where the most senior person or group of persons […] makes its decisions, the place where the actions to be taken by the enterprise as a whole are determined […] ». In other words,

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[55] See *Malayan Shipping Co Ltd v FC of T,* 1946, 71 CLR 156, where the court held that the company was resident in Australia because the managing director exercise from Australia complete management and control over the business operations of the company, notwithstanding that the trading operations were conducted abroad.

[56] According to the German case law, indeed, a place of management is regarded as the place where the management's important policies are actually made.

[57] Cf. K. VOGEL, *Double Taxation Conventions*, 3rd edition, The Netherlands, 1997, p. 262.

the OECD reinforces the idea that the determination of a place of management is a question of fact.

However, it is clear that the "place of management" is less certain compared with the "place of incorporation" and more easily exploited for tax avoidance reasons, as it allows corporations to detach the place of residence from the place where profits are generated or realized.

4. Source Jurisdiction.

By customary international law, the source State should have the primary right to tax. This implies that the country in which income is sourced has the right to tax and that the state of residence has an obligation to eliminate double taxation of that income.

According to the source principle, a State has the power to tax the income of an individual or entity based only on the fact that the income has its source in the State and without regard to the residence of the person with the right to such income[58]. Source-based taxation generally finds its justification in the already mentioned "benefit theory" (*supra* § 2) [59], on basis of which taxpayers should pay taxes according to the

[58] See W. HALLERSTEIN, *Jurisdiction to Tax Income and Consumption in the New Economy: A Theoratical and Comparative Perspective*, in Georgia Law Review, 2003, p. 8.

[59] Cf. K. VOGEL, *Worldwide vs. Source Taxation of Income – A Review and Re-Evaluation of Arguments (Part I)*, Intertax, 1988, p. 398, where he argued that, as it is usually the source country that has provided most or all of the benefits relevant for the production of income and therefore incurred the costs of providing these benefits, exclusive taxation should occur in the source country as compensation to the government bearing these costs. Specifically, the Author pointed out that some of the benefits traditionally provided by source countries include «the provision of infrastructure or education, as well as more specific government policies such as keeping the exchange rate stable or interest rates low». Moreover, he noted that even if Schanz showed that both the residence and the source countries could assert a claim to tax on this basis, he highlighted that anyway the source country's claim was greater than that of the residence country. Specifically, Schanz suggested that the source State should levy three fourths of the tax that it would ordinarily levy on residents and that

costs caused to the government of a country on the benefit derived from the use of infrastructure of such country.

Like the concept of residence for tax purposes also the concept of "source jurisdiction" has not a single meaning[60]. Under both domestic law and treaties, indeed, income is categorized with different source rules designed for each category: for instance, it is referred to as the State in which tangible or intangible property in question is located; or the State whose laws govern the contract[61]; or with which the identity of the payer is linked; or in which the payer is located; or, finally, from which the payment was made or which bears the expenses[62].

The OECD, in particular, provides a mixture of implicit source rules and rules that function effectively like source rules for different kind of income. Indeed, for instance, under Article 11 (4) of the OECD Model Convention, interest income is taxable by the country in which the payer is resident, while Article 6 enshrines that the income derived from immovable properties is taxable by the country where the immovable property is located.

Moreover, as it will be better explained in the next paragraph, according to Article 7 business profits derived by a resident of one

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the residence State should levy one fourth of the tax it would ordinarily levy on the domestic-source income of non-residents; D. PINTO, *The Need to Reconceptualize the Permanent Establishment Threshold*, 18th Annual Conference of the Australian Tax Teachers'Association, 30 January 2006, Australia; Id., *Exclusive Source or Residence-Based-Taxation – Is a New and Simpler World Tax Order Possible?*, Bulletin For International Taxation, 2007, p. 288.

[60] E. C. C. M. KEMMEREN, *Source of Income, cit.*, p. 432, in which, he refers to the concept of "source" as «a motley collection of justifications».

[61] R. S. J. MARTHA, *The Jurisdiction, cit.*, p. 109; D. L. FORST, *The Continuing Vitality of Sourced-Based Taxation in the Electronic Age*, in Taxes Notes International, 1997, p. 1455; J. K. SWEET, *Formulating International Tax Laws in the Age of Electronic Commerce: The possible Ascendancy of Residence-Based Taxation in an Era of Eroding Traditional Income Tax Principles*, in University of Pennsylvania Law Review, 1998, p. 1949.

[62] See, H. W. ENDRISS, *Wohnsitz – order Ursprungprinzip? cit.,* pp. 80-81.

contracting State are taxable by the other contracting State only if the resident carries on business through a permanent establishment (PE) located in that other State and the profits are attributable to the PE.

Despite such multitude of different meanings, however, it is worth noting that these different meanings appear to have a common theme which is the circumstance that taxation is linked with the utilization of the production factors of labor or capital[63] within the territory where these factors are exploited. In other words, the source principle requires a certain minimum nexus to the territory of the source State[64]. Prof. Vogel, indeed, states that source jurisdiction belongs «to the state that is in some way or other connected to the production of the income in question, to the state where the value is added to a good»[65].

In other words, jurisdiction to tax income on the basis of source principle is conferred by the relationship of the State to the property or activities that produce that income, which is separate in concept from the place where the producer resides[66]. Once such a relationship is established, the State possesses the power to tax the income attributable

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[63] See Profs. BRUINS, EINAUDI, SELIGMAN and SIR JOSIAH STAMP, *Report on Double Taxation*, *op. cit.,* which represents the historical basis for the factors used in determining source jurisdiction; E.C.C. M. KEMMEREN, *Source of Income, cit.*, p. 431, in which the «mere political allegiance is, in the author's view, an insufficient basis for tax jurisdiction with respect to the *production* of income and the *possession* of capital because political allegiance does not *produce* income, nor does it establish or preserve capital».

[64] Cf. S. A. STEVENS, *The duty of Countries and Enterprises to Pay Their fair Share,* Intertax, 2014 p.703.

[65] See K. VOGEL, *Worldwide vs. Source Taxation of Income – A Review and Re-Evaluation of Arguments (Part I)*, *op. cit.*, p. 217.

[66] Cf. P. B. MUSGRAVE & R. A. MUSGRAVE*, Inter-Nation Equity,* in *Modern Fiscal Issue: Essays in Honor of Carl S. Shop*, Toronto, 1972, p. 71; D. PINTO, *E-commerce and Source-based Income Taxation*, in Online Books IBFD, 2003, p.36.

to those activities regardless of the residence of the person with the right to such income[67].

4.1. The concept of Permanent Establishment.

4.1.1. The Permanent Establishment's discipline and the BEPS impacts.

The concept of a permanent establishment (PE), as enshrined in Article 5 of the OECD Model[68], is universally considered to be the decisive threshold in determining whether or not the source State has the right to tax business income generated by a non-resident taxpayer[69].

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[67] It is worth highlighting that, according to another approach, the source principle should be interpreted based on the principle of origin. Taxation based on such latter principle justifies a State taxing income that is created within the territory of that State and the intellectual element is the key component in the production of such income. In this sense, see E.C.C.M. KEMMEREN, *Source of Income in Globalizing Economies, cit.,* p. 434; ; Profs. BRUINS, EINAUDI, SELIGMAN and SIR JOSIAH STAMP, *Report on Double Taxation, cit.,* where Bruins states that «the origin of income is where the intellectual element among the assets is to be found […] The yield or acquisition is due […] not only to the particular thing but to the human relations which may help creating yield»; D. L. FORST, *The Continuing Vitality of Sourced-Based Taxation in the Electronic Age*, in Tax Notes International, 1997, p. 1455; E. C. C. M. KEMMEREN, *Principle of Origin in Tax Conventions, A Rethinking of Models*, Tilburg, 2001, pp. 37-39.

[68] Most recently, *OECD Model Tax Convention on Income and on Capital*, 15 July 2014, Models IBFD. Moreover, there is also another model convention that is used in the international tax world, namely the United Nations Model Double Convention between developed and Developing Countries, Article 5, 2011, Models IBFD (UN Model), which use the OECD Model as a basis to define the status of PE, even if it introduces some amendments to the OECD text.

[69] Cf. B. J. ARNOLD, *International Tax Primer*, *op. cit.,* p. 74, where he explained that «there are several reasons for the establishment of a threshold requirement for the taxation of nonresidents. First, serious compliance and enforcement problems arise when nonresidents are taxable on all domestic source income […]. Second, […] few countries have detailed source rules; as a result, a threshold requirement can provide more certainty for nonresidents as to when they become subject to tax by a country. Third, requiring nonresidents to file tax returns and pay tax on relatively small

The general meaning of such provision, indeed, is to determine the right of one contracting State (the source State) to tax the profits of an entity of another contracting State (the residence State): only if the income generating business activities reach a certain level of physical and temporal permanent can the source State tax such income. As such, the PE is not a legal entity in the source State, but it can be considered an "extension" of an entity legally existing in the residence State[70]. Consequently, transactions between the PE and the rest of the enterprise do not legally exist[71].

The term "permanent establishment", specifically, as provided for by Article 5, represents a "fixed place" of business through which the business of an enterprise is wholly or partly carried on. According to the Commentary on Article 5, such "fixed place" must be fixed with a certain degree of permanence and the business of the enterprise must be carried on through the fixed place of business.

For long time the discipline of PE have been a key in dealing with the avoidance of double taxation situations. Nevertheless, the PE status became in the last years also a tool by means of which enterprises have reduced their tax expenses.

In order to prevent such form of abuse, which allowed multinationals enterprises (MNE) to minimize their tax burdens, the OECD, as part of the Action Plan of 2013[72], adopted, in 2015, the Action 7 aimed to

amounts of income is likely to discourage cross-border trade and investment or result in nonresidents ignoring their tax obligations».

[70] See J. F. DUTRIEZ, *Attribution of Profits to a Permanent Establishment of a Company Engaged on Online Sales of Goods through a Local Warehouse,* International Transfer Pricing Journal, 2018, p. 186; D. W. BLUM, *Permanent Establishments and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – The Nexus Criterion Redefined?*, Bull. Intl. Taxn., 2015, p. 315.

[71] Cf. Para. 25 OECD Model: Commentary on Article 7, 2014.

[72] OECD, *Addressing Base Erosion and Profit Shifting (BEPS)*, 2013, International Organizations' Documentation IBFD which, in general, with its fifteen Actions aims

prevent the artificial avoidance of the PE's discipline[73]. The purpose of such Action, indeed, is to give guidance on fighting the aggressive tax planning used by MNE with the specific purpose to circumvent the PE definition through the use of agency or commissionaire arrangements or specific exceptions, such as the "preparatory" and "auxiliary" one[74]. The core changes proposed by the OECD, indeed, focus on: *i)* strengthening the «dependent agent» PE rule; *ii)* reducing the scope of the exceptions list; *iii)* adding an anti-fragmentation rule

As result of Action 7, the new formulation of Article 5 of the OECD Model Convention, with particular regard to the revised exemption list and the anti-fragmentation rule, provides in its paragraph (4) that the exceptions or combination thereof are restricted to activities of a "preparatory" or "auxiliary" nature. The goal behind such disposition is to ensure that when an enterprise 'activities in a source country are not important enough, which means that such activities not substantially contributing to the activity of the enterprise, they will not give rise to a PE in that country. In other words, the decisive criterion would be whether what is performed at a fixed place of business forms an essential and significant part of the core business of the enterprise as a whole [75].

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to target aggressive tax planning strategies which have the effect of shifting profits from high tax jurisdictions to low tax jurisdictions.

[73] Cf. OECD, *Preventing Artificial Avoidance of Permanent Establishment Status* - Action 7: *Final Report*.

[74] See OECD, C. LAM, *BEPS Action7: Hoe the OECD's proposals to redefine a PE could affect multinationals, Global Tax News,* DLA Piper, 4 Feb. 2016.

[75] Para. 4.24 OECD Model: Commentary on Article 5, 2014. Cf. D. AVOLIO, *Stabile organizzazione e attività preparatorie e ausiliarie: cosa cambia per le imprese con il BEPS,* Il Fisco, 2016, p. 1348. For a deeper analysis concerning the impact of the Action 7, see D. AVOLIO – D. SENCAR, *Stabile organizzazione e* Action *7 del progetto BEPS dell'OCSE*, in S. MAYR – B. SANTACROCE, *La stabile organizzazione delle imprese industriali e commerciali*, Milano, 2016.

Concerning the new "anti-fragmentation" rule, the intent of such addition is, instead, to prevent the use the discipline of permanent establishment to split up the business activities carried on by the same enterprise or closely related enterprises in the same country into smaller pieces that would not meet the PE threshold as stated by Article 5 (4), and therefore would be exempt because they would be considered to be of preparatory or auxiliary nature. The *ratio* of such provision is, on one hand, that enterprise should not fragment complementary functions that constitute cohesive business operations; on the other hand, an enterprise should not fragment complementary functions that constitute cohesive business operations between related parties or in multiple places of business in a country.

Specifically, the new formulation of Article 5 (4) should help to stop such trend, as all activities of the enterprise in a particular country will be looked at on a combined basis to determine the overall nature of the activities compared to the activity of the enterprise as a whole[76].

4.1.2. The attribution of Profits to a Permanent Establishment.

Assuming the existence of a PE, Article 7 of the OECD Model and its commentary specify guidance on how to share profits resulting from the presence of a PE between the contracting States.

The concept of allocation of profits to a PE was already introduced in work performed by the League of Nations at the end of

[76] Cf. T. IZZO – C. MCCORMICK &M. REILLY, *A More Subjective Permanent Establishment Standard*, Daily Tax Report, Bloomberg 2016.

the 1920s[77]. Even the concerning discipline has been modified since its adoption, it was always included in treaties and the latest version is now established in Article 7 of the OECD Model[78].

According to such Article, whereby the residence State has the exclusive right to tax the profits obtained by an enterprise through the development of economic activities abroad, except when a PE is established in the source State, the profits in respect of which may be taxed by the latter State[79].

The attribution of profits to a PE, as provided by the second paragraph of the discussing Article, introduces a relationship with the OECD Transfer Pricing Guidelines for Multinationals Enterprises and Tax Administrations (OECD Guidelines), enshrining that such attribution should be done on the basis of the so-called "authorized OECD approach" (AOA). This means that the profits are attributed to a PE are the profits the PE would have earned at arm's length[80], if it was a separate and independent entity enterprise engaged in the same or similar activities under the same or similar conditions, considering the functions performed, asset used and risks assumed by the enterprise through the PE and the other parts of the enterprise.

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[77] L. NOUEL, *The New article 7 of the OECD Model Tax convention: The End of the Road?*, Bull. Intl. Taxn., 2011, p. 5, where he pointed out that «according to the 1927 draft, income from industrial, commercial or agricultural undertakings were taxable only in the state where the persons controlling such undertaking had a PE. In the case of multiple PEs, the taxing right was determined by apportioning the income of the various Pes according to their accounts. If there were no such accounts, the draft indicated that the competent authorities of the two contracting states were required to come to an arrangement as to the rules of income apportionment».

[78] Art. 7 *OECD Model* and *OECD Model: Commentary on Article 7*, 2014.

[79] Art. 7 (1) OECD Model enshrines that «profits of an enterprise of a Contracting State shall be taxable only in that State unless the enterprise carries on business in the other Contracting State through a permanent establishment situated therein. If the enterprise carries on business as aforesaid, the profits that are attributable to the permanent establishment in accordance with the provision of paragraph 2 may be taxed in that other State».

[80] Art. 9 of the OECD Model Convention, 2014.

Similar rule, then, is based on a fiction that PEs are independent entities and requires two steps: the first step determines the activities and functions of the assumed separate and independent enterprise; the second step, on the contrary, focuses on the determination of the profits attributable to this enterprise based on a comparability analysis[81] .

With specific reference to the first step, it is worth noting that as the PE is not a legal entity separate from the enterprise and therefore there are no legal contracts that could help define the main activities and responsibilities, a detailed review of the functions carried out by the latter has to be performed[82].

Based on what has been established in the first and second steps, finally, the most appropriate methodology has to be chosen in order to determine the arm's length price of all activities that have been assigned to the PE and, therefore, the profit that the PE would have earned if it was a separate and independent enterprise.

5. The crisis of the traditional models of connection.

From the analysis carried out, it can be noticed that both source-based taxation, and the residence-based taxation are grounded in some variant on the territory in that either require a nexus with the territory of which it resides or generates profit[83].

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[81] OECD, *2010 Report on Attribution of Profits to Permanent Establishments,* 2010, at part I.

[82] Id., at part 1, B-5.

[83] See A. T'NG, *The Modern Marketplace, the Rise of Intangibles and Transfer Pricing*, Intertax, 2016, p. 415. For a deeper analysis, cf. A. BECKER, *The Principle of Territoriality and Corporate Income Taxation, Part. 1,* Bull. Intl. Taxn. 5, 2016, p. 191.

Nevertheless, nowadays such framework seems to bound to fail in the modern marketplace.

Current multinationals, indeed, are able to operate in a multitude of territories without the need to establish a physical presence in such areas. The traditional concepts - on which the source-based jurisdiction is based on - that factors of production such as labor, raw materials, land, and capital were largely immobile are made untrue by a globalized economy.

Internet-based companies have proven to be increasingly capable of deriving income from clients throughout the world while maintaining a limited or no-presence in the countries from which the payment is made. In other words, in the context of the current multi-jurisdictional supply chains of multinationals, the link to the territory of production seems anachronistic and impractical.

In this context, after a reenactment of the main steps achieved at international and European level and their relevant weakness, the work largely will aim to contribute to the current and complex debate concerning the role played by the new concept of "value creation", since it has identified by the BEPS Project, in the context of digital economy, not only as the benchmark for the attribution of profits for the application of the existing corporate income tax, but also as a fundamental reason for the invention of a new taxable item[84].

[84] OECD/G20 *Action 1 Final Report 2015 – Addressing the Tax Challenges of the Digital Economy*, OECD, 2015.

Chapter III –

The Localization of Cross-Border Income according to the Standard of "Value Creation" in a post-BEPS system

TABLE OF CONTENTS: 1. Value Creation" according to the economic theories; 2. "Value Creation" within the international tax system; 2.1. The Base Erosion and Profit Shifting Project; 2.2. The birth of the concept of "Value Creation" and its aleatory and uncertainty;;"; 4.; 2.3. The Role of "Value Creation" under the BEPS Project and the response of the European Union; 2.4. "Value Creation" as a criterion of localization of cross-border income: between the "common understanding" and new complex perspectives; 3. Preliminary conclusions on the "Value Creation".

1. "Value Creation" according to the economic theories.

Before turning out our attention on the functions that the "value creation" plays within the international tax system and its implications, it is vital to know what we mean by value creation and its origin.

As Professor Vanistendael argues, indeed, «we know that profits are subject to income tax, but value or value creation, which is apparently something different from profits, is not mentioned in income tax acts»[85].

Looking back, for long time "value" and "value creation" were central concepts in the economic literature on management and

[85] See F. VANISTENDAEL, *op. cit.*, p. 1386.

organization[86] and there were disagreements over what value actually resided in.

For some school of thought, indeed, the price of products resulted from the supply and demand, but the value of those products derived from the amount of work that was needed to produce things, the ways in which technological and organizational changes were affecting work, the relations between capital and labor[87].

The most representative of such approach was Adam Smith who took three distinct approaches to the problem of value. The first, following Petty[88], was a simple labor embodied theory which Smith believe to apply without qualification to the «early and rude state of society». The second, which he deemed more appropriate to contemporary capitalism, was an "adding-up theory" that explained value as the sum of the costs of production including land and capital in addition to labor. His third theory, which in certain terms anticipated

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[86] D. P. LEPAK – K. G. SMITH – M. S. TAYLOR, *Value Creation and Value Capture: A Multilevel Perspective*, Academy of Management Review, 2007, pp. 108-194.

[87] In this sense, see M. MAZZUCATO, *The Value of Everything. Making and taking in the Global Economy*, 2018, p. 7; I. VERLINDEN – B. MARKEY, *From Compliance to the C-Suite: Value Creation Analaysed Through the Transfer Pricing* Lens, Intertax, 2016, pp. 774-775, for whom «looking back, value creation was a function of economies of industrial scale in the past: mass production and the high efficiency of repeatable tasks. Adam Smith already wrote in 1776 that income was a function of labour and the division thereof. The economy only gradually evolved to a less primitive form whereby machines increased the productivity of blue-collar workers. In order to collect extra income, the contribution of capital was required to build up a technologically advanced machine park»; A. SMITH, *An Inquiry into the Nature and Consequence of the Wealth of Nations (1776)*, consulted at http://www.ifaarchive.com/pdf/smith_an_inquiry_into_the_nature_and_causes_of_the_wealth_of_nations%5B1%5D.pd.

[88] He is recognized as the first author of the "labor theory of value". He introduced the concepts of "natural price" and "market price" which maintained that value was determined by labor input. See, H. LANDRETH – D. C. COLANDER, *History of Economic Thought*, Boston, 1989.

the later subjective value theory, considered value as being determined by the «toil and trouble» experienced by producers[89].

Indeed, until the mid-nineteenth century, almost all economist assumed that in order to understand the value of goods and services it was necessary to verify the conditions in which those goods and services were produced, including the time needed to produce them, the quality of the labor employed, and the determinants of the value actually shaped the price of goods and services. In other words, before major social changes in the nineteenth century, the value determined the price.

This stream of thought began to change later.

Many economists, in fact, came to believe that the value of things was determined by the price paid on the market or, in other words, on what consumer was prepared to pay (so-called subjectivity theory)[90]. Any good or services being sold at an agreed market price were by

[89] A. SMITH, *The Wealth of Nations*, 1776. The labor theory of value and price was significantly furthered by D. Ricardo, *on the Principles of Political Economy and Taxation*, 1817 for whom the influence of supply and demand side on the market value of a product was a temporary (short-term) nature, and the determining factor in the long run was the cost of production.

[90] C. GRÖNROOS, *Value co-creation in a service logic – a critical analysis. Mark. Theory*, 2011, pp. 279–301, where he clarifies that «value creation cannot mean anything other than the customer's, or any other user's, experiential perception of the value-in-use that emerges from usage or possession of resources, or even from mental states». In particular, the subjectivity theory of value can be traced back to ninetieth century economists like Carl Menger and Leon Walras. In Menger's book, for example, *Principles of Economics*, Chap. III: *The Theory of value* he states that: «the value of goods arises from their relationship to our needs, and it is not inherent in the goods themselves. With changes in this relationship, value arises and disappears. For the inhabitants of an oasis who have command of a spring that abundantly meet the requirements for water a certain quantitative of water at the spring itself will have no value. But if the spring, as the result of an earthquake, should suddenly decrease its yield of water […] [it] would immediately attain value of each inhabitant» (C. Menger, *Principlas of Economics*, 1976).

definition value. This approach, consequently, has brought a shift from value determining price to price determining value[91].

According to new perspective, it was possible to identify two types of value: a quantitative notion and a qualitative one.

Porter defined value as «the amount buyers are willing to pay for what a firm provides them. Value is measured by total revenue […]. A firm is profitable if the value it commands exceeds the costs involved in creating the product»[92]. In this way, Porter has mostly described the quantitative form of value as the amount of money that the customers are willing to pay for the qualitative value. For him, moreover, businesses create value through differentiation along different steps of the value chain.

On the other side, the approach of Bowman and Ambrosini was also persuasive, since it showed both the quantitative and qualitative side of the concept of value creation[93]. They introduce and differentiate two types of value and exchange at the organizational level of analysis: "use value" and "exchange value".

"Use value" refers to the specific quality of a new job, task, product, or service as perceived by users in relation to their needs, such as the speed or quality of performance on a new task or the aesthetics or performance features of a new product or service. "Exchange of

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[91] It refers to the theory of "marginalism" to which a solid contribution to the development of such a theory was made by French mathematician and economist Antonie Augustin Cournot (1801-1877), German mathematician and economist Johann Heinrich von Thnen (1783-1850), and German lawyer and economist Hermann Heinrich Gossen (1810-1858) et al. At the center of the marginalist theory is the assumption of the existence of marginal utility of a product. Therefore, the followers of this theory scrutinized the buyer's needs and the behavior of particular firms.

[92] M. PORTER – V. MILLAR, *How information gives you competitive advantage,* 1985.

[93] C. BOWMAN – V. AMBROSINI, *Value Creation versus Value Capture: Towards a Coherent Definition of Value in Strategy*, Brit. J. Mgt., 2000, pp. 1-15.

value", on the contrary, refers to the «monetary amount realized at a single point in time when the exchange of the good take place».

In the same direction, Lepak finds that individuals can create value by creating new goods or services that are perceived to be of value by a target user (e.g. a client or a customer) relative to his needs and when the monetary amount realized for this service is greater than what might be derived from an alternative source producing the same good or service[94]. Thus, representatives of this direction of thought believed that the price of a product is a result of subjective appraisal of material goods by trade participants. Consequently, the value and price of merchandise, are determined by the psychology of a specific consumer[95].

In other words, there are two important economic conditions that may be necessary for value creation activities to endure. First, the monetary amount exchanged must exceed the producer's cost of creating the value in question. Second, the monetary amount that a user will exchange is a function of the perceived performance difference between the new value that is created and the target user's closest alternative.

Therefore, it is possible to define value creation process as a combination of valuable resources, for instance, knowledge, method or intangible utilities, that are intended to create the qualitative and quantitative value proposition for the customers[96].

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[94] D. P. LEPAK – K. G. SMITH – M. S. TAYLOR, *op. cit.*, pp. 180-194.

[95] For a deeper historical overview on the notion of value, see R. PETRUZZI – ROMERO J.S. TAVARES, *Transfer pricing and Value Creation*, Vienna, 2019, p. 8 et seq.

[96] M. MAZZUCATO, *op.cit.*, p. 6, where the author defines the value creation as «the ways in which different types of resources (human, physical and intangibles) are established and interact to produce new goods or services»; T. M. AMABILE, *Creativity in context*, Boulder, 1996, who employs the concepts of *novelty* and *appropriateness*. In her words, in fact, «a product or response will be judged as creative to the extent that it is both a novel and appropriate, useful, correct and valuable response to the task

2. "Value Creation" within the International Tax System.

2.1. The Base Erosion and Profit Shifting Project.

In recent years, the international tax landscape has changed dramatically. With the political support of G20 Leaders, the international community has taken joint to increase transparency and exchange of information in tax matters, and to address weakness of the international tax system that create opportunities for base erosion and profit shifting (BEPS). Afterwards the financial crisis and the increase of aggressive tax planning by MNEs have put BEPS high on the political agenda.

Consequently, in July 2013, OECD announced 15-item Action Plan and in September 2013 presented it for approval[97] to the G-20 leaders at the St Petersburg G20 summit[98].

BEPS Project is counted as the second major post-financial crisis effort at global cooperation relating to the taxation[99] which basically

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at hand». This implies, hence, that the level of new value creation will depend on a target user's subjective evaluation of the novelty and appropriateness of the new task, product, or service under consideration. The greater the perceived novelty and appropriateness of the task, product or service under consideration, the greater the potential use value and exchange value to the user.

T. THEUNIS, *Profit-allocation based on value creation in the digital economy*, Lund University, 2018, for whom «I will therefore define value creation as: "the process of creating something which did not exist before, of which the outcome is better than the closest alternative available, for which individuals are willing to exchange monetary amount».

[97] OECD, *Action Plan on Base Erosion and Profit Shifting cit.*

[98] The G20 is a group of the 20 most economically powerful jurisdictions in the world. Formed in 2008 as a successor to the G8 to be able to respond effectively to the global nature of the financial crisis, finance ministers, central bank governors and head of state from the 20 members meet on an annual basis to promote international economic cooperation at the highest level. For more general information, see G20, *The history of the G20 Summit*, available at https://g20.org/en/summit/about/.

[99] The first project, indeed, involved transparency. In the immediate aftermath of and in response to the financial crisis of 2008, the OECD relaunched the Global Forum on

aims at limiting the risk of tax avoidance by MNEs, stopping facilitating double non-taxation. BEPS Project, indeed, is about to introduce more fairness and more sense to the international tax system[100].

To this end, the OECD articulated a project for international tax relations that *i)* mitigates corrosive tax competition between governments in favor greater tax cooperation and coordination; *ii)* fosters a coherent approach to cross-border income taxation that authorizes a jurisdiction to deny tax relief where necessary to protect its tax base as well as to yield tax base to avoid double taxation; *iii)* reduces cross-border information asymmetry between taxpayers and governments through measurers to enhance transparency.

By the end of 2015, hence, the OECD released the final report.

The final BEPS package consists of reports on 15 Actions that are about three main blocks: the first involves the creation of new rules to eliminate double non-taxation; the second concerns fixing new rules of international taxation, for instance, transfer pricing rules; and, finally, the last block aims at improving transparency, seeking new data to know better where MNEs pay their taxes and also improving the transparency of multinational companies to the tax administrations (that is the Country-by-country reporting). In addition, there are few horizontal actions which intends to deal with the challenges posed by the digitalization of the economy and build a multilateral instrument to make sure that BEPS Project would be implemented faster.

The consensus has been articulated at three stage of commitment: *i)* new minimum standard that jurisdictions explicitly agreed to adopt,

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Transparency and Exchange of Information for Tax Purpose as a globally inclusive organization that agreed on enhanced information exchange standards. Moreover, the G20 and OECD initiated work on tax policy to achieve strong sustainable growth, which may become the next tax cooperation project.

[100] To have a better idea on what BEPS represents, see the description available at http://www.oecd.org/tax/beps/about/#history.

unless they already had consistent rules in place; *ii)* recommendations, to which BEPS associates[101] and participating jurisdictions agree in principle and which are expected to result in convergence at the level of rules in future; *iii)* best practices to which BEP associates and participating jurisdictions are invited to adhere should they so choose, and as to which the OECD will provide guidance.

The degree of consensus regarding BEPS outcomes is not so simple to discern. While some jurisdictions have moved ahead on enacting several of the standards and recommendations, other have followed a wait-and-see strategy or quietly declined to act[102]. A number believe that their laws and rules are already largely or fully compliant with BEPS so that no action is required. At European level it was introduced a parallel reform that has shaped some OECD outcomes[103] and is in other cases not fully consistent with the BEPS outcomes. These variances are in some instances due to perceived constraints under the TFUE and in other instances represent a defection from the OECD consensus[104].

Moreover, the significant political changes in the United States with the elections of President Donald Trump and the United Kingdom's decision to leave the Europe are expected to alter the terrain

[101] BEPS associates are new non-OECD and G20 jurisdictions and jurisdictions which join the inclusive framework to participate in the CFA's work on BEPS

[102] See, for instance, UAE/GCC report on Oman.

[103] For instance, as a response to the G20 call for an action by OECD against aggressive tax planning, the same European Commission responded to the BEPS package by adopting the Anti-Tax Avoidance Directive (ATAD) on 12 July 2016 (Directive 2016/1164, OJEU 2016, L 193). See for a deeper view, A. P. DOURADO, *Aggressive Tax Planning in EU Law and in the Light of BEPS: The EC Recommendation on Aggressive Tax Planning and BEPS Actions 2 and 6*, p. 44 et seq.

[104] See EU Report, sections 4.3. – 4.4. – 5.1 – 5.3.

for the implementation of the BEPS outcomes, even if at present the impact of these events are totally unclear.

2.2. The birth of the "Value Creation" concept and its aleatory and uncertainty.

Once described in general terms the origin of the BEPS Project and its main contents, we now focus the entire section on the main goal which characterized the OECD Project.

The impact of the BEPS Project, indeed, is to make sure that multinational enterprises would pay their taxes where their economic activities are carried out and profits are made. The OECD talks about of USD 3.000 billions of accumulated profits in Bermuda and Cayman[105].

In this respect, the goal of the BEPS Project is stopping such phenomena and re-align the location of taxable profits with the "value creation". The latter concept, hence, represents the new central benchmark and the ultimate criterion for the allocation of taxing rights. By invoking the OECD's words, all the anti-base erosion and profit shifting measures, in fact, are intended to «ensure that profits are taxed where economic activities take place and value is created»[106].

Many scholars regard the statement «taxation where value is created» as the core of the OECD BEPS Project and is becoming widely accepted as the guiding principle for taxing corporate profit[107].

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[105] http://www.oecd.org/tax/beps/about/#history.

[106] OECD, *Explanatory Statement: OECD/G20 Base Erosion and Profit Shifting Project*, para. 1 (OECD 2015)

[107] J. HEY, *"Taxation Where Value is Created" and the OECD/G20 Base Erosion and Profit Shifting Initiative,* Bull. Intl. Taxn., 2018, p. 203; MICHAEL P. DEVEREAUX – J. VELLA, *Are We Heading Towards a Corporate Tax System Fit for the 21st Century?*, Fiscal Studies, 2014, p. 466, in which it is affirmed that the 15-item BEPS Action Plan

The same European Commission recently recognized the key role played by such new benchmark, explaining that «since the start of its mandate, this Commission has taken action to ensure the principle that all businesses operating in the EU pay their taxes where profits are made and thus where value is created»[108].

Even if all agreed that the alignment of profits with the value creation is considered the new "tax mantra", nonetheless, there is no current objective definition of value creation, as anything can contribute to the creation of value[109].

As Morse has noted, indeed, «allocating taxation in accordance with value creation is meant to match tax jurisdiction with some "real" location of a corporation's activity. But this does not make the meaning of value creation clear. Value creation might refer, for example, to one or more of the following factors: employee location, sales location, location of production capacity, location of management or location where capital is raised»[110].

The lack of a clear concept is also due to the overlapping posed by the OECD between the concepts of value creation and economic activities. In this context, the OECD refers to both at the same time,

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would impose a new economic substance requirement over the existing international tax system».

[108] European Commission, *Impact Assessment Accompanying the document Proposal for a Council Directive laying down rules relating to the corporate taxation of a significant digital presence and Proposal for a Council Directive on the common system of a digital services tax on revenues resulting from the provision of certain digital services*, SWD (2018) 82 final, p. 5.

[109] A. BAL, *(Mis)guided by the Value Creation Principle – Can New Concepts Solved Old Problems?*, Bull. Intl. Taxn., 2018, where the Author highlighted that «this concept does not know any thresholds or other formal restrictions. It is a source principle that can be interpreted as both an origin and a destination principle. The ambiguity of this term is the reason for its enormous popularity: everyone agrees that taxation should be in line with value creation and everyone has their own view of what it means. In other words, we agree to disagree».

[110] S. C. MORSE, *Value Creation: A Standard in Search of a Process,* Bull. Intl. Taxn. 2018, p. 196.

stating that «the combined report contains revised guidance which responds to these issues and ensures that transfer pricing rules secure outcomes that better align operational profits with the economic activities which generate them»[111].

According to some scholars even if it is likely that in a location where an MNE exercises real economic activities some value is created, and where no economic activity takes place there is no value creation, nevertheless, it is questionable whether the jurisdiction where economic activities are carried out is also the jurisdiction where the greatest value is created[112]. For instance, a low-wage production site does not contribute much to the creation of value, despite the fact that a large number of individuals are involved in performing intense reals economic activity[113].

On the contrary, there is a general consensus on where value is not created, since many believe that value is not created in tax havens where a company has a mere «paper presence»[114] without neither a physical presence nor a substance.

Beyond this only certainty, the existence of a general "grey area" around the concept of value creation makes necessary to deepen the concept and the nature of the principle, since it has relevant implications in the contemporary era of globalization and digitalization.

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[111] OECD/G20 (2016), *BEPS Project Explanatory Statement: 2015 Final Report,* OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris.

[112] M. HERZFELD, *The Case against BEPS: Lessons for Tax Coordination*, Fla. Tax. Rev., 2017, p. 40; J. HEY, *op. cit.*, p. 203, where the author noticed that «the extent of the created value is not necessarily proportional to the intensity of economic activity».

[113] M. HERZFELD, *op. cit.*, p. 42.

[114] See S. C. MORSE, *op. cit.*, p. 196; M. LENNARD, *Act of creation: the OECD/G230 test of "Value Creation" as a basis for taxing rights and its relevance to developing countries*, https://unctad.org/en/PublicationChapters/diaeia2018d5a4_en.pdf, where it specified that «the term "value creation" in this sense is employed particularly in connection with the use of tax havens, where activities exist but no value is considered to be created».

It has been highlighted, indeed, that two main questions are currently debated on the new criterion of value creation: first, what the value creation means and, second, what is the function that the concept could exercise within the current international tax framework[115].

This section will try to address both of these questions.

2.3. The Role of "Value Creation" within the BEPS Project and the response of the European Union.

To make the effort to deepen the role played by the new parameter of "value creation" within the current international tax system, it is worth considering the different functions that value creation is required to fulfill within the BEPS Action Plan and how Europe has implemented this concept.

Indeed, it is possible to identify two different functions that the OECD attributes to "value creation".

The first one regards to upholding the existing international tax system[116] and is intended to identify and deal with the aggressive tax planning and tax avoidance. In other terms, value creation was used to counter practices that artificially segregate taxable income from the activities that generate it.

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[115] See F. VANISTENDAEL, *An Octogenarian on Value Creation*, Tax Notes International, 2018, p. 1385.

[116] In this respect, it is worth noting that this upholding approach was criticized by the main doctrine. See, R. AVI-YONAH – H. XU, *Evaluating BEPS: A Reconsideration of the Benefits Principle and Proposal for UN Oversight*, Harv. Bus. I., 2016, p. 208 where the author labels BEPS as a «patch-up», stating that «unfortunately, many old principles of international tax law have been preserved in the final BEPS package. This approach has substantially compromised the value of the new principle, and made the legal reform of international tax look more like the patch-up of existing rules and principles. As a result of the patch-up, complete renovation of current international tax law has not happened and genuine new rules guided by the new principle have not been formulated. Instead, the patch-up work has produced complex, discretionary, uncertain, costly, and contradictory rules».

In this respect, this function of value creation has been the guiding principle of the BEPS initiative with regard to the Actions 8-10 on transfer pricing, where value creation is used to align transfer pricing outcomes, since most profit shifting was thought to be affected through the improper use of transfer pricing rules. It implies the adoption of transfer pricing rules or special measures to ensure that inappropriate returns will not accrue to an entity solely because it has contractually assumed risks or has provided capital[117]. The goal is to exclude from the calculation the mere ownership of intangibles as well as formal acceptance of risks which really constitutes only funding, without other activities.

Also, BEPS action 7 – concerning preventing the artificial avoidance of permanent establishment status – in asking what is the minimal PE threshold states that the different ways of approaching this issue have to be coordinated with the need of ensuring that profits associated with the transfer and the use of intangibles are appropriately allocated in accordance with value creation[118].

Finally, the concept of value creation was also used in other actions of the BEPS, such as those concerning hybrid mismatch, interest limitation, harmful practice, and the abuse of treaty benefits.

With respect to these actions, hence, the parameter of "value creation" is about substance with the specific purpose of cutting tax havens out of the international tax system. It aims at limiting the use of legal structure which lack of an economic substance in term of assets

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[117] OECD, *Public Discussion Draft: BEPS Actions 8, 9 and 10: Discussion Draft on Revisions to Chapter I of the Transfer Pricing Guidelines*, para. 16, where it is affirmed that «it is important to understand how value is generated by the group as a whole, the interdependencies of the functions performed by the parties with the rest of the group, and the contribution that the parties make to that value creation».

[118] OECD (2014), *Public Discussion Draft – BEPS Action 7: Preventing the Artificial Avoidance of PE Status*, para. 44.

and employees, such as the use of «shell companies that have little or no substance in terms of office space, tangible assets and employees»[119]. Value creation related to this function is defined, actually, «the tip of the BEPS arrow against "practices that artificially segregate taxable income from the activities that generate it", as the Action Plan puts it»[120].

More fundamental appears the second role that the OECD attributed to value creation, namely the function of an overarching principle for the justification and allocation of taxing rights. Regarding this function it is particularly relevant the current debate concerning the tax challenges of the digitalization of the economy that is addressed starting from Action 1, as it will analyze later[121].

Here, the concept of value creation is not limited to the attribution of profits for the application of the corporate income tax but is also a fundamental reason for the invention of new taxable items.

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[119] Action Plan *cit.*, pp. 13-14.

[120] M. LENNARD, *Act of creation cit.*, p. 58; J. HEY, *Taxation Where Value is Created cit.*, p. 204; J. SCHWARTZ, *Value Creation: Old wine in new bottles or new wine in old bottles?*, Kluwer International Tax Blog, May 21 2018, where the author argues that «Prof. Wolfgang Schön put the case that "value creation" is indeed new. It has been conflated with "economic substance" which in the BEPS context has in turn been conflated with tax avoidance and artificial arrangements». This substance approach to the "value creation", moreover, finds also support by a UK case law on the location of the source of trading profits. In *Smidth & CO Greenwood (1921) 8 TC 193,* the House of Lords noted that «the question is, where do the operations take place from which the profits in substance arise?». Mainly, according to the so-called "Smidth test" of establishing where the profits in substance arise is equally applicable where the non-resident's trade is merchanting. The decision in Smidth supports the conclusion that, where the activities are the buying and selling of goods at profit, the trade is normally exercised at the place where the contracts for sale are made - that is where the operations take place from which the profits in substance arise. But where there are other trade activities, apart from the making of sales contracts, you also need to consider where those operations are carried out. So, a merchanting trade, in the same way as any other trade, could be carried on from more than one or even several locations or even countries.

[121] W. SCHÖN, *Ten Questions about Why and How cit.*, p.

In other terms, while the substantial nature of the value creation aims at counteracting artificial structures that lead to the erosion of taxable basis, on the contrary, within the digitalization of the economy where "tax benefits" derived mainly by a legal vacuum due to an anachronistic international tax framework rather than from artificial behaviors, value creation comes into play as an allocation rule which would legitimize the jurisdiction to tax of a country even in lack of a physical presence.

The value creation standard, moreover, has been implemented also by the European Commission to support, as highlighted by Professor Schön[122], different policy outcomes in 2016, such as the EU Anti-Avoidance Directive, the CCCTB Draft Directive and, as it will be explained in the aftermath, the Proposal on the "digital presence".

Following an initial common consolidated corporate tax (CCCTB) proposal in 2016, a proposal for a modified CCCTB[123], which is to be preceded by an initial stage of harmonization (the common corporate tax, CCTB)[124] was introduced by the European Commission in October 2016.

The Proposed CCCTB Directive provides for a single set of rules to calculate the taxable corporate profits in European Union. The reason that underpins such European initiative was the need to make corporate taxation fairer, more competitive and more growth friendly. Although the reintroduction of the CCCTB has faced criticism, the Commission considers the proposal to be a fundamental step towards combating tax

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[122] J. SCHWARTZ, *Value Creation: Old Wine in new bottles or new wine in old bottles cit.*, p. 2.

[123] Proposal for a Council Directive on a Common Consolidated Corporate Tax Base, COM (2016) 683 final (25 Oct. 2016), EU Law.

[124] Proposal for a Council Directive on a Common Corporate Tax base, COM (2016), 685 final (25 Oct. 2016), EU Law.

avoidance, together with the other anti-tax avoidance initiatives[125], with the final goal to create a fair and equitable tax environment.

The CCCTB proposal, in particular, establishes a formula apportionment mechanism as the tool to determine the tax base, through the use of an allocation key base on three equally factors, namely labor, assets (which include all fixed tangible assets and it does not consider intangibles and financial assets on the basis that these are mobile and thus easier to manipulate) or sales by destination. All these factors are viewed as determinants to explain exactly where the real economic activity is and where value is created. On the contrary, other kinds of factors are easier to manipulate into aggressive tax planning strategies and, consequently, not able to grant any taxation in line with the place where actually the value is created.

It is worth noting that some scholars argued that in applying such simplified understanding of "value creation", the CCCTB ignores a large and growing segment of value creation by companies, namely intangible and financial assets, for the simple reason that these factors are seen as "mobile"[126].

However, as in the context of BEPS Project also within the CCCTB's initiative the value creation standard is used in a substantive manner as a tool to address artificial profit shifting within the Member States.

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[125] Council Directive 2016/1164 of 12 July 2016 Laying down Rules against Tax avoidance Practices that Directly Affect the Functioning of the Internal Market, OJ L 193/1 (2016), EU Law IBFD.

[126] R. OFFERMANNS – S. HUIBREGTSE – L. VERDONER – J. MICHALAK, *Bridging the CCCTB and the Arm's Length Principle – A Value Chain Analysis Approach*, European Taxation, 2017, p. 469 where he properly asked «how, for example, should Google's European profits be allocated based on the CCCTB, given that the fixed assets involved in running its business are limited. From the authors' perspective, this denies the business realities of today's world».

On the other side, at the basis of the proposal for a "digital presence"[127] the main goal is to better capture the value creation of digital business models which highly rely on unique intangible assets. To this end, the proposal uses the "value creation" as both a justification to identify a new type of taxable nexus for digital businesses operating across border in case of a non-physical commercial presence and, consequently, new principles for attributing profits that is expressed in the valuation techniques of transfer pricing.

With respect to these latter functions in the new context of digitalization that the present work will focus its attention in the following paragraphs, that is "value creation" as a source for justifying taxing rights and a basis for new rules for the attribution of the related profits.

In the current section, in particular, we start with the analysis of "value creation" as a valid criterion for the attribution of taxing rights to a jurisdiction.

2.4. "Value Creation" as a criterion of localization of cross-border income: between the "common understanding" and new complex perspectives.

The statement that income has to tax where value is created may be interpreted in two different ways from which could derive different consequences, depending on the fact whether the concept is understood consistently or not with the current international tax system.

If value creation is deemed, as showed above, the combination of valuable resources that create the qualitative and quantitative value

[127] European Commission, Proposal for a Council Directive laying down rules relating to the corporate taxation of a significant digital presence, SWD (2018) 81 final – SWD (2018) 82 final, Explanatory Memorandum.

proposition for the customers, it means that the concept of value evokes somehow the creation of taxable wealth.

The creation of a wealth implies, under a tax point of view, the presence of a source of income. The latter, traditionally, is deemed to be the good or a set of goods aim at producing wealth, the act or a group of acts as well as the activity put in place with the purpose to achieve a certain economic result[128].

When such source of income is spread across the world there could be an issue with respect to its allocation in the space. To this end, the international tax rules, as showed in the previous chapter, link the taxation with the utilization of the production of factors of labor and capital within the territory where these factors are exploited.. This means that source and residence jurisdiction still rely on supply-side factors of value creation (production factors) and they ignore completely the demand-side of the equation[129]. Consequently, «value is generally assumed to be created where the supplier is producing a good or service and thereby creates value»[130]. This is what some scholars have called as «the common understanding of value creation principle»[131].

Taxation where value is created a supply side concept can be deemed as «a restatement of traditional international tax fairness

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[128] The source of production of income coincides with the notion of activity. In this sense, see NAPOLITANO, *Il possesso e le attività produttive del reddito fiscale* d'impresa, Milano 1982, p. 41; AULETTA, Attività, Enc. Del dir., III, Milano 1958, p. 982; FANELLI, *Introduzione alla teoria giuridica* dell'impresa, Milano 1950, p. 112; F. PAPARELLA, *Possesso dei redditi ed interposizione fittizia. Contributo allo studio dell'elemento soggettivo nella fattispecie imponibile*, Milano, 2000, p. 52 et seq.

[129] A. P. DOURADO, *Digital Taxation Opens the Pandora Box: the OECD Interim Report and the European Commission Proposal,* Intertax, 2018, p. 608.

[130] J. BECKER – J. ENGLISH, *Taxing Where Value is Created cit.*, p. 164.

[131] M. DEVEREUX – J. VELLA, *Value Creation as the Fundamental Principle of the International corporate Tax System*, European Tax Policy Forum, 31 July 2018, p. 3.

standards»[132]. Interpreting consistently with the context of the current international tax system, hence, the concept of "value creation" refers to the location where production takes place. It is the supply-side location that should inform the allocation of taxing rights to jurisdictions other than the state of residence[133].

In this sense, as English and Becker highlighted, value creation can be a new paradigm which claims a mere reassessment of the criteria upon to which the determination of taxable nexus and taxable profits should be based, especially in the new scenario of the digitalization of the economy. Thus, it will be crucial to verify, as we will try to do in the following, whether the interpretation of the value creation concept consistent with the traditional tax framework (i.e. the determination of the value creation on the supply-side angle) lends itself to an expansion of the traditional nexus criteria, opening its view towards new value drivers that are developing within the new current context of the digitalization of the economy[134].

Such «common understanding of value creation principle», however, is countered by a more reformer approach, on the other side.

According to the latter, as a matter of fact, it cannot be ignored that on the basis of the economic perspective of value – for which value is the intersection of the qualitative value proposition for the customers and the quantitative value preposition given by the profits received in exchange – value depends also on the demand's side preferences, which

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[132] P. HOFMANN – N. RIEDEL, *Comment on J. Becker & J. Englisch, "Taxing where Value is Created: What's "User Involvement" Got to Do with it?* Intertax, 2019, p. 173

[133] See OECD Action 1 cit., para. 259; W. KOFLER, G. MAYR & C. SCHLAGER, *Taxation of the Digital Economy: A Pragmatic Approach to Short-Term Measures*, Eur. Tax'n, 2018. Devereux and Vella qualify this approach as the «common understanding of the value creation principle» (M. DEVEREUX – J. VELLA, *Value Creation as the Fundamental Principle cit.*).

[134] J. BECKER – J. ENGLISH, *op. cit.*, p. 165.

means that supply side cannot be created value independent of the demand side. The same Vogel, for instance, supported the right of a market state to tax income, believing that it «cannot convincingly be denied that providing a market contributes to the sales income at least to same extent as providing the goods does. There is no valid objection, therefore, against a claim of the sale state to tax part of the sales income»[135].

This implies that taxation should at least partially be located to the market jurisdiction, because is the market that brings together supply and demand where value is created.

Consequently, the traditional binomial residence and source jurisdiction could not work properly anymore[136] and, probably, it is time – as already many scholars highlight – to shift our attention on the new binomial "origin" and "destination"[137].

Hay, indeed, considers value creation a source principle in the form of a principle of "origin" as well as of "destination", depending on whether the market is conceived as a value adding factor with value

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[135] See K. VOGEL, *Worldwide vs. Source Taxation of Income cit.*, p. 401.

[136] M. DEVEREUX – J. VELLA, *Are We Heading towards a Corporate Tax System cit.,* p. 453 where the authors, indeed, state that «the basic allocation of taxing rights between source and residence countries might arguably be a reasonable compromise in a simple world in which there are no multinational companies and where there are clear conceptual distinctions between, for example, active and passive income. This may or may not have been the case in the 1920s; but it is certainly not true in the 21st century. Change including in technology, transport, finance and business practice, has undermined the effectiveness and stability of the international system. This has weakened some fundamental concepts and design features of the system […] In such scenario, there is no clear conceptual basis for identifying where profit is earned; all those locations may be considered to have some claim to tax part of the company's profit».

[137] See PEGGY B. MUSGRAVE, *Principles for Dividing the state Corporate Tax Base,* in CHARLES E. MCLURE, (ed.), *The State Corporation Income Tax: Issues in Worldwide Unitary Combination*, 1984, p. 228 et seq.

being created by users and consumers[138]. That would mean to consider not only the location in which labor and capital converge, as is currently

[138] J. HEY, *op. cit*,,. p. 204, where he highlights that «this view, also referred to as "value realization", is especially held by certain emerging markets, particularly China». Concerning the meaning of the source principle as an origin principle, see C. C. M. KEMMEREN, *Source of income in Globalizing Economies cit.*, p. 433, where the author suggests that source of income should be interpreted only as the origin of income in respect of income taxes. In particular for the author the principle of origin justifies allocation of tax jurisdiction on income to a state if the income has been created within the territory of that state, i.e. the cause of the income is within the territory of that state. The origin of income is where the intellectual element is to be found. This intellectual element is provided by the activities of individual human beings. Only individuals can create income and things in themselves cannot. However, the principle of origin as interpreted by Kemmeren only relates to the supply side of income creation and ignores that the demand itself also creates value. In this sense Hongler and Pistone notice that «submit that an incorporation of the principle of origin in the new dimension of the sourcing theory provides for an important theoretical contribution to achieve a closer link with the nexus on business income […], but that such nexus should also take into account additional factors, including those that arise in the market country and that can influence the performance of business and value creation arising in such context» (P. HONGLER – P- PISTONE, *Blueprints for a New PE Nexus to a Tax Business income in the Era of the Digital Economy*, IBFD, 2015, p. 19); US Treasury, *Selected Tax Policy Implications of Global Electronic Commerce,* 1996, p. 18, for which the source of income is generally located where the economic activities creating the income occur; A. SCHABAHAIAN, *The Andean Subregion and Its Approach to Avoidance or Alleviation of International Double Taxation*, Bull. for International Fiscal Documentation, pp. 309-315, who defines the principle of source as «that is, the taxing power rests with the country in whose territory such income originates or is generated». Moreover, the clear explanation of the meaning and identification of the source of income has come from the courts of Commonwealth countries who adopted a common source-based tax system that served through the 20th Century. In South Africa, for instance, taxpayers were liable to income tax on income «from source within or deemed to be within the Union (of South Africa) ». South Africa's highest court then noted in *Overseas Trust Corporation Ltd v CIR 1926 AD 444* that the term source refers to the origin of income, rather than where it was located. The source of income, hence, is the originating cause of the income or profit. In this sense, Schwarz, commenting on such statement noticing that source is «what the taxpayer does in return for which he receives the income. This includes work in all forms – inventing, making, producing and selling – as well as providing the use of an asset such as land, intellectual property or money. Once a source of income or profit is identified, it is necessary to determine its geographic location. The combination of identification of a source of income and its geographical location links the income with the relevant tax system (see, J. SCHWARZ, *Value Creation: Old Wine in new bottles or new wine in old bottles?* Kluwer International Tax Blog, May 21, 2018); M. DE WILDE, *Tax Jurisdiction in a digitalizing economy: why "online profits" are so hard to pin down*, Intertax, 2015, p, 4 for whom «if the demand side is relevant for creating income, why then does international tax law currently take no account of this when apportioning companies' international profits? The answer would seem to be that this is simply how things have evolved. The practice of allocating profit to the supply side is just how things have

the case for business profits in tax law, but also the place where goods and services are sold or provided, as currently happens in VAT and more in general in other consumption-oriented taxes.

"Origin", in fact, represents the supply side of income production, where the production factors of capital and labor (so-called business inputs) converge. On the other hand, "destination" identifies the demand side of income production and is where the goods and services produced are brought to market (so-called business outputs).

To get a better idea of the relative value of inputs added through the production, we here offer a graph developed by Stan Shih of Acer.

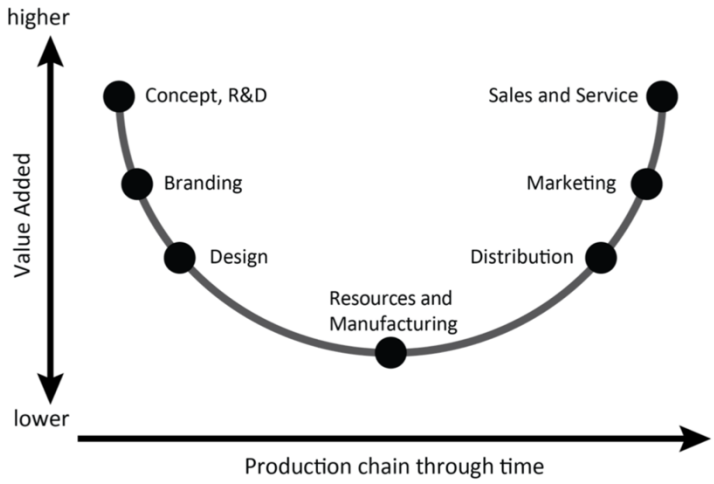

Figure 5: The so-called "smile curve"[139]

The rationale behind this approach is that without customers an MNE could create goods and services, but, ultimately, it needs

worked out and merely is a "product of history". There is not much more that can be said on that from a substantive perspective».

[139] See A. CHRISTIANS, *Taxing According to Value Creation*, Tax Notes International, 2018, p. 6, where the author highlights that the "smile curve" proves that the most valuable are inputs associates with concept, branding, design, marketing, and sales.

consumers to make an investment valuable[140]. The difference between the sale price and the cost of procurement and/or production or provision is the profit, which is charged to tax. Value creation, in other terms, allows market countries to claim a share of the tax base in proportion to production countries.

Indeed, part of the doctrine believe that «it is simply incorrect to state that no value arises in the market. The profits being allocated among countries owe as much to the market as they owe to the various parts of the supply chain. Profits depend on the price charged at the point where supply and demand meet»[141].

After all, the allocation of taxing rights to market countries is not a new reality, since, for instance, already in many of US subnational context corporate profits is largely allocated to the market[142] and proposal for unitary taxation and formulary apportionment system often allocate some taxing rights to the market (for instance, as mentioned above, the European Commission's proposal for the CCCTB).

It is interesting to note, for this purpose, the 1993 judgement by the Supreme Court of South Carolina in the case of *Geoffrey Inc. v. South Carolina Tax Commission*[143]. Such case law involved an out-of-

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[140] China International Tax Center/International Fiscal Association (IFA) China Branch, in OECD, *Comments Received on Public Discussion Draft – BEPS Action 10: Use of Profit Splits in the Context of Global Value Chains*, p. 101 (OECD 2015); M. Herzfeld, *Splitting Profits with Communists*, 2015, Tax Note Intl. 6, p. 467.

[141] M. DEVEREUX – J. VELLA, *Value Creation as the Fundamental Principle of the International Corporate Tax System*, European Tax Policy Forum, Policy Paper, 2018, pp. 7-8, where he states that «arguing that corporate profits should not be allocated to market countries because consumers merely consume, simply ignores the role of consumers to the generation of profits». On the contrary, according to someone no value is created by consumers and therefore countries should not have a right to tax on the basis of sales (HM Treasury, *Corporate Tax and Digital Economy*, 2.26 – 2.32.

[142] W. HELLERSTEIN, *A US Subnational Perspective on the "Logic" of Taxing income on a "Market Basis"*, Bull. Intl. Taxn., 2018.

[143] See Supreme Court of South Carolina, *Geoffrey Inc. v. South Carolina Tax Commission,* 437 S. E. 2d 13, 1933.

state trade marker owner that was established in the US state of Delaware and licensed its "Toys R Us" trademark to its affiliates in South Carolina in return of royalty payments. South Carolina subjected Geoffrey to state tax on the basis of its "intangible presence" in this state. The Supreme Court definitely recognizes that the real source of Geoffrey's income was South Carolina's customers. This implies that in the view of the Court the source of income was represented by the demand side.

As the four economists observed in their report of the Leagues of Nations «the oranges upon the trees in California are not acquired wealth until they are picked, and not even at that stage until they are packed, and not even at that stage until they are transported to the place where demand exists and until they are put where the consumer can use them. These stages, up to the point where wealth reaches fruition, may be shared in by different territorial authorities»[144].Nonetheless, the consideration of market countries as a possible jurisdiction to tax for business profits seems to put in crisis the globally dichotomy between direct taxes on income and profits, on the one side, and indirect taxes on consumption, on the other side. Accordingly, indirect taxes, and in particular VAT, usually levied at the place of consumption, thus, already taking in consideration the demand side of value creation[145].

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[144] League of Nations Economic and Fiscal Commission, *Report on Double Taxation,* Document E.F.S.73.F.19, 1923, p. 23.

[145] See K. ANDERSSON, *Taxation of the Digital Economy*, Intertax, 2017; L. U. CAVELTI – C. JAAG – T. F. ROHNER, *Why Corporate Taxation Should Mean Source Taxation: A Response to the OECD's Actions Against Base Erosion and Profit Shifting*, Worlt Tax J., 2017, pp. 352 and 377; W. SCHÖN, *Ten Questions about Why and How to Tax the Digitalized Economy*, Bull. Intl. Taxn., 2018, p. 286 where the author pointed out a very interesting argumentation, believing that «the mere existence of the market's demand side […] is regularly covered by VAT, GST and other consumption-oriented taxes. Against this background, one needs to make a special case for a shift of the right to tax business income to the market country on top of the existence of a VAT/GST […] There is also an historical perspective […] One can draw the conclusion that, unlike in the 1920s, there now exists a broad and

The interpretation of value creation in such terms, hence, would bring strong effects on the entire international tax system, since it would require a shift towards a destination-based taxation, where the destination should be assumed where the paying customers of the good or service is located. This implies clearly a radically rethinking of the current taxation of business income[146].

highly successful tax regime tapping the "consumption side" of the market. Against this background anybody who pleads for taxation of inbound digital services has to show that the convergence of VAT/GST doesn't sufficiently perform this role. It is true that VAT/GST has to struggle with practical issues of their own as regards the taxation of the digital economy, but nobody doubts the prominent role of VAT and GST as a source of revenue for destination countries»; E.C.C. M. KEMMEREN, *Should the Taxation of the Digital Economy Really be Different?,* EC Tax Rev., 2018, pp. 72-73.

Contrary, see M. DEVEREUX – J. VELLA, *Value Creation as the Fundamental Principle cit.*, p. 8 for whom «arguing that corporate profits should not be allocated to market countries because such countries (might) already levy VATs or sales taxes on the same activity is equally unpersuasive. It suggests that the value creation principle has (had or will have) a different meaning in relation to countries that have (had or will have) a corporation tax but not a sales tax or a VAT»; J. BECKER – J. ENGLISH, *op.cit.*, p. 164 where the authors state that indirect consumption take in consideration the demand side, but they do not (at least non directly) do so with regard to the income accruing to the foreign taxpayer who exported goods and services into the market jurisdiction. Indeed, «it is only from a generalized perspective, and having resort to general equilibrium theory in international trade, that one can assume that an amount of income corresponding to that earned from cross-border suppliers of goods and services will already be taxed in the demand jurisdiction»; M. DE WILDE, *op. cit.*, p. 9, where with reference to the relationship between taxation of profits on a destination based and VAT the author specifies that it does not transform income tax into a form of VAT, since the tax base would continue to be profit-based, with the only change being a different geographical allocation of taxable base; P. MIESZKOWSKI - J. MORGAN, *The national Effects of Differential State Corporate Income Taxes on Multistate Corporations'*, in Charles E. McLure, *The State Corporation Income Tax: Issues in Worldwide Unitary Combination*, 1984, p. 257.

[146] M. DEVEREUX, *The Digital Services "Sutton"* Tax, available at http://business-taxation.sbsblogs.co.uk/2018/10/23/the-digital-services-sutton-tax/, for whom a merely updating of the Corporate Income Tax appears to be not sufficient anymore, pointing out that «we are in the midst of a shifting of the tectonic plates of international taxation of profit. After nearly a century of what has been broadly the same approach, the international consensus is beginning to break down for a variety of reasons, and some governments increasingly see advantages to taxing profit on sales or users within their own jurisdiction due to their immobility. Unfortunately, few governments are willing to admit as much. So to justify their radically new plans they pretend that those plans are consistent with – or just a tweak away from – the existing system». The abolishment of the Corporate Income Tax, actually, has been whished for a long time, since numerous of distortions to be created as a result of

As some scholars argued, a tax based on the destination of sales, nevertheless, would avoid distortions, since in all likelihood it would not expect a consumer to change her location in order to reduce the tax charge of the multinational from which she buys a product. Consequently, unlike the current tax system, based on the location of multinational enterprise's subsidiaries or the location of parent company, it will be very difficult for the MNE to affect the location of its charge[147].

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corporate tax (see, G. GRAVELLE, *The Economic Effects of Taxing Capital Income*, Cambridge, 1994; A. PLEIJSIER, *Get rid of Corporate Income Tax*, Kluwer International Tax Blog, 2017). One of the major weakness of taxing corporations that has been highlighted since its introduction, for instance, concerned its relationship with the principle of the ability-to-pay. The fallacious rationale behind this principle referred to corporations is that the latter are separate legal "persons" and incorporate a lot of money so that they must have substantial ability-to-pay taxes and should therefore do so. Indeed, according to those that oppose such approach, only people and not things can "pay" taxes in their sense of having their private real incomes decreased (In this sense, see R. M. BIRD, *Why Tax Corporations?*, Bulletin, 2002, p. 195 where it is specified that «the uncertainty about the incidence of corporate taxes provides yet another reason for suggesting that there should be no place for such taxes in a tax system concerned with achieving efficiency and equity». Moreover, as the argument goes, the taxation of corporations lacks of another essential feature of the ability-to-pay, such as that the incidence of such taxes needs to be progressive. Indeed, «to the extent that corporate taxes reduce the income of shareholders, and shareholders are on average richer than others, such taxes may indeed be progressive in their incidence. But any such progressivity is obviously "blind" in the sense that it takes no account of the total position of the shareholder. The same tax is imposed on the impoverished elderly pensioners as on the multimillionaire renter[…]»; L. CARPENTIERI - S. MICOSSI – P. PARASCANDOLO, *Tassazione d'impresa ed economia digitale*, Assonime, 2019, where the authors, argue that according to the major school of thinking «l'autonoma capacità contributiva delle società è difficile da sostenere; come ricorda Cosciani, già nel 1911 Luigi Enaudi scriveva: "La società non è altro che un esattore per conto dello Stato a carico dei veri contribuenti, uomini singoli, vivi e reali» (cf. C. COSCIANI, *Aspetti economici dell'imposta sulle società*, Quaderno dell'Associazione fra le società italiane per azioni, Roma, p. 9; L. ENAUDI, *Premesse dottrinali della riforma fiscale sulle società per azioni,* Riv. soc. com., 1911). Moreover, the same tax base of the corporate income tax seems to be another reason of its weakness, since it has essentially a "conventional" nature. In particular, as some scholars noticed, the definition of income itself appears to be a mere political choice (J. R. Books, *The Definition of Income*, Georgetown University Law Center, 2018, p. 254, for whom «income is whatever society wants it to be in order to achieve a result that the democracy believes to be appropriate and just […] Income is thus a constructed ide, inherently driven by policy objectives and pragmatic concerns»).

[147] In this sense, M. P. DEVEREUX & J. VELLA, *Implications of Digitalization cit.*, p. 555, where he also defines a taxation based on the location of consumers as «economic

The understanding of value creation as a concept that legitimizes a shift of business profits towards a taxation also in the market country, according to its supporters, seems to be without a legal basis. It is read, indeed, as an expression of the benefit principle (see *supra* Chap. II §2) which is often referred to by "source countries" when it comes to international allocation of taxing rights.

In particular, as explained in the previous chapter, the benefit principle has evolved in different concept. According to the later version - so-called entitlement theory usually associated to Peggy Musgrave - a source state should be entitled to tax income originating within its borders because it is the state where the income-generating activity take place and thus the one that economically contributes to the production of income. In this respect, if a country provides and finance public goods which contribute to the creation of value, it has legitimate interest in taxing the outcome[148].

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efficiency, robustness to avoidance and competitive pressures». Indeed, following the point of view of the author «if income is taxed in the place of destination, then it is very hard for a multinational to manipulate the source and hence the place of taxation of that income. As a result of these two factors, the likelihood of competition among countries should also be avoided. If country A lowers its tax rate, it should not attract either activity or tax revenue from country B, since the taxable income depends only on sales in A»; A. J. AUERBACH – M. DEVEREUX – M. KEEN & J. VELLA, *International Tax Planning op. cit.*, p. 795. One a very interesting proposal, among the destination-based tax schemes, is the introduction of a Cash Flow Tax which was proposed the first time by the Meade Committee in the late 1970. Unlike the current corporate tax, the Cash Flow Tax records the transaction at the time of the payment, abandoning the accrual basis (See M. VERSIGLIONI, *Il reddito liquido: lineamenti argomenti ed esperimenti*, 2014, Riv, dir. trib.; R. LUPI – M.VERSIGLIONI, *Il reddito liquido" e la relativizzazione del principio di competenza,* Dial. Trib., pp. 407 et seq. According to such a view, the idea of a "*reddito liquido*" is even more consistent with the principle of the ability to pay. The Authors highlight, in fact, that «differenza "liquida" positiva pari al risultato del confronto algebrico tra le disponibilità liquide esistenti alla fine del periodo di imposta e quelle all'inizio del medesimo periodo […] è decisamente più in grado di presidiare l'effettività della capacità contributiva, oggi imperniata […] sulla liquidità di ciò che si ha o di ciò che si organizza e non più correlabile, come in passato, ad un ampio e generico potere di organizzazione dei fattori produttivi, compreso il capitale»).

[148] See J. HEY, *op. cit.*, p. 205; P. B. MUSGRAVE – R. A. MUSGRAVE, *op.cit.*, p. 71; P. B. MUSGRAVE, *op. cit.*, pp. 228-246; C. E. MCLURE, *Implementing State Corporate*

This latter version seems to be more appropriate to justify such reforming interpretation of the value creation principle.

As a matter of fact, the existence of a market requires customer base but also some means of communication as well as a legal infrastructure to enforce contracts and, depending on the distribution channels, also a specific technical infrastructure, from motorways to data highways. As the sellers or providers of services benefit from the existence of these factors, they should pay for it, to say it in modern language, since these factors contribute to the creation of value[149].

However, it is arguable whether source countries have to provide most or all of the benefits relevant for the production of income.

Income Taxes in the Digital Age, Nat'l Tax J., 2000, who noticed three differences between the traditional benefit principle and the entitlement theory. The former, indeed, concentrates on the benefits provided by the government to business while the latter is based on economic benefits (e.g. the benefits of exploiting a market). Second, the latter is preferred in cases in which the tax base is calculated departing from the profits obtained by the company. Third, the latter supports a higher level of corporate income taxation than the former.

[149] F. B. BROWN, *An equity -based multilateral approach for sourcing income among nations*, Florida Tax review, 2011, pp. 609-610 where the author argued that «the market in any country could not exist without the necessary physical, economic, and legal infrastructure, and this is largely the result of governmental functions. And by accessing a country's market through the sale of goods and services, a taxpayer is benefiting from these governmental activities, thus justifying a […] tax» and «a portion of the income should be assigned to that country even without the taxpayer 's actual presence in the country»; K. VOGEL, *Worldwide vs. source taxation of income: a review and reevaluation of arguments*, part III, Intertax, 1988, p. 401 «taxation by the sales state must be considered under the aspect of inter-nations equity as well. It cannot convincingly be denied that providing a market contributes to the sales income at least to some extent as providing the goods does. There is no valid objection therefore against a claim of the sales State to tax part pf the sales income»; R. J. VANN, *Reflections on business profits and the arm's length principle*, in B. J. ARNOLD – E. M. ZOLT, *The taxation of business profits under tax treaties*, Toronto, 2003, p. 145, «if we think of source taxation in terms of benefit theory, then the place where the relevant activity of the payer is based has some claim if the income recipient is relying on institutions in that place [..] it gives a claim to the place of sale in the business context in the sense of the location of the buyer […] Such a justification […] will be based on some measure of benefit from the institutions in the jurisdiction». On the other hand, Schön notes that there may be other options to grant taxing rights to the market jurisdiction on benefit grounds beyond income taxation (e.g. user fees, indirect taxes, etc…). See, W. SCHÖN, *op.cit.*, p. 286.

This is a pivotal question especially within the current era of the digitalization of the economy which allow enterprises to produce profits at a global level that in no way can be connected to the markets in which the company is active. Technology and transportations, indeed, are increasing more and more the ability of an enterprise to reach market without the need to maintain a physical presence in the territory concerned. Nowadays, it is possible to either provide services remotely (for instance, cloud computing, e-mails, videoconference) or conduct sales by remoted means (e.g. platforms, "apps" etc.)[150]. This implies that within the current new types of business models the only contributions of a market country are often the customer base and the telecommunications infrastructure to reach customers.

Nevertheless, for some scholars, even if a business does not have a permanent establishment in a country, it benefits from the country's infrastructure. Indeed, «the circumstance that short-term business operations may accumulate substantial profits from domestic sources indicated on the contrary that the taxpayer benefits substantially from the infrastructure of the host country, even though no PE exists. It seems that an enterprise which does not need to invest in immovable facilitates, or other fixed places of business, may still derive considerable advantages from the community in which its income sources are located. Today, the performance of a business activity in another country, the duration of the activity and the profits arising from

[150] E. ESCRIBANO, *op. cit.*, p. 43 where the author noticed that «it is clear that the scope of benefits that would be within the company's reach in these circumstances would be more limited in cases in which it is not physically present in the State. For example, the company would rarely be in the position to enjoy general public services as the police/fire protection or the water supply»; C. E. MCLURE, *op. cit.*, pp. 6:5-6:6, for whom «it seems that in this world most of the public services that benefit business firms […] do so only if the firm has a physical presence in the country»; D. PINTO, *Exclusive Source or Residence -Based Taxation – Is a New and Simpler World Tax Order Possible?*, Bull. Intl. Taxn., 2007, p. 288.

it, are per se significant arguments […] that requires all enterprises which obtain such benefits from a country to render a corresponding contribution to this society, whether or not they have a PE»[151].

As Dale Pinto pointed out, there are a lot of pivotal infrastructures without which the same enterprises which do not need of an immobile presence in the state could not have a proper access to the customers market. An appropriate infrastructure of telecommunications and supply of energy, in fact, ensure high-quality of internet access; an extensive transport network together with a fast and efficient postal service would enable a quick and guaranteed delivery of the products; an appropriate legal framework supported by an efficient and reliable judicial system would enable the protection of IP rights, the enforcement of payment in the context of electronic transactions and the protection of both business and customer's rights and interests among others[152].

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[151] A. SKAAR ARVID, *Permanent Establishment: Erosion of a Tax Treaty Principle,* 1991, p. 559.

[152] D. PINTO, *E-commerce and source-based income taxation*, Amsterdam, 2003, pp. 21-23; P. HONGLER - P. PISTONE, *Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy*, IBFD White Paper, 2015, p. 22; A. Cockfield, *Reforming the permanent establishment principle through a quantitative economic presence test*, Canadian Business Law Journal, 2003, pp. 400-422; S. Gadzo, *Nexus requirements for taxation of non-resident' business income: a normative evaluation in the context of the global economy*, available at https://www.academia.edu/31765430/Nexus_requirements_for_taxation_of_non-residents_business_income_a_normative_evaluation_in_the_context_of_the_global_economy, p. 227; MCLure, *Implementing state corporate income taxes in the digital age*, National Tax Journal, 2000, pp. 6:6 and 6:13; F. B. Brown, 2011, p. 611 for whom «one would be unable to spend and consume income within a given country in the absence of the governmental services that support physical, legal, and economic infrastructure as well as public safety»; W. SCHÖN, *op. cit.*, p. 285 where it is argued in the section 6 that «the existence of a market requires a customer base but also some means of communication as well as a legal infrastructure to enforce contracts and, depending on the distribution channels, also a specific technical infrastructure from motorways to data highways»; M. P. DEVEREUX – J. VELLA, *Are we heading Towards a Corporate Tax cit.*, p. 18.

Such examples reveal that a company trading remotely with customers residing in a state without being physically present in its territory would still be in a position to use, enjoy or, at least indirectly benefit from the State's services and infrastructures[153]. Such assumption has used to justify the legitimate demand of market jurisdiction to tax profits that companies derive from the remote sales or provision of services with their residents[154], but such an argument has not historically convinced the OECD[155].

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[153] E. ESCRIBANO, *op. cit.*, p. 44, to such argumentation adds that the existence of a potential market is also possible thanks to a serious of government's measures that ensure the prosperity of a country, such as the socio-economic context in which they operate and a number of policies and services promoted by their government over the years to foster their general well-being, access to education and healthcare, economic prosperity, labor and protection.

[154] M. DEVEREUX – R. DE LA FERIA, *Designing and implementing a destination-based corporate tax,* Oxford University Center for Business Taxation, Working Paper, 2014, p. 13, «countries where consumers reside provide services that are complementary to the consumption of their residents»; M. C. DURST, *Analysis of a formulary system,* part VII: *the sales factor*, Tax management Transfer Pricing Report, 2014, for whom «the market for goods and services within a country is a kind of natural resource located within the country's borders, and income from the exploitation of that resources should be apportioned at least in part to the country's tax base»; R. J. VANN, *Reflections on business profits and the arm's length principle,* in B. J. ARNOLD – J. SASSEVILLE – E. M. ZOLT, *The taxation of business profits under tax treaties,* Toronto, 2003, p. 145, «if we think of source taxation in terms of benefit theory, then the place where the relevant activity of the payer is based has some claim if the income recipient is relying on institutions in that place […] It give a claim to the place of sale in the business context in the sense of the location of the buyer […] Such a justification […] will be based on some measure of benefit from the institutions in the jurisdiction».

[155] OECD (2003), *Are the current treaty rules for taxing business profits appropriate for ecommerce? Final Report*, p. 14, where « (the Technical Advisory group) therefore rejected the suggestion that the mere fact that a country provides the market where an enterprise's goods and services are supplied should allow that country to consider that a share of the profits of the enterprise is derived therefrom […] they do not regard an enterprise which may have access to a country's market as necessarily "using" that country's infrastructure and, even if that were the incidental to the business profit-making process to consider that a significant part of the profits are attributable to that country».

3. *Preliminary conclusions on the "Value Creation".*

The beating heart of the BEPS Project is the alignment of taxation with value creation in order to make sure that MNEs would pay their taxes where the economic activities are carried out, and profits are made.

Within the BEPS Project, in particular, the notion of value creation performs different functions. If, on the one hand, it has a substantial nature, since it represents the means to cut tax havens out of the international tax system, on the other hand, it would represent an overarching principle for the justification and allocation of taxing rights.

This latter function has represented the central topic of the current section.

Even if there is no consensus on the meaning of value creation, we tried to give a possible definition of it, believing that the value creation can be deemed as the combination of valuable resources that create the qualitative value proposition for the customers and the quantitative value proposition.

Starting from this premise there are two possible ways of interpreting the value creation as a valid principle for the allocation of taxing rights.

According to a «common understanding of the value creation principle», value is generally assumed to be created where the supplier is producing a good or service and thereby creates value». The main merit of such kind of interpretation is that it adheres to the existing international tax framework which used to link the taxation of business profits with the utilization of the production of factors of labor and capital within the territory where these factors are exploited. Value creation, hence, is conceived as a supply-side concept. Compared to the

past, consequently, the value creation principle would allow an expansion of the traditional factors of production and supply side within a firm. Consequently, a market country could represent a source jurisdiction insofar as customer base could be considered an adding factor on the supply side of the enterprise.

According to a more revolutionary approach, on the contrary, an MNE would create value not only through the supply-side, but ultimately it needs customers to make a valuable investment. Thus, it is the combination of the supply-side and the market country that contribute to the creation of value for an enterprise.

This implies that the traditional binomial residence and source jurisdiction could not work properly anymore. A shift towards new forms of binomial, such as "origin" and "destination", is required to create a system consistent with the idea of a market country as a new source jurisdiction.

Similar approach, nevertheless, would require to policy makers and states strong efforts, since, on the one hand, the entire international tax system for the taxation of business profits should be rethought in order to move towards destination-based schemes of taxation and, on the other side, it will need to create a system that does not end up denying the traditional dichotomy between indirect and direct taxes.

It is not a novelty, moreover, that the OECD and the great numbers of G20 member countries have refuted the idea of a taxation according to the destination principle for long time.

The same legal justification at the basis of similar understanding of the value creation concept, namely the benefit principle in its later version of the entitlement theory, appears not free from weakness. Indeed, as far as we are concerned, it is reasonable to believe, as some scholars pointed out, that there could be other possible options to grant

taxing rights to the market jurisdiction on benefit grounds beyond income taxation (such as, for instance, users fees, indirect taxes etc.)[156].

[156] W. SCHÖN, *op. cit.*, p. 286.

Chapter IV –

The Application of "Value Creation" approach to Transfer Pricing

TABLE OF CONTENTS: 1. The rise of intangibles: the so-called "capitalism without capital"; 2. The impact of Intangibles on the International Tax System: The Aggressive Tax Planning of Multinational Enterprises; 3. New Guidance on Transfer Pricing Rules for Intangibles: The Alignment of Profits with "Value Creation"; 3.1. The Arm's Length Principle and its main strengths and weakness; 3.2. The Release of Actions 8-10 of BEPS Project and its limits: the merit of "value creation" and its complex relationship with the arm's length principle; 3.3. Formulary Apportionment as more proper solution.; 4. A deeper look at the discipline of Transfer Pricing for Intangibles according to the BEPS Project; 4.1. Identifying Intangibles; 4.2. Ownership of intangibles and the DEMPE analysis; 4.3. The "hard-to-value-intangibles" and the arm's length principle; 5. The legal status of the BEPS Project and the OECD Transfer Pricing Guidelines; 6. First considerations on transfer pricing rules and the "value creation" approach.

1. The rise of intangibles: the so-called "capitalism without capital".

Over the past few decades, intangibles have become a major concern not only for academic research in a number of areas of human knowledge, but also for business managers, auditors' investors and other stakeholders and policy maker.

Before the Information and Communication Technologies (ICT) revolution, the manufacturing sector was the driving source of productivity growth[157]. The ICT revolution, indeed, has changed the way of doing business. As the figure below showed, in the last years there has been a steady increase of investment in intangible assets by the manufacturing firms in most of the developed countries, while the share of investment in tangible capital has decreased.

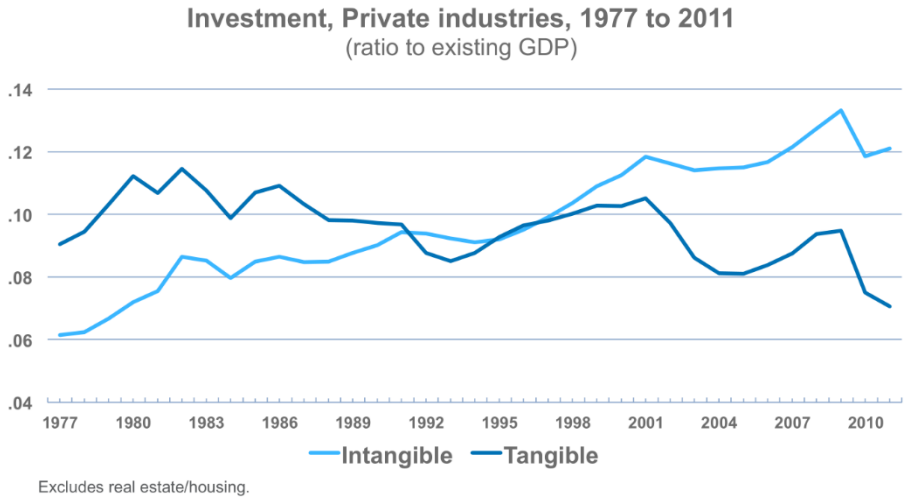

Figure 1: The U.S. intangible and tangible investment rate[158]

[157] Cf. A. BOUNFOUR – T. MIYAGAWA, *Intangibles, Market Failure and innovation Performance,* Switzerland, 2015, p. 1-2.

[158] Figure from C. CORRADO – C. HULTEN, *Internationalization of Intangibles*, February 22, 2013.

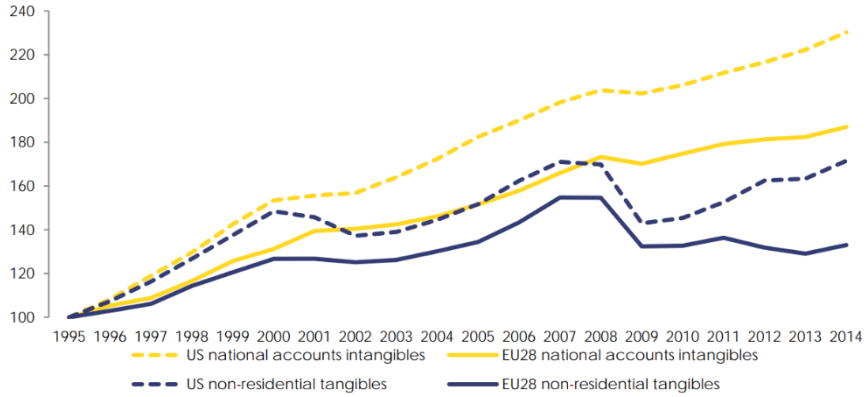

Figure 2: Intangible and tangible investments in the EU-28 and the U.S.[159]

To better understand the impact of such immaterial things in the economic growth, it is worth noting that the most valuable company in the world, such as Microsoft, in 2006 had a market value around $250bn. Looking at its balance sheet, it can be noticed that the traditional assets of plant and equipment were only $3bn, which represents the four percent of Microsoft's assets and 1 percent of its market value[160].

The same OECD reports that the most valuable global companies, such as Google, Microsoft, Apple, Amazon, and Facebook are those that are driven by the intangibles (branding, predicting software, algorithm, etc.)[161].

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[159] European Commission, *Unlocking Investment in Intangible Assets*, Discussion Paper, May 2017.

[160] C. TALBOT, *Knowledge is power: how does government know what it owns – and how does it affect policy?*, 24 December 2018, available at https://www.civilserviceworld.com/articles/feature/knowledge-power-how-does-government-know-what-it-owns-%E2%80%93-and-how-does-it-affect.

[161] OECD Report, *New Sources of Growth: Knowledge-Based Capital,* OECD 2013. In this perspective, the OECD describes intangibles as "knowledge-based capital" (KBC), writing that «knowledge-based capital comprises a range of assets. These assets create future benefits for firms but, unlike machines, equipment, vehicles and structure, they are not physical. This non-tangible form of capital is, increasingly, the largest form of business investment and a key contributor to growth in advanced

Similar scenario has defined by Professors Jonathan Haskel and Stain Westlake as "capitalism without capital", namely corporations that develop specific products or process or invest in organizational capabilities that create or strengthen «product platforms that position a firm to compete in certain markets»[162].

The way in which we used to understand capitalism and economic growth has considerably changed. Capital is different nowadays from the Marx's view, as it is no longer a tangible means of production and ownership of land, but profitable and valuable capital which is driving the economy is "intangible capital"[163].

Intangible investment, specifically, is defined as «the claims on future benefits that do not have a physical or financial embodiment»[164]. Many authors proposed different ways of classifying the intangible assets, but according to a more recent classification there are three main components of intangibles. These are computerized information, scientific and creative property. The computer software and computerized databases are in the first group. The second group includes science and engineering research and development (R&D), copyrights and license costs, and other activities for product development such as design and research. The third group emphasize

economies. One widely accepted classification groups KBC into three types: computerized information (software and databases); innovative property (patents, copyrights, designs, trademarks); and economic competencies (including brand equity, firm-specific human capital, networks of people and institutions) […]».

[162] See J. HASKEL – S. WESTLAKE, *Capitalism without Capital. The Rise of the Intangible economy,* Princenton, 2017, p. 5.

[163] For Marx "capitalism" is when production is organized in society such that capital, in the sense of machines and infrastructure, is owned privately. In Capital, "capital" is used variously to describe stocks and flows associated with capital. See E. ROWE, *Capitalism without capital: the intangible economy of education reform*, Discourse: Studies in the Cultural Politics of Education, 2019, p. 3.

[164] B. LEV, *Intangibles: Management, measurement and reporting,* Washington DC,: Brookings Institution Press, 2000.

the soft part of the intangible assets, such as brand equity, firm specific human capital and organizational structure[165].

The history of the concept of intangible investment dates back to Machlup[166] who conceived the knowledge as intangible asset and emphasized the difficulties in isolation the effects of intangible investment on the knowledge producing industries.

The much of the concern, indeed, with the intangible asset is related to their identification and measurement due to their characteristics that make such kind of non-physical element very unique.

First, conventional accounting practice does not measure intangible investment as creating a long-lived capital asset, due to the fact that there is no a market where it is possible to identify the raw value of such kind of investment (for example in developing a software). Consequently, the measurement of the asset associated with such type of investment is an arduous process and accountants prefer not to do it except in limited circumstances, namely when the asset has been successfully developed and sold.

Further, intangible present unusual economic peculiarities, represented by - using the words of Haskel and Westlake - the so-called "four S", such as *scalability, sunkeness, spillover,* and *synergies*.

Scalability means intangible assets can be used repeatedly and in multiple places at the same time, unlike tangible assets. It is significant in the modern economy, as it has been the crucial tool for the success of multinational companies, as well as to create barriers to potential competitors of these firms.

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[165] C. CORRADO – C. HULTEN – D. SICHEL, *Intangible capital and US economic growth*, Review of Income and Wealth, 2009, pp. 661-685

[166] F. MACHLUP, *The production and distribution of knowledge in the United States*, USA, 1962.

Intangible investment, moreover, tends to represent a *sunk* cost that is almost impossible to liquidate. This implies that investments with high irrecoverable costs can be challenging to finance, especially with debt, in which there is a lack of collateral available to a lender liquidation.

The third "S" (*spillover*) reflects the ease with which intangible assets can be used by subjects other than the owner. Such spillovers often emanate from company R&D activities, but they are also found in branding and marketing, copying of organizational innovations and employee training[167].

Finally, intangible investments tend to have *synergies* with one another. Certain investments, in other words, can only be productive if the appropriate complementary assets exist (e.g., hardware + software + training) so that one intangible asset can become even more valuable when combined with another intangible.

These properties of intangibles have pervasive effects on companies, on the economy, and highlight the existence of a lack of information on intangibles that increase uncertainty and lead to the undervaluation of companies and the existence of significant errors in analysts' earnings forecasts[168]. Moreover, the asymmetries of information in intangible create a risk that opportunistic behavior of

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[167] Cf. T. HMEPHILL, *Capitalism without Capital: The Rise of the Intangible Economy*, Cato Journal, 2018, p. 753, where he explains that according to Haskell and Westlake, spillover matter are based on three reasons: «first, if companies are unsure if they will obtain the benefits of their investments, they will likely invest less; second, there is a company premium in making the most of their own intangible investments (or from other companies' intangible spillovers), and those firms will have competitive success; third, spillovers affect the geography of modern economies, such as creative people locating to urban areas to encourage connectedness».

[168] Cf. M. GARCÌA-AYUSO, *Intangibles: Lessons from the past and a look into the future*, Journal of Intellectual Capital, 2003, p. 598-599.

managers results in significant insider gains and harmful earnings management.

In other words, there are different shreds of evidence: on the one hand, intangibles are fundamental resources of competitive advantages that need to be identified, measured and controlled in order to ensure the efficient management of corporations and to allow the design and implementation of public policies; on the other hand, there is a strong, consistent relationship between intangible investments and subsequent earnings and value creation in business corporation.

The peculiarities of intangibles have also caused a substantial impact on the tax system.

Intangibles, as it will be explained in the next paragraphs, on one side, have revolutionized the concept of value creation, as companies conclude business in a market without establishing a physical presence, undermining the traditional notion of permanent establishment (*supra* §4). On the other side, the uncertainty which characterized intangibles has favored aggressive tax planning from the biggest multinational enterprises (MNE) because of the inability of current national and international tax law to intercept and tax income generated by global transactions of intangibles, dematerialized and spread throughout the world.

2. The impact of Intangibles on the International Tax System: The Aggressive Tax Planning of Multinational Enterprises.

As pointed out in the previous paragraph, globalization and especially the strong emergence of the hi-tech multinational has increased the possibilities for the erosion of the national tax base.

Media reports have highlighted that some highly profitable multinational companies seem to pay almost no corporate income tax on host country income[169].

According to some studies conducted by some non-governmental organizations, such aggressive tax practices are very harmful for the revenues growth in developing countries, effectively robbing them of opportunities to fund the welfare for the poor and needy[170].

The global economy crisis has exacerbated this and placed heavy burdens on government budget[171].

In the past two decades all of the most well-known multinational enterprises (MNEs) has triggered an intense debate due to their aggressive tax planning, which although legal, they often lead to heavy low effective tax rates[172].

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[169] See M. A. SULLIVAN, *Economic Analysis: Should Tech and Drug Firms Pay More Tax?*, Tax. Notes International, 2012, p. 655; R. K. GUPTA, *Recent Trends in Transfer Pricing Intangibles: GAAR and BEPS*, India, 2017, pp.159-160 where the Author reminds that «the phenomenon of tax avoidance by multinational corporations is hardly a new development. As early as 1999, "The Economist" had come out with a detailed report, revealing how Rupert Murdoch's News Corporation had managed to pay just six percent in taxes on the billions of dollars in profits it generated around the world […] ».

[170] R. MURPHY, *The Missing Billions – The UK Tax Gap,* Touchstone Pamphlet, 2008; OXFAM, *Tax Havens: Releasing the Hidden Billions for Poverty Eradication*, Oxfam GB Policy Paper, 01 June 2000.

[171] Cf. A. PICHHADZE, *Exposing Unaddressed Issues in the OECD's BEPS Project: What About the Roles and Implications of Contract Interpretation Law and Private International Law* in *Transfer Pricing Arm's Length Comparability Analysis?*, World Tax Journal, 2015, p. 103.

[172] The term "aggressive tax planning" was first described in the OECD, *Study into Role of Tax Intermediaries* (OECD 2008) report, although the definition has now evolved. See C. PANAYI, *Advanced Issues in International and European Tax Law*, Oxford, 2015, p. 5, where the Author points out that aggressive tax practices are also thought to have led to a phenomenon coined as "stateless income". Stateless income, mainly, has been described as «income derived for tax purposes by a multinational group from business activities in a country other than the domicile of the group's ultimate parent company but which is subject to tax only in a jurisdiction that is neither the source of the factors of production through which the income was derived, not the domicile of the group's parent company». In this respect, E. D KLEINBARD, *Through*

In particular, the tax planning techniques using intellectual property (IP) and more in general intangibles assets (commonly referred to IP tax planning) have proven to be one of the most effective way for facilitating tax avoidance for multinational enterprises.

Intangible assets and the related intellectual property, indeed, due to their peculiarities, as explained above, may constitute the major value-driver for a multinational company. As non-physical value driver, an intangible asset does not have a fixed geographical *nexus* and can be easily reallocated without significant costs. Multinational companies can use such malleability to reduce their overall tax burden by allocating valuable IP to group companies' resident in low tax-countries, posing, moreover, relevant challenges for tax authorities in applying transfer pricing rules following the arm's length principle[173].

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a Latte Darkly: Starbuck's Stateless Income Planning, Tax Notes, 2013, pp. 1515 – 1517; Id., *The Lessons of Stateless Income*, Tax Law Review, 2011, p. 99.

It is worth noting, furthermore, that tax planning is something different from tax avoidance and tax evasion. Tax evasion, indeed, is strictly illegal and can lead to criminal sanctions. On the contrary, the line between tax planning and tax avoidance is not so clear. According to the OECD International Tax Avoidance and Tax Evasion (OECD, *International Tax Avoidance and Evasion, Four related studies*, Paris, 1987, p. 11), tax avoidance is «a serious concern to governments as it is contrary to fiscal equity, has serious budgetary effects and distorts international competition and capital flows». Reducing the tax liability through tax planning by «choosing the most advantageous route consistent with normal business transactions» is however regarded acceptable by the report. In this respect, the main doctrine pointed out that tax avoidance may is something between "bad" tax evasion and "good" tax planning. In this respect, P. MERKS, *Tax Evasion, Tax Avoidance and Tax Planning*, Intertax, 2006, pp. 272-273; K. VOGEL, *Double Tax Treaties and Their Interpretation*, Berkeley Journal Intl. L., 1986, p. 79, who noticed that «tax planning inevitably reaches a point beyond which it cannot be tolerated within a legal system if it is intended that the system be just».

[173] See J. B. DARBY – K. LERNASTER, *Double Irish More than Doubles the Tax Savings: Hybrid Structure Reduces Irish, U.S and Worldwide Taxation*, Practical US/International Tax Strategies, vol. 11, 2007, p. 2; C. FUEST, *Besteuerung multinationaler Unternehmen: keine Alleingänge!,* Wirtschaftdienst, vol. 93, 2013, pp. 138-139.

Empirical research studies assess the significance of corporate tax avoidance and its sensitivity with respect to international tax incentives. Some studies provide rather general evidence for profit shifting by asking how tax rate differentials affect reported pre-tax profits. In their seminal work, Grubert and Mutti as well as Hines and Rice

Such ability to shift profits into low or no tax jurisdictions, by exploiting flaws and loopholes in existing tax rules and taking advantages of some favorable tax regimes or, harder, of the conclusion of secret rulings with some "complacent" government[174] has been severely criticized for distorting the allocation of capital and eroding national tax bases of countries, bringing the taxation of multinational firms to the top of the international policy agenda[175].

Most of the renowned multinational enterprises in the world, like Amazon, Google, Starbucks, Apple and Microsoft have been scrutinized for their legal but highly aggressive tax planning practices,

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show for the United States that there is indeed an empirical relationship between the profitability reported by US multinationals' foreign affiliates and respective host country tax rates (H. GRUBERT – J. MUTTI, *Tariffs and Transfer Pricing in Multinational Corporate Decision Making*, The Review of Economics and Statistics, 1991, pp. 185-293). According to other studies profits of European subsidiaries depend on their specific tax incentives and profit shifting potential given the structure of the whole multinational group (H. P. HUIZINGA – L. LAEVEN, *International profit shifting within multinationals: A multi-country perspective*, Journal of international Economics, 2012, pp. 176-185). Also, for Europe, Egger, Eggert and Winner directly compare tax payments of multinational firms and a group of domestic firms using propensity score matching and find that multinational firms pay substantially less taxes (P. Egger – W. Eggert – H. Winner, *saving taxes through foreign plant ownership*, Journal of International Economics, 2010, pp. 99-108). Finally, Fuest, Hebous and Riedel study income shifting through debt. They report that financing structures of multinational entities in developing countries react more sensitively to tax differences than in developed countries, suggesting that developing countries with high taxes may be more vulnerable to tax planning (C. FUEST – C. HEBOUS – N. RIEDEL, *International debt shifting and multinational firms in developing economies*, Economics Letters, 2011, pp. 135-138). Such findings, hence, strongly support the idea that multinational group reallocate profits globally as to minimize the overall tax burden. Cf. also J. H. HECKEMEYER – M. OVERESCH, *Multinationals' Profit Response to Tax Differentials: Effect Size and Shifting Channels*, ZEW-Discussion Paper No. 13-045, 2013.

[174] Indeed, it is worth bearing in mind that the European Commission opened three investigations to examine whether decisions by tax authorities in Ireland, the Netherlands and Luxembourg with regard to the corporate income tax to be paid by Apple (cf. *Aid to Apple SA.38373 C(2014) 3606 final 2014*), Starbucks (cf. *Aid to Starbucks SA. 38374 C (2014) 3626 final 2014)*, Amazon (*Aid to Amazon by way pf a tax ruling SA 38944 C(2014) 7156*) and Fiat Fiance & Trade (cf., *Aid to FFT SA. 38375 C(2014) 3627 final 2015*) comply with the European Union rules on State aid.

[175] For instance, Google Inc. has saved billions of dollars paying hefty royalties to the subsidiaries incorporated in Bermuda. See Google Report published in 17 June 2013: https://publications.parliament.uk/pa/cm201314/cmselect/cmpubacc/112/112.pdf.

essentially through the use of two exemplary of IP-based tax planning strategies which lead to an overwhelming disparity between where the profit was generated and where at the end the tax was payed.

Indeed, one of the most frequent tax planning techniques was the now obsolete "Double Irish Dutch Sandwich" which it came under intense scrutiny in the United Kingdom, and members of Parliament have characterized the practice as "unethical" and "immoral"[176]. Such structure was commonly used and allowed companies to shift profits to low or no tax jurisdictions by taking advantage of mismatches in corporate residence rule[177].

Irish law has been used for tax planning since 1980s when Steve Jobs executed favorable tax agreements for Apple Inc with the Ireland. It consists of two Irish companies (the "bread") and a Dutch company (the "cheese"). The first Irish Holding is tax resident in Bermuda, since according to the Irish law such company it is not a tax subject therein, being managed and controlled in Bermuda. Taxation of the profits in Bermuda is zero, as Bermuda does not levy any corporate income tax[178]. In this way profits earned by the Irish Holding Company remain completely untaxed.

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[176] In general, it is worth noting that, senior executive of major multinationals were called upon in the UK to give evidence to Parliament's Public Accounts Committee. This was because despite huge profits generated by these multinationals, very little or nothing was paid as UK corporation tax.

[177] On October 2014, the Irish Finance Minister Michael Noonan announced that from 1 January 2015, Ireland would eliminate the ability of new companies to use the double Irish tax arrangement, by changing the residency rules to require all companies registered in Ireland to be Irish tax residents as well. It was also announced that a "knowledge development box" would be introduced in 2016 or when the EU Code of Conduct Group completed its review of EU patent box regimes. See A. TING, *Old Wine in a New Bottle: Ireland's Revised Definition of Corporate Residence and the War on BEPS'*, British Tax Review, 2014, pp. 237-247; M. BURROW, *Ireland to Stop New "Double Irish" Arrangements*, Tax Notes, 2015, p. 279; D. D STEWARD, *Ireland Targets "Stateless" Companies in 2014 Budget'*, WTD, 2013, pp. 200-201.

[178] Bermuda does not levy any taxes on profits, dividends or income. The only burden for Bermuda companies is an annual company fee based on share capitals.

Generally, a US parent company transfers IP to the Irish Holding, which sublicenses the IP to a Dutch company which is a conduit company. To avoid taxation on the transfers, the Holding typically makes a buy-in[179] payment and concludes a cost sharing agreement (CSA)[180] on the future modification and enhancement of the IP with the US Parent Company.

The royalty payment from the Irish Operating company to the Irish Holding Company, which is a Bermuda resident, would be subject to Irish withholding tax. Consequently, to avoid such withholding tax, the Dutch Company is interposed. Instead of directly sublicensing the IP to the Irish Operating Company, the Irish Holding first sub-licenses it to the Dutch Company, who consequently sub-licenses to the Irish operating company. The royalty payment from Ireland to Netherlands is not taxed due to the IRE/NL Treaty and/or the EU Interest and Royalties Directive[181]. Moreover, royalty payment from the

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[179] Cf. C. TURLEY, D. G. CHAMBERLAIN & M. PETRICCIONE, *A New Dawn for the International Tax System: Evolution from past to future and what role will China play?*, Online Books IBFD, 2016, p. 151, where in the footnote n. 554 it is pointed out that term "buy-in" was used in the US Treasury's 1998 White Paper and, later, it was replaced by the new term "platform contribution transaction payment" (PCT payment). The term "buy-in" is used by the OECD TP Guidelines in the more limited sense of a payment made by a new participant joining a pre-existing CSA (see, *para* 8.31 OECD TP Guidelines).

[180] For a deep analysis concerning cost sharing agreements, see C. TURLEY, D. G. CHAMBERLAIN & M. PETRICCIONE, *A New Dawn for the International Tax System, op.cit.*, p. 151, where the Authors clearly explained that «a CSA is an arrangement whereby associated enterprises jointly develop intangible property for each enterprise to use separately in its own business. The costs that are shared under the CSA are the expenses of developing the intangibles. These are, typically, research and development (R&D) costs relating to new products or improvements, but advertising and other marketing expenses relating to brand development could also be shared […]. The governing rule for CSAs is that intangible development costs must be shared in proportion to participants' shares of reasonably anticipated benefits (RAB shares) ».

[181] Council Directive 2003/49/EC of 3 June 2003 *on a common system of taxation applicable to interest and royalty payments made between associated companies of different Member States.*

Netherlands to the Holding Company resident in Bermuda is not taxed because the Netherlands does not levy withholding tax on royalty payments[182].

To get an idea on the different steps, the figure below represents the discussing structure.

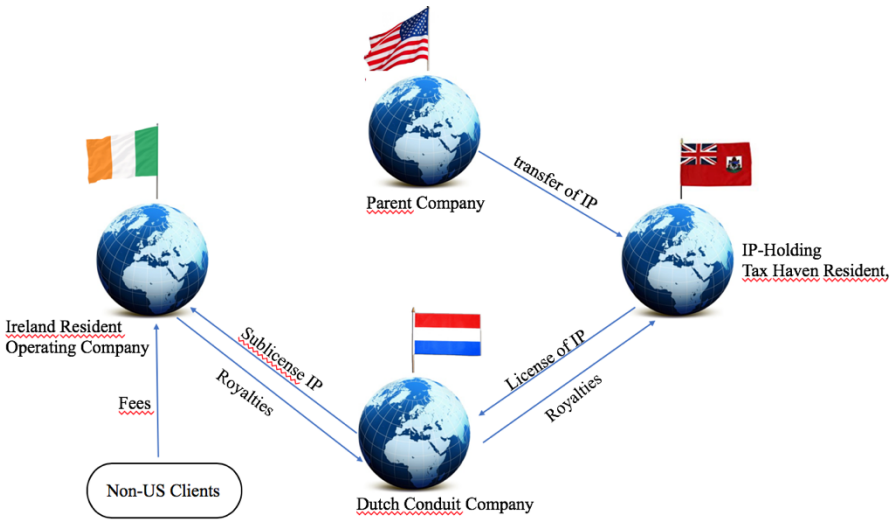

Figure 3: The Double Irish Company Structure[183]

The Irish operating company, on the other side, exploits the IP and usually earns high revenue. Consequently, such profits from customer sales are subject to tax in Ireland. Nevertheless, the tax base of such operating company is close to zero due to the fact that, on the one hand, the Irish tax low rate is of 12.5%, on the other hand, it pays

[182] Article 8c Dutch corporate tax law 1969.

[183] For a deeper analysis of the structure, see R. NABBEN, *Intellectual Property Tax Planning in the light of Base Erosion and Profit Shifting*, Master Thesis, Tilburg University, 2017, p 32 ss; E. D. KLEINBARD, *Stateless Income*, Florida Tax Review, 2011, 699-774; J. SANDELL, *The Double Irish and the Dutch Sandwich: How Some U.S. Companies Are Flummoxing the Tax Code*, Tax Notes International, 2012, pp. 867-878; R. PINKERNELL, *Ein Musterfall zur internationalen Steuerminimierung durch US-Kozerne*, Steuer und Wirtschaft, pp. 369-374.

tax-deductible high royalties for the use of IP held by the Holding Company.

It is clearly that in such structure, group companies may have an incentive to charge excessively high royalty payments also exploiting the circumstance for which the determination of the arm's length price for the royalty payment is usually difficult, since intangible is only partially developed at the time of transfer and risk associated with future earnings. This means, in other words, that multinationals have considerable leeway in determining the price[184]. Moreover, as already pointed out, withholding tax are easily avoided through either the Interest-Royalty Directive or "friendly" treaties or by interposing conduit companies in jurisdictions that does not levy withholding taxes (such as Netherland).

Beside the "Double Irish Dutch Sandwiches" [185], another way to minimize taxes through IP was basically represented by the exploitation

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[184] See C. FUEST – C. SPENGEL – K. FINKE – J. H. HECKEMEYER – H. NUSSER, *Profit Shifting and "Aggressive" Tax Planning by Multinational Firms: Issues and Options for Reform*, World Tax Journal, 2013, pp. 310-311.

[185] It is worth noting in order to properly complete the analysis that the Apple's IP tax strategy was similar but at the same time relatively simple when compared to the more common "Double Irish Dutch Sandwich" structure. Indeed, basically, Apple Inc established subsidiaries in Ireland: Apple Operations International (AOI), Apple Operations Europe (AOE) and Apple Sales International (ASI). AOI is a company incorporated in Ireland, but with central management and control in the US. In this respect, both according to the Irish legislation and US tax law, such company cannot be considered resident neither in Ireland nor in US. AOI is the intermediate holding companies. Its subsidiaries include ASI and group distribution companies in, respectively, Europe and Asia. ASI, on the other hand, is also incorporated in Ireland. Similar to AOI, it enjoys the perfectly complementary definitions of corporate tax residence in Ireland and the US. ASI engages unrelated contract manufactures in China to assemble the products, and sells the finishes products to distribution subsidiaries in Europe and Asia. Consequently, in most cases the products never physically transit through Ireland. The company has entered into a cost sharing agreement (CSA) with its ultimate parent company Apple Inc, under which it has the economic rights to Apple's intellectual property outside the America while the legal ownership rests with the Apple Inc in US. The arrangement is not commercially justifiable compared to the amounts of cost sharing arrangements and the corresponding income earned by ASI. The tax liabilities of ASI were trivial compared to its income. For instance, it paid US $10 million while its income was US $22billion

of the IP-box regime[186]. In such case, indeed, instead of locating the IP in an Ireland Holding Company, this structure locates the IP-Holding company in an European country that offers an IP-box regime, such as, for instance, Luxembourg, United Kingdom and Belgium.

Whereas in the "Double Irish Dutch Sandwich" the profits accruing through royalties are untaxed at the level of the Irish holding company due to it being Bermuda resident for Irish tax purposes (and Bermuda does not levy corporate income tax), IP-holding structures using IP-box regimes reduce taxation through the reduced tax rated offered by the IP-box regime.

Because the IP-holding company is now located in Europe, in case the IP is licensed-out to an operating company also located in Europe, royalty payments are untaxed in the source country due to the Interest-Royalty Directive or the relevant treaty in case of non-EU. Therefore, the Dutch conduit company that is interposed in the "Double Irish Dutch Sandwich" in the discussing structure is no longer required, as showed by the figure below.

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in 2010 (cf. US Hearing Report, p. 17). The double non-taxation of the profits booked in AOI and ASI was the result of a combination of factors: namely, the definition of corporate residence in Ireland and the Us; transfer pricing rules on intangibles and cost sharing agreements; the Us Controlled Foreign Corporations rules; and the check-the-box regime and the low taxes at the source jurisdiction.

For a deep review of Apple's tax strategy, see A. TING, *iTax: Apple's International Tax Structure and the Double Non-Taxation Issue*, British Tax Review, 2014, pp. 40-71.

[186] Intellectual property box regimes, in general offer substantial lower tax rates to income derived from intellectual property or grant credits to expenditures incurred in the creation of the IP. According to European Union, 27 OECD Member Countries provide some form of IP tax incentives, of which eleven offer a corporate tax reduction. Cf. European Commission, *A Study on R&D Tax Incentives*, *Final Report*, 2014, p. 19. For an overview see L. EVERS – H. MILLER – C. SPENGEL, *Intellectual property box regimes: effective tax rates and tax policy considerations*, International Tax and Public Finance, 2014, p. 504.

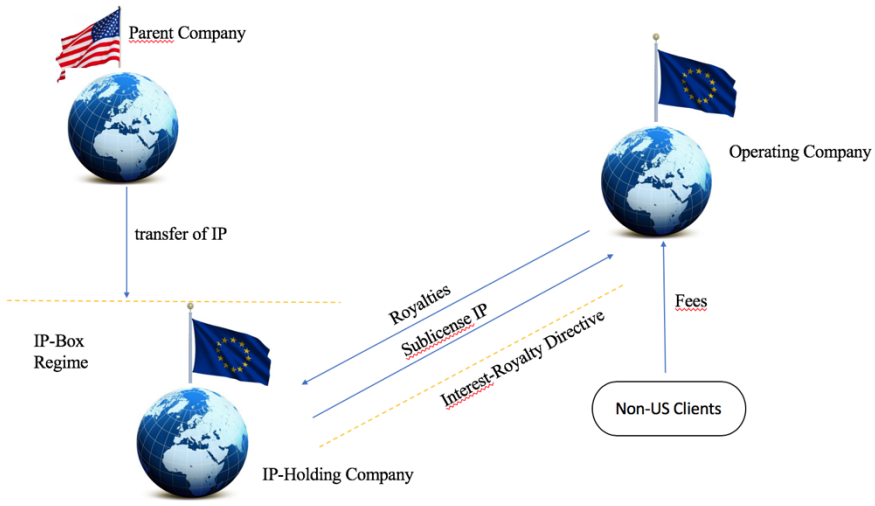

Figure 4: IP-Holding structure using IP regimes

Also in this case, determining the arm's length of the price for the transfer from IP-Holding company to the other subsidiary it is not easy.

The royalties are not completely untaxed at the level of the IP-Holding Company. However, as IP Box Regime allows exempting a large share of royalty income from taxation or offer reduced tax rates for such income, the tax liability of the IP-Holding company is very low.

From the analysis of the two most popular IP tax planning structures it is displayed that MNE are able to reduce, through a legal behavior, their effective tax rates by exploiting flaws in both domestic and international taxation.

Mainly, this effect is caused by two main factors.

On the one hand, by «a de facto waiver of residence taxation»[187] due to ineffective CFC rules, a conflicting definition of tax residence in

[187] See, C. FUEST – C. SPENGEL – K. FINKE – J. H. HECKEMEYER – H. NUSSER, *Profit Shifting and "Aggressive" Tax Planning by Multinational Firms: Issues and Options for Reform, op. cit.*, p. 8.

different countries, and a low general tax rate and special IP tax regimes; on the other hand, by a no or little source taxation due to the non-existence of withholding taxes on royalties, difficulties in the valuation of intangibles and relating royalty payments, and a lacking of a taxable presence of MNE.

Under a transfer pricing perspective, the phenomena of profit shifting has definitely affirmed the failure of the arm's length principle – at least for those transactions that involved intangibles assets within a MNE group – which has proven to be far from infallible in preventing companies from diverting taxable profits out the jurisdictions where they carry out their economic activities and thus benefit from public services and infrastructures.

Taking this as the starting point, the current section aim at putting in light the main issues related to the ALP and its relationship with the new approach to transfer pricing for intangibles laid down by the BEPS Project.

3. New Guidance on Transfer Pricing Rules for Intangibles: the alignment of profits with "value creation".

3.1. The Arm's Length Principle and its main strengths and weakness.

Since the 1995 OECD Transfer Pricing Guidelines the arm's length principle (ALP) was labelled as the international tax standard for transfer pricing analysis[188].

[188] It is worth noting the ALP was first introduced by the United states in 1934 (See, S. L. LANGBEIN, *The Unitary Methods and the Myth of Arm's Length*, Tax notes, 1986, p. 632). The OECD, on the contrary, has been working for many years to

ALP requires that the amount charged by one related party to another for a given transaction must be the same as if the parties were not related. An arm's length price for a transaction is, therefore, what the price of that transaction would be on the open market, namely if it was dealt between unrelated parties.

ALP, hence, is basically based on «an imaginary picture of what most probably would have happened under circumstances other than those existing»[189].

One of the most important rationale behind its success and general consensus is that basically the OECD has always rejected other types of methodologies - especially in the form of global apportionment methodologies - that sets transfer prices by reference to a pre-determined formula[190]. In this sense, it can be said that the ALP has

achieve an international consensus on transfer pricing rules. In 1979, the OECD issued a report, *Transfer Pricing and Multinational Enterprises* (OECD, *Transfer Pricing and Multinational Enterprises*, 1979). In 1995, the OECD replaced the 1979 report, culminated in a comprehensive and fundamental review of transfer pricing, which is represented by the OECD's *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations* (TPG). In general, see R. PETRUZZI, *The Arm's Length Principle: Between Legal Fiction and Economic Reality*, in M. Lang *et al.* (eds.), *Transfer pricing in a Post-BEPS World,* The Netherlands, 2016, p. 9, where it is stated that «since that moment [1993], the arm's length principle has been the preferred methods for allocating business income between head office and permanent establishment and also between related companies both in the OECD Model Tax Convention on Income and on Capital (OECD Model) and in the United Nations Model Double Taxation Convention Between Developed and Developing Countries (UN Model) as well as being the relevant principle embedded in most transfer pricing rules around the world»; Y. BRAUNER, *Value in the Eye of the Beholder: The Valuation of Intangibles for Transfer Pricing Purposes*, Virginia Tax Review, 2008, p. 96, where he states that «the arm's length standard is the heart, spirit and the foundation of the current transfer pricing regime».

[189] See, T. NIELSEN, *The Arm's Length Test: A Rule of Law – or an Excuse for Arbitrary Taxation?*, Intertax, 1979, p. 297.

[190] R. M. HAMMER, *Will the Arm's Length Standard stand the Test of Time? The Specter of Apportionment*, Intertax, 1996, p. 4 where it is pointed out that the OECD has always rejected other kind of methodologies, especially those that sets transfer prices by reference to a pre-determined formula, since, always according to OECD's view, it is difficult administered them on a worldwide basis, as well as the fact they would quite probably result in double taxation.

rarely been challenged and this is one of the major reasons of its affirmation within the international framework.

On the other hand, ALP provides a market-based mechanism that allows the general international tax norms to apply equally and similarly to transactions between related and unrelated parties. If correctly applied, actually, the ALP replicates market conditions in intra-firm trade, minimizing distortion of investment decisions and maximizing global economic welfare[191].

Moreover, it seems to play a key role for the double taxation as well, since only sophisticated mathematical methodology may aspire to tax income once, through an analysis of the various risks and profit opportunities in the various stages of production[192]. The head of the OECD's transfer pricing unit, Tomas Balco, indeed, considers that the ALP «performs two main functions – that of anti-abuse provision, which should prevent base erosion and profit shifting, but also to assure fair allocation of taxing rights between jurisdictions with a view to prevent double taxation»[193].

Despite all these merits, however, the ALP has always been strongly opposed.

According to Raffaele Petruzzi, the arm's length principle is based on three main pillars, such as «the fiction of separate legal entities (so-called "separate entity approach"), the relevance of the contractual

[191] KPMG, *The end of the arm's length principle?*, 2018.

[192] R. S. AVI-YONAH, *International Taxation of Electronic Commerce,* Tax L. Rev., 1997; Y. BRAUNER, *Formula Based Transfer Pricing*, in Y. BRAUNER-M. MCMAHON (eds.), *The Proper Tax Base: Structural Fairness from an International and Comparative* Perspective, Kluwer Law International, 2012.

[193] L. ANGIVIK, *The future of the arm's length principle*, TP Week, December 2017.

arrangements, and the comparability of transactions»[194]. Nonetheless, the rationale behind these three pillars is not so strong as expected[195].

Regarding the comparability of transactions, many scholars argue that it does not reflect the economic circumstances effectively, but it just pretends to do so. This because the ALP ignores the economic reasons behind the decision of firms to operate across borders through a related transaction rather than contract with unrelated parties. Multinational groups, in fact, exist for the purpose of generating profits by internalizing transactions that would be costlier if conducted with unrelated parties.

In the early 1995, after all, the same OECD emphasized that «a practical difficulty in applying the arm's length principle is that associated enterprises may engage in transactions that independent enterprises would not undertake», recognizing, hence, that transactional relationship between controlled parties may differ in important and fundamental ways from potentially comparable transaction between unrelated parties [196].

In this sense, we agree with whom believes that the failure of the ALP lies in its own nature, as it is an eminently "subjective" parameter which leaves a sort of "grey area" within which taxpayers and tax administration may move freely and legitimately[197]. This is due mainly

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[194] R. PETRUZZI, *op. cit.*, p. 11.

[195] IFA, *Cahiers De Droit Fiscal International,* Vol. 102, The Netherlands, 2017, p. 197.

[196] (1995) OECD TPG, at 1.10; H. N. HIGINBOTHAM, *When the Arm's Length Isn't Really Arm's Length: Issues in Application of the Arm's Length Standard,* Intertax, 1998, p 235, where, it is pointed out that, for instance, an independent enterprise may not be willing to sell an intangible (e.g. the right to exploit the fruits of all future research) for a fixed price if the profit potential of the intangible cannot be adequately estimated and the are other means of exploiting the intangible.

[197] E. ESCRIBANO, *op. cit*., p. 56; I. NAVARRO, *Los ajustes transaccionales en la normatva sobre precios de transferencia,* available at http://e-archivio.uc3m.es/handle/10016/23300, 2016, pp. 57-58.

to the fact that to a transaction could be attributed a "range" of arm's length prices, since inefficiencies in the market, good and bad deals and a variety of other factors mean that competitors in the same market do not generally have the same price or the same profit. Using the words of Henshall, in other terms, «there is simply no "right price" »[198].

ALP is far from an exact science. Judgement must be exercised to determine the comparability of transactions, so that accurate adjustments can be made to reflect any differences. In fact, it is precisely this "subjectivity" has rendered the ALP incapable of fully preventing profit shifting from transfer pricing manipulation as above illustrated, allowing the MNEs an instrumentally application of the ALP.

On the other hand, the reliance on a formal analysis of the terms and conditions of intra-group transactions also distanced transfer pricing analysis from the actual economic substance of the transactions, leading to «leaves falling where there are no trees»[199]. The formal analysis of international transactions has particularly distorting effects in operations involving intangibles. As noted in the previous paragraph, more often entities that did not contribute to the creation of an intangible – or that do not bear the risks associated with it – end up entitled to the income it generates[200].

Beyond these critical aspects, the other tricky aspect at the basis of the ALP is represented by its inability to capture the so-called

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[198] J. HENSHALL, *Global Transfer Pricing,* London, 2016, para. 2.47.

[199] S. WILKIE, *Transfer Pricing Aspects of Intangibles*, in M. Lang *et al.* (eds.), *op. cit.*, p. 68.

[200] M. HIEMANN – S. REICHELSTEIN, *Transfer Pricing in Multinational Corporations: an Integrated Management and Tax Perspective*, in W. SCHÖN and KAI A. KONRAD (eds.), *Fundamentals of International transfer Pricing in Law and Economics,* Berlin, 2012, p. 11; S. GONNET, *Risks Redefined in Transfer Pricing Post-BEPS*, in M. Lang, *op. cit.*, p. 35.

"synergies rents", since it rests on a big untruth that the related parties are separate entities ("separate entity-approach")[201].

As matter of fact, various scholars noticed that the ALP is "inherently flawed", because it treats the members of an MNE as separate entities rather than "inseparable parts of a single unified business" thereby denying the economic reality, especially in the current context of globalization, and the "internationalization theory"[202]. According to the latter, corporate groups, due to its own organization, manage to internalize transactions costs and thus increase its efficiency in achieving economies of scale, raising capital

[201] In this respect, to get a better idea, it is worth reminding that the nature of companies is different from the legal, economic and tax standpoint. Indeed, under the legal perspective, as well known, a company is a sort of legal fiction or abstraction which receives a treatment analogous to that received by a natural person. For instance, legislation generally grant them certain powers and obligations similar to those of natural persons, namely, the capacity to own property, pursue legal actions, enter into contract in their own names etc. On the other side, from an economic viewpoint, the relationship between companies and their shareholders is not so strict. Companies and shareholders may well be regarded as economically independent or as economically integrated (see P. A. HARRIS, *Corporate/shareholder income taxation and allocating taxing rights between countries*, Amsterdam, 1996, pp. 43-46). Escribano pointed out that «as a consequence of all this, as long as there is no clear boundary between ownership and control, companies and their shareholders (whether individuals or companies) may be regarded as economically integrated and thus forming an economic single entity». Under a tax perspective, a distinction should be made with reference to how income derived by a company is ultimately taxed. On the one hand, in fact, countries may treat a company as separate taxpayer, distinct from its shareholders, whose income becomes taxable in its own hands at the time it is perceived (P. A. HARRIS, *op. cit.*, pp. 50-51). Today this is the general tendency, since the majority of the countries have CITs in place which impose the tax at the level of the company. On the other hand, countries may decide to treat the company as fiscally transparent, in a way that results in the attribution of its profits to the shareholders behind it. Having established this, the other main question that follows is whether the fact of belonging to a corporate group is considered or not for the taxation of a company. In this respect, countries can choose to treat the different members of the groups separately (separate-entity approach) or they may opt to recognize the corporate group as a whole thereby ignoring the transactions between the group members and merely looking at outcomes for the overall group.

[202] R. J. VANN, *op. cit.*, p. 139; L. E. SCHOUERI, *Arm's Length: Beyond the Guidelines of the OECD*, Bull. Intl. Taxn., 2015, p. 698.

advertising products, protecting valuable intangibles etc.[203]. The consequence is that MNEs are able to enjoy higher margins of profits than those obtained by comparable enterprises that are not integrated in a group[204]. Such extraordinary margins are referred as "synergy rents" and the ALP as it currently laid down is unable to take them into account[205]. The unique incontrovertible reality, hence, is that MNE group operates more like a unitary entity. Such a cohesion, after all, is basically proved by the controlling powers of the parent corporation.

In this sense, as Hey pointed out, treating members as separate entities is just a "fiction" which ignores the economic facts and outcome of an integrated business and, therefore, the real essence of MNEs[206].

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[203] R. AVI-YONAH, *International tax as international law: an analysis of the international tax regime*, Cambridge, 2007, p. 25.

[204] In this sense, see E. ESCRIBANO, *Jurisdiction to Tax Corporate Income Pursuant to the Presumptive Benefit Principle. A Critical Analysis of Structural Paradigms Underlying Corporate Income Taxation and Proposals for Reform*, United Kingdom, 2019, p. 61.

[205] Schoueri argues, in this sense, that the ALP, as it currently stands in the OECD and UN Model Conventions, is incapable of dealing with synergy rents and that such failure cannot be adjusted by a different interpretation of the ALP. See, L. E. Schoueri, *op. cit.*, pp. 698-711-713; Z. Pèrez – N. Ibarrola stated in their comments to the changes proposed by Actions 8-10 of the BEPS Project that «it is virtually impossible that transactions exclusively undertaken by MNEs – and hence transactions that independent parties would not undertake – may respect the ALP». See, OECD (2015), *Comments received on Public Discussion Draft: BEPS Actions 8, 9 and 10: Revisions to Chapter I of the OECD TPG*, p. 511.

[206] See, HEY, *op. cit.,* p. 206; R. S. AVI-YONAH, *The Rise and Fall of Arm's Length: A Study in the Evolution of U. S. International Taxation,* Tax. Rev., p. 89 and *Between Formulary Apportionment and the OECD Guidelines: A Proposal for Reconciliation*, World Tax. J., 2010; R. S. AVI-YONAH – I. BENSHALOM, *Formulary Apportionment – Myths and Prospects*, World Tax J., 2011; S. GREIL, *The Dealing at Arm's Length Fallacy: A way Forward to a Formula-Based Transactional Profit Split?*, Intertax, 2017, p. 624; G. RECTENWALD, *A Proposed Framework for Resolving the Transfer Pricing Problem: Allocating the Tax Base of Multinational Entities on Real Economic indicators of Benefit and Burden*, Duke J. Comp. & Intl. L., 2012, p. 427; H. LUCKHAUPT – M. OVERESCH – U. SCHREIBER, *The OECD Approach to Transfer Pricing: Acritical Assessment and Proposal*, in W. Schön – K. A. Konrad, *Fundamentals of International Transfer Pricing in Law and Economics*, Spring, 2012; L. E. SCHOUERI, *op. cit*, p. 698, where he pointed out that «internationalization allows integrated enterprises to carry out transactions more efficiently than independent enterprises, which must follow market prices».

It is worth noting, in conclusion, that all these weaknesses not only end up denying the same rationale at basis of the birth of the ALP but, additionally, lead to an inexorable detriment of the legal certainty, depriving both taxpayers and countries of the possibility to foresee the likely revenue outcome in a transfer pricing case[207].

3.2. The Release of Actions 8-10 of BEPS Project and its limits: the merit of "value creation" and its complex relationship with the arm's length principle.

The transfer pricing issues constitutes the «beating heart»[208] of the BEPS Project and it is represented by Actions 8, 9 and 10[209].

Transfer pricing rules allow the determination on the basis of the ALP of the conditions, including the price, for transactions within an MNE group[210]. Using the words of Avi-Yonah, transfer pricing rules

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[207] R. AVI-YONAH, *International tax as international law cit.*, p. 26, where the author expresses concern over the possibility that potential investors may feel discouraged for the inability to forecast the tax burden on their potential international ventures and thus choose not to invest.

[208]See Y. BRAUNER, *What the BEPS*, UF Law Faculty Publications, 2014, p. 96 where it is stated that «the aggressive transfer pricing is the beating heart of BEPS planning – the *sine qua non* of the transactions that triggered the universal interest in BEPS and eventually the BEPS project». In another text the same author has claimed that «transfer pricing is by far the single most important and impactful tool among the current international tax planner's tools of trade». In this sense see, ID., *Transfer Pricing in BEPS: First Round- Business Interests Win (But, Not in Knock-Out),* Intertax, 2015, p. 72 et seq.

[209]OECD, *Aligning Transfer Pricing outcomes with Value Creation – Actions 8-10 Final Reports*, OECD/G20 Base Erosion and Profit Shifting Project, 5th October 2015 (Final Report). Such guidance in the Actions 8-10 Final Report takes the form of revisions to chapters I, II, VI, VII and VIII of the *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administration* (OECD Guidelines 2017). Action 8, mainly, is a revision of ch. VI OECD Guidelines, all references to the particular paragraphs of the Intangibles section of the Actions 8-10 are parenthetically stated as paragraphs of the "OECD Guidelines" in subsequent citations.

[210]See Article 9 (1) OECD Model Tax Convention on Income and on Capital. For an overview, see T. ZINN - N. RIEDEL - C. SPENGEL, *The Increasing Importance of Transfer Pricing Regulations: A Worldwide Overview*, Intertax, 2014, pp. 355-370;

allocate income earned by an MNE among the countries in which the company does business.

However, as shown in the second paragraph, the existing pricing rules fail in ensuring an efficient allocation of the income of MNEs among jurisdictions[211]. Some MNEs have been able to use or misapply those rules that separate income from the economic activities that produce income and to shift it in low-tax country, especially when the transactions involving intangibles.

In this sense, the main purpose of Actions 8-10 is to assure «that profits are taxed where economic activities take place and where value is created»[212]. This means that the OECD calls for transfer pricing rules or special measures which ensure that no group company receives an inappropriate amount of returns, preventing the separation of economic activities and the value generation from profit, aligning taxable basis wherever the value creating activities occur[213].

The concept of value creation on the basis of transfer pricing rules, thus, tends to achieve a fair allocation of taxing rights, since it is suitable to reduce manipulation by contractual arrangements[214].

To this end, the BEPS Project proposed to address the "flaws" of the current international tax system with a particular attention to all

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M. BOOS, *International Transfer Pricing: The Valuation of Intangible Assets*, The Hague, 2003, p. 3; G. COTTANI, *Transfer Pricing,* IBFD online book, 2011, pp. 10 et seq.; J. HENSHALL, *Global transfer pricing: principles and practice*, Haywards Heath, 2013, pp. 5 et seq; ID., *Global Transfer Pricing cit*.

[211]Cf. C. GARBARINO – M. D'AVOSSA, *The OECD Intangibles Project and the Concept of "Intangibles Related Return"*, European Taxation, 2015, pp. 12-15, where the Authors noted that «the identification of a correct transfer price for intangibles depends on the assumption that there is an intrinsic market value of a given intercompany transaction and this highlights one of the logical weaknesses of the transfer pricing approach».

[212]OECD, Action 8-10 Final Reports, p. 7.

[213]OECD Secretary-General Report to G20 Leaders, Brisbane, Australia, 1st Nov. 2014.

[214]See, J. HEY, *op. cit.*, p. 206.

areas that were identified as particularly risky, namely transactions with intangible assets, risk and over capitalization[215].

According to the new Transfer Pricing Guidelines, as resulting from the BEPS Project, in the context of intangibles the entities that are deemed to add value are those ones that perform functions, use assets and/or assume risks in the development, enhancement, maintenance and protection and exploitation of intangibles (so-called DEMPE)[216], playing a more important role in the performance of functions[217]. In other words, the OECD assimilated value creation to the performance of functions, use of assets and assumption of risks[218].

To get an idea of the different approach compared to the past, see the figure below.

Table 1. Allocation of Risks and Intangible Profits

Item	Allocation Criteria		Measure
	1995 Guidelines	2015 Guidelines	2015 Guidelines
Risks	Contractual terms	"Actual conduct of the parties": 1) control over risk; and 2) financial capacity to assume risks	Object qualification
Intangible profits	Legal ownership	1) "Important" functions; 2) factual risk allocation; 3) funding profits capped; 4) presumption of no comparables; and 5) profit-split method	Valuation object qualification

Figure 6[219]

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[215] BEPS *Action Plan*, p. 20.

[216] 2017 OECD *Transfer Pricing Guidelines*, paragraphs 6.47 – 6.72.

[217] I. NAVARRO, A., *La modificaciòn de las pautas sobre precios de transferencia (Acciones 8-10): ¿cambio o evoluciòn?*, p. 136, in J. M. Almudí – J. Ferreras – P. Hernàndez (dirs.), *El plan de accíon sobre erosión de bases imponibles y traslado de beneficios (BEPS): G-20, OECD y Unión Europea*, Pamplona, 2017, where Navarro observes that the new parameter grants a greater weight to functions over assets and risks both in the framework of functional analysis and when the time comes to select the "most appropriate" method.

[218] E. ESCRIBANO, *op. cit.*, p. 154.

[219] J. WITTENDORFF, *BEPS action 8-10: birth of a new arm's length principle*, Tax Notes International, 2016, p. 333.

Such "value creation" approach on transfer pricing rules promoted by the OECD has been both welcomed and criticized by some scholars.

According to Tavares, for instance, this new approach appears to be more consistent with contemporary economic theories that seek to identify the most significant features that contribute to the success of an enterprise, most notably the knowledge-based theory of the firm[220]. Thus, firms serve as "repositories" of valuable knowledge that can be easily and cheaply learned through continuing association. He believes that such an idea is "strikingly consistent" with the direction of the BEPS value creation approach[221].

From many quarters, on the contrary, it has been strongly questioned the compatibility of the "value creation approach" with the current legal configuration of the arm's length principle, as illustrated in the previous paragraph.

The OECD itself, within the same BEPS Project, after all, has shown some doubts in this regard, affirming that there may be instances where the existing arm's length-based norms cannot be effective. Specifically, it recognized that MNE have been able to «use and/or misapply those rules [the ALP] to separate income from the economic activities that produce that income and to shift it into low-tax

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[220] R. J. S. TAVARES, *Multinational firm theory and international tax law: seeking coherence*, World Tax Journal, 2016, pp. 271-272, where he argues that "value creation" approach (reflected in different outcomes derived by the BEPS Project, such as, for instance, the DEMPE approach to transfer pricing, captures the "knowledge-based" views on the firm. This theory can be traced back to Penrose, who suggested that the access and use of information through management decision-making is what makes a difference and creates value (E. T. PENROSE, *The theory of the growth of the firm*, Oxford, 1959).

[221] R. J. S. TAVARES, *Multinational firm theory cit.*, p. 272.

environments», implicitly admitting that the ALP was inherently troublesome[222].

As matter of fact, some scholars pointed out that one of the most critical aspects of the new value creation approach is that the OECD instead of rethinking the ALP, refine the concept, continuing to accept its weakness, especially with regard to the "separate entity approach", while attempting to counteract its harmful consequences.

The "value creation approach", indeed, seems to definitely cast light on the fact that value chains of MNEs are highly integrated. Taxing profits where value is created and activities take place cannot be realized without treating an MNE as a single entity. In order to identify the place where value is created, indeed, is necessary to track the different synergies of the integration between the different entities of the group.

According to Avi-Yonah, actually, «if the BEPS Project is designed on the principle of single unitary entity, the BEPS countermeasures will be much simpler and more effective, as intergroup transactions will be disregarded, and the profit or tax base will be attributed to its real activities which generate profit and create the value in the jurisdiction»[223].

Furthermore, as already mentioned above, as the ALP is by nature a "subjective" parameter which creates a range of possible compatible prices, it turned out to be itself a benefit instrument for taxpayers which may structure their transfer pricing assessment as to "push the limits" of the ALP and thus get the most convenient pricing within the wide range demanded by the ALP; typically, separating income from the

[222] BEPS Project, p. 19; E. ESCRIBANO, *op. cit.*, p. 56

[223] R. AVI-YONAH – H. XU, *op. cit.*, p. 209.

economic activities that produce that income in denial of the same *ratio* at the basis of the Actions 8-10.

In other terms, the ALP as it currently stands, is likely to bring outcomes that are not aligned with value creation[224].

This being so, in the effort to maintain the ALP, the OECD has attempted to effectively limit such inherent "subjectivity" of the ALP narrowing the possible range of acceptable prices by means of the empowerment of certain transfer pricing methods (specifically, those that are less reliant on comparability analysis, such as transactional method) at the expense of others.

Transfer pricing methods, in general, are instruments to establish whether the conditions imposed between associated enterprises are consistent with the ALP. This means that they are not expected to determine the price at which related parties would have indisputably traded but rather provide the price at which they would have presumably traded[225]. The choice of such methods, as stated by the OECD, has to be made according to the rule of the "most appropriate method"[226].

In such context, the OECD aware of the difficulties posed by the ALP as a valid instrument to counteract the profit shifting, has labelled the transaction profit split method (TPSM) as the most appropriate transfer pricing method in those situations where the controlled transaction under review is part of highly integrated business operation, or where transactions involved unique and valuable intangibles.

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[224] J. WITTENDORFF, *op.cit.*, p. 333, who notes that profit allocation in line with value creation may not be equal to profit allocation in line with third-party behaviour.

[225] L. E. Schoueri, *op. cit.*, p. 697.

[226] See 1995 TPG, para. 3.2.; the current version, 2017 TPG, para. 2.2.

The main feature of the TPS method is that according such methodology transactions are not assess separately but departs from the "combined profits" that arise from the relevant controlled transactions in which the related parties are involved to further split the outcome between parties on an "economically valid basis", by reference to the relative values of the different contributions made by the associated enterprise – which will be identified by means of a functional analysis - that approximate the allocation of profits that would have been reflected in an agreement made at arm's length. In other terms, TPS method is applied on a transaction-by-transaction basis, where the selection of allocation keys and the related weight are established according to the specific facts and circumstances.

Even if the empowerment of the transactional transfer pricing methods, and most notably the TPS method, has been applauded by numerous scholars - since it is commonly regarded as a "pragmatic solution", namely a halfway solution between the ALP and apportionment[227] - its compatibility with the ALP is more than questioned.

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[227] Schön describes the TPS method as «a limited fractional apportionment» and Avi-Yonah and Benshalom regards it as a «quasi-formulary method»; Tavares, on the other hand, argues that TPS method is a «middle ground» between the OECD guidelines and formulary apportionment which we will explain better in the follow paragraph. See, W. SCHÖN, *International tax coordination for a second-best word (part III)*, World Tax Journal, 2010, p. 235; R. AVI-YONAH – I. BENSHALOM, *op. cit.*; R. J. S. TAVARES, *Multinational firm theory and international tax law: seeking coherence*, World Tax Journal, 2016, pp. 273-274.

Y. BRAUNER, *Transfer Pricing aspects of intangibles*, in M. Lang *et al.* (eds.), *op. cit.*, p. 110, where «(the TPS method) is somewhat widely accepted as the best way for the OECD to abandon arm's length un the transfer pricing of intangibles without losing too much face»; L. E. SCHOUERI, *op. cit.*, pp. 693-695-696, who believes that TPS is intended to be the ALP-based method, as it intends to «mimic the allocation of profits that would be observed in relation between independent parties if a comparable contribution to the success of the activity would occur», but has considerable doubts whether the method is ultimately compatible with the ALP. Indeed, according to the author, the adoption of a consolidated approach rather than an entity approach may

In the first place, the preeminence of certain transfer pricing methods over others appears to contradict the guidelines enshrined in the OECD TPG according to which the selection of the relevant method should always aim at finding the most appropriate methods considering the facts and circumstances of the case[228].

Moreover, the predetermination (imposition) of the methodology, not only contradicts the rule of the "most-appropriated method", but it leads to restrict the freedom that the ALP seems to grant to taxpayers to select the methods and, consequently, demonstrate that the transfer prices resulting from such selected method is indeed consistent with the ALP.

It cannot be excluded, indeed, that in some transactions where intangibles are involved, other methodologies are more consistent with the ALP. For instance, the rejection of the cost-plus method (C+)[229] in the cases where what is being remunerated is the performance of R&D activities, entails the dismissal of the transfer prices that could be within the ALP range of prices for the sole reason that they are based on a specific methodology that is deemed to inappropriate[230].

In short, it seems that the intent of the OECD to counteract the subjectivity of the ALP by means the predetermination of the method

compromise the comparative exercises. In this sense, Schoueri regards the increasing use of such methods as a piece of evidence of the failure of the ALP.

[228] E. ESCRIBANO, *op. cit.*, p. 165 for whom, moreover, «the validity of this guideline is not only due to its presence in the OECD TPG and a great number of domestic transfer pricing regulations, it could be regarded that it may be logically inferred from the own ALS».

[229] It is worth noting that C+ method takes in consideration the costs incurred by the supplier of property (or services) in a controlled purchaser, to add at the end an appropriate cost-plus mark-up to make an appropriate gross profit in light of their functions performed, risk assumed and market conditions.

[230] (2015) OECD Final Report: Actions 8-10, pp. 86 and 170; OECD TPG 2017, paragraphs 6.79 and 8.26.

collides with the ALP itself since by its nature it is characterized by subjectivity.

Beyond these concerns, moreover, there are further aspects of the new transfer pricing guidelines that may also be regarded as hard to reconcile with the ALP.

Indeed, as many scholars noticed, the new guidelines may well give rise to outcomes that differ from those that may have presumably occurred in the market[231].

First, this is due to the fact that contractual risk allocation is disregarded if it is inconsistent with the actual conduct of the parties[232]. Second, the overestimation of the market value of functions, since the important functions analysis (the new key criterion for the allocation of profits) is a "double-edged" sword because of its subjectivity[233]. Third, the possibility to undertake *ex post* transfer pricing adjustments based on *ex post* outcomes derived by the exploitation of the intangible[234]. These risks, however, would only materialize if the tax administrations rejects the pricing provided by the taxpayer on the sole grounds that it would not be consistent with the considerations enshrined by the OECD

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[231] L. E. SCHOUERI, *op. cit.*, pp. 714-715.

[232] J. WITTENDORFF, *op. cit.*, p. 332 where he noticed that, on the contrary, under the 1995 guidelines, the associated enterprise controlling the risk would be considered to solely perform a management service. Consequently, «arm's length compensation to the enterprise exercising control over the risk is thus markedly different under the two sets of guidelines»; S. GONNET, *op. cit*., p. 40, according to whom «in most situations defining risk, identifying risk management and financial capacity are not as obvious and free from ambiguity».

[233] In this sense, J. WITTENDORFF, *op. cit.*, p. 333, where he states that «whether profit allocation in line with value creation will entail an allocation in line with third-party behavior is uncertain. The new arm's-length principle arguably will often result in biased profit allocation between associated enterprises that is out of touch with profit allocation between independent enterprises because contractual risk allocation is disregarded and the market value of functions is overestimated».

[234] Such possibility mainly exists in scenarios involving hard to value intangibles (see sections below).

TPG 2017 (for instance, as already highlight, the pricing is not based on the methodology that is regarded as appropriate by the guidelines).

Despite all these critical issues, however, what is clear is that the OECD in the Actions 8-10 did not want to replace transfer pricing the ALP, as it states that «the goals set by the BEPS Action Plan in relation to the development of transfer pricing rules have been achieved without the need to develop special measures outside the arm's length principle»[235].

Unfortunately, this mixture of concepts (ALP and value creation)[236], for the reasons displayed above, seems unlikely to guarantee a consistent result with the main goal at the basis of the BEPS approach, such as the taxation of profits where value is created.

In other words, from the considerations carried out so far it is possible to infer that the value creation approach is more than welcomed, nevertheless, its concrete application appears to be inhibited by an unchanged system.

If, in fact, the ALP may worth as a reasonable criterion for transactions within traditional enterprises, on the other side, it is not the most suitable instrument to satisfy the BEPS mantra (such as, the alignment between transfer pricing outcomes and value creation) on transfer pricing related to transactions involving remote services and intangibles which have a central role in the current business environment. Despite this, the OECD pretended that the new guidelines constitute a clarification of the current transfer pricing rules following the ALP, ending up to create a more complex and unreasonable system

[235] OCED (2015), *Final Report on BEPS Actions 8-10 cit.,* p. 12.

[236] R. AVI-YONAH – XU HAIYAN, *op. cit.*, p. 225 in this regard they argue that «although the goal is correct, the approach of Actions 8-10 is very problematic. The solution still focuses on patch up of the dysfunctional rules built on the arm's length principle […] ».

which ends up to contradict the same rationale behind the ALP and the same rules enshrined in the guidelines itself.

3.3. Formulary Apportionment as more proper solution.

Even if the OECD strongly supports the arm's length principle and the related methodologies, there has been a lot of a debate between adopting the formulary apportionment (FA) and the ALP to price cross-border transactions between related parties and allocate taxable income among different jurisdictions.

Under a formulary apportionment, indeed, the global profits of an MNE are allocated on a consolidated basis among the associated enterprises in different countries on the basis of a predetermined and mechanistic formula.

The OECD recognizes three essential components in applying FA: first, determining the unit to be taxed, such as, for instance, which of the subsidiaries and branches of an MNE group should comprise the global taxable entity; secondly, accurately determining the global profits; finally, establishing the formula to be used to allocate the global profits of the unit.

The formula would be most likely based on some combination of costs, assets, payroll and sales[237].

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[237] OECD TPG 2017, para. 1.17. Concerning the specific factors at the base of a formulary apportionment, see I. BENSHALOM, *The Quest to Tax Financial Income in a Global Economy: Emerging to an Allocation Phase*, Tax Rev., 2008, p. 16, where, for instance, it is pointed out the relevance of payroll to curb some firms from manipulating the formula; A. AVI-YONAH – KIMBERLY A. CLAUSING, *op. cit.*, p. 319, where the authors proposed a reform that would be based on a sales-only formula; Y. BRAUNER, *Formula Based cit.*, p. 618, where the author noticed that Professor Lawrence Lokken believes that formulary apportionment should use an assets-only formula, primarily because assets are the least manipulate factor among the three (sales, payroll and assets) and therefore is least vulnerable to taxpayers' abuse.

Up until now a shift towards global FA has been firmly rejected by OECD in the Transfer Pricing Guidelines due to various reasons.

Firstly, from the OECD's point of view, it is difficult for all countries to agree on the same formula. The disagreement may exist not only with regard to the formula itself, but on the definition of the single apportionment components according to which the global profit is apportioned (for instance where is the location of "sales" and how to determine the value of the "assets"). This is because basically each country would tend to devise the formula to maximize its own revenue[238].

Furthermore, a predetermined formula seems to be arbitrary, disregarding the market conditions, since it would leave several important factors, most notably intangibles and risk allocation which are the core of the BEPS Actions.

Thirdly, global FA may present intolerable compliance costs and data requirements because information would have to be gathered about the entire multinational enterprise group, especially considering that different tax jurisdictions may have different tax accounting rules.

Lastly, taxpayers may enter into tax avoidance arrangements under FA by manipulating components of the relevant formula.

Despite such objections, the formulary apportionment's system is strongly supported by many scholars as the second-best alternative to ALP or even the solution that should replace ALP in an era post-BEPS[239]. This mainly due to the fact that formulary apportionment

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[238] See G. COTTANI, *Formulary Apportionment: A Revamp in the Post-Base Erosion and Profit Shifting Era?*, Intertax, 2016, p. 755.

[239] The main contributions in this sense are R. S. AVI-YONAH – K. A. CLAUSING, *Reforming Corporate Taxation in a Global Economy: A Proposal to Adopt Formulary Apportionment*, in J. FURMAN – J. E. BORDOFF (eds.), *Path to Prosperity: Hamilton Project Ideas on Income Security, Education and Taxes*, 2008, pp. 319 – 327; C. MORSE, *Revisiting Global Formulary Apportionment*, Va. Tax. Rev., 2010; J. ROIN, *Can the Income Tax Be Saved? The Promises and Pitfalls of Adopting Worldwide*

applies to business as a whole, since the synergies effects will be taken into account by allocating the profits between the various entities.

The other advantage of FA is that it seems to provide more legal certainty and be less arbitrary with respect to ALP.

As already mentioned, the arm's length principle suffers from being a vague and subjective parameter (see *infra* §3.1.), leading to several disputes between tax authorities and taxpayers on what arm's length remuneration of certain transaction should be.

Under a FA method, on the contrary, as it is based on a predetermined formula the taxpayers know before what factors have to be taken in consideration and how much each factor contribute in the allocation of profits[240]. Consequently, no dispute will occur at least with regards to the identification and determination of the single contributors and their related quantity.

As far as concern the arbitrariness, it is worth noting that arm's length proponents, as explained before, emphasize the fact that ALP allows to follow a correct, thus fair economic reality, while formulary apportionment is considered more arbitrary.

In reality, in spite of the ALP which is basically based on a mere fiction that is economically distorted, FA is true to its nature as a tax base division mechanism resulting from an admittedly arbitrary compromise between competing tax jurisdictions[241]. In other terms, compared to the ALP a formulary apportionment method is no more arbitrary, but even less arbitrary with respect to the latter.

Formulary Apportionment, Tax. L. Rev., 2008, p. 169; W. HELLERSTEIN, *International Income Allocation in the Twenty-first Century: The Case for Formulary Apportionment*, Int'l Transfer Pricing J., 2005, p. 103.

[240] T. THEUNIS, *op. cit.*, p. 36.

[241] Y. BRAUNER, *Formula Based Transfer Pricing cit.*, p. 619.

Moreover, and more important, a formulary apportionment system appears to be more consistent with the aim of the Actions 8-10, such as the alignment of the transfer pricing outcomes with value creation to ensure that the transfer pricing properly reflects the value adding functions performed by the relevant parties.

Indeed, such new "value creation approach" seems to coincide with the theoretical basis of FA, such as the attribution of income to the location where business activities are performed; in fact, as highlighted by Cottani, apportionment factors at the basis of FA, such as sales, assets and payroll, are all indicators of where the business proper is situated[242].

In this sense, FA is also a more effective method to limit the profits shifting and the erosion of taxable base in high tax jurisdictions. As noted, «while MNE may freely decide where to locate production, IP rights and distribution, the decision where to serve their customers is far less flexible/mobile». On the contrary, «profit allocation based on where the customers are located would therefore be less arbitrary and sensitive to base erosion and profit shifting. If customers are perfectly immobile, sales-based profit taxation ensures global tax neutrality»[243].

The same European Commission, moreover, within its CCCTB' proposal which is based on a formulary apportionment system, argues that «the CCTB features as an effective tool for attributing income to where value is created, through a formula based on three equally weighted factors (i.e. assets, labor, and sales). Since these factors are attached to where a company earns its profits, they are more resilient to aggressive tax planning practices than the widespread transfer pricing methods for allocating profit».

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[242] G. COTTANI, *Formulary Apportionment cit.*, p. 758.

[243] U. SCHREIBER, *Sales-Based Apportionment of Profits*, Bull. Intl. Taxn., 2018.

Given the several flaws of the ALP which ending up to contradict the new "value creation approach" and, on the contrary, the particular strengths of FA, we believe that, in order to ensure a more reasonable and effective transfer pricing system, it is high time for a definitely change of course.

After all, it is worth keeping in mind that formulary apportionment is not a mere theoretical idea, since it is currently applied by some countries, such as United States, Canada and Switzerland[244]. However, if not a radical change, another solution could be a compromise between the ALP and FA, as proposed by Avi-Yonah, which provides to use the formulary apportionment in the context of the arm's length principle by using it to allocate the residual profit in the profits split method[245].

4. *A deeper look at the discipline of Transfer Pricing for Intangibles according to the BEPS Project.*

4.1. Identifying intangibles.

Clarified the several criticalities that the new "value creation approach" to transfer pricing entails with respect to the arm's length principle, in this section we intend to briefly describe in a more practical way the transfer pricing discipline for intangibles as enshrined in the BEPS Project. In particular, we will deepen the concept of DEMPE analysis and the particular discipline envisaged for cases involving so-called "hard to value intangibles".

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[244] A. S. SCHANZ, *The apportionment formula under the European Proposal for a Common Consolidated Corporate Tax Base*, European Taxation, 2018.

[245] R. S. AVI-YONAH, *Between Formulary Apportionment and the OECD Guidelines: A Proposal for Reconciliation*, World Tax Journal, 2010.

The Action 8 identifies a three step approaches necessary to prevent by moving arbitrarily intangibles among group members as follow: *i)* adopting a broad and clearly delineated definition of intangibles; *ii)* ensuring that profits associated with the transfer and use of intangibles are appropriately allocated in accordance with value creation; *iii)* developing transfer pricing rules or special measured for transfers of hard-to-value-intangibles[246].

The vague nature of the intangible assets concept, as explained at the beginning of the current chapter, creates issues in identifying a general and unique definition of their notion.

Indeed, there are different definitions depending on why one needs to characterize the concept: at the international level it is possible identified an accounting, legal and tax definition; on the other side, there are different interpretations that arise from each countries' domestic legislation.

In such scenario, it is worth appreciating the effort of the OECD in developing a specific notion of intangible item for transfer pricing purposes.

According to the section A of the new chapter VI of the OECD Guideline, as replaced by the Actions 8-10 of the BEPS Project, indeed, intangible item is «something which is not physical asset or a financial asset, which is capable of being owned or controlled for use in commercial activities, and whose use or transfer would be compensated had it occurred in a transaction between independent parties in comparable circumstances»[247].

The Final Report provides some examples of types of intangible that fall within this definition, including both intellectual property, such

[246] Action 8-10 Final Report, p. 22

[247] OECD, Action 8-10 Final Reports, p. 67 (OECD Guidelines, para 6.6).

as patents and trademarks, that can be registered, but also other assets such as know-how, trade secrets, and contractual rights. Furthermore, there are certain factors that may contribute to the income earned by an enterprise but are not themselves intangibles, like group synergies and the specific characteristics of local market.

Neither accounting nor legal definitions of intangibles are decisive for transfer pricing purposes. For instance, costs associated with developing intangibles internally through expenditures such as research and development (R&D) and advertising are sometimes expensed rather than capitalized for accounting purposes and the intangibles resulting from such expenditures therefore are not always reflected on the balance sheet. These kinds of intangibles nevertheless may carry significant economic value and may need to be considered for transfer pricing purposes.

Moreover, «the determination that an item should be regarded as an intangible for transfer pricing purposes does not determine or follow from its characterization for general tax purposes, as for example, an expense or an amortizable asset»[248].

As properly pointed out, such a "ring-fenced" definition of intangibles in the OECD Guidelines is aimed at meeting the requirements of the arm's length principle under article 9 of the OECD Model by making the transfer pricing notion universally interpreted in a cross-border situation and thus preventing the potential risk of double taxation due to consistent definitions under domestic tax law[249].

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[248] OECD, Action 8-10 Final Reports, p. 67 (OECD Guidelines, para 6.7).

[249] See M. PANKIV, *Post-BEPS Application of the Arm's Lenght Principle to Intangibles Structures*, Int.l. Transfer Pricing J., 2016, p. 464.

The new guidance, moreover, also refers to the other distinction between two categories of intangibles, namely marketing intangibles and trade intangibles.

Market intangibles is defined as «an intangible […] that relates to marketing activities aids in the commercial exploitation of a product or service and/or has an important promotional value for the product concerned»[250].

A trade intangible, instead, is identified as «a commercial intangible other than a marketing intangible. This category is provided to facilitate the discussion for purposes of transfer pricing analysis, rather than to delineate with precision various classes or categories of intangibles or to prescribe outcomes that turn on such categories»[251].

Due to this wide definition of intangibles for transfer pricing purposes, the Actions 8-10 highlight the characteristic of «unique and valuable» intangibles in order to emphasize the issue that might arise when intangibles are not comparable to those used by or available to the parties to potentially comparable transactions and the use of which in business operations is expected to yield greater future economic benefits than would be expected in the absence of that intangible[252].

4.2.The ownership of intangibles and the DEMPE analysis.

The section B of the new chapter VI provides an analytical framework to ensure that all members of an MNE group are properly

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[250] Action 8-10 Final Report, p. 69 (OECD Guidelines, Glossary, "Marketing intangible"). Such marketing intangibles, depending on the context, could be trademarks, trade names, customer lists, customer relationship and proprietary market and customer data that are used in marketing and selling goods or services to customers.

[251] OECD, Action 8-10 Final Report, p. 69 (OECD Guidelines, para 6.15).

[252] OECD, Action 8-10 Final Report, p. 70 (OECD Guidelines, para 6.17).

compensated on the basis the already mentioned "functional analysis", namely for the functions they perform, the asset they contribute and the risks they assume.

In this scenario, the identification of the owner(s) of an intangible and the determination of relevant contributions to such an intangible is the necessary precondition before assigning the appropriate amount of an intangible-related return to an entity.

In the context of transfer pricing, the ownership of intangibles can be classified from different perspectives.

The most common types of ownership are legal ownership and economic ownership.

In a transfer pricing analysis, in general, legal rights and contractual arrangements form the starting point[253]. The determination of the legal ownership generally involves the examination of the terms and conditions of written contractual arrangements or other legal documents, such as relevant registrations, license agreements, other relevant contracts and other indicia of legal ownership, including the contractual assumption of risks in the relation between associated enterprises as contractual parties[254].

The Actions 8-10, on the contrary, has led to a shift from a formalistic approach to transfer pricing to a more substance-over-form oriented approach.

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[253] OECD *Transfer Ricing Guidelines, op. cit.*, para 6.35.

[254] OECD *Transfer Ricing Guidelines,* para 6.34 and 6.40. The latter paragraph explains that some type of intangibles can be legalized. For certain type of intangibles, the right to use may be protected under specific intellectual property laws and registration systems. Examples include patents, trademark and copyrights. As a result, the legal ownership can be identified through public records, such as patent or trademark registrations. Other types of intangibles are not protectable under specific intellectual property registration systems. However, they may be protected against unauthorized appropriation or imitation under unfair competition legislation or other enforceable laws. In such case, legal ownership can be identified through applicable laws or governing contracts.

According to proposed changes to the OECD transfer pricing guidelines, and as already mentioned in the previous paragraphs, indeed, «although the legal owner of an intangible may receive the proceeds from exploitation of the intangible, other members of the legal owner's MNE group may have performed functions, used assets, or assumed risks that are expected to contribute to the value of the intangible. Members of the MNE group performing such functions using such assets, and assuming such risk must be compensated for their contributions under the arm's length principle»[255].

It puts a lot of emphasis on active functional involvement when elaborating the substance requirement in the context of the transfer pricing aspects of intangibles[256].

In other terms, according to the OECD's approach the mere legal ownership of the intangibles does not entitle the entity to all returns. The allocation of such returns, indeed, should be based on the functions performed, assets used and risk assumed related to the development, enhancement, maintenance, protection and exploitation (DEMPE).

Some scholars have individualized three categories of functions or activities related to the creation of intangibles values from a managerial decision-making perspective. They are: *i)* operational level activities, namely the day-to-day administration or contract R&D activities; *ii)* tactical level activities; *iii)* strategic level activities, that

[255] OECD BEPS Project, p. 73.

[256] M. A. DE LANGE – P.W.H. LANKHORST & R.P.F.M. HAFKENSCHEID, *Recognition of Transactions between Associated Enterprises: On Behaving in a Commercially Rational Manner, Decision-Making Traps and BEPS*, Intl. Transfer Pricing J., 2015, p. 10.

is, activities of an executive broad nature, which have a major impact on the whole organization[257].

From the OECD's point of view the important functions seem to be the operational-level activities and the tactical-level activities rather than the high-end activities at top management or board level.

Moreover, the OECD points out that functions, risks, and assets are equally important in the analytical framework of transfer pricing. Consequently, functions, risks and assets work in an integrated way so that all these elements are relevant to determine the ultimate allocation of intangible-related-profits. In other words, entities that performing a full set of DEMPE functions and assuming respective DEMPE-related risks with respect to relevant intangibles will be entitles to the entire or at least a major share of intangible-related profits.

It is worth stressing that the OECD does not require that an entity perform all the DEMPE functions on its own in order to be entitled to all return derived by an MNE group from the exploitation of the intangible, rather it is expected that the owner is able to exercise control over the risks and has financial capacity to undertake the related risks[258].

According to the revised Chapter I of the OECD Guidelines, an entity assuming a specific risk would need to exercise control over the

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[257] See L. HELDERMAN, *A New Era in Determining Arm's Length Compensation for Intangibles? A Comparative Overview of Existing and Possible Future Transfer Pricing Principles,* Intl. Transfer Pricing J., 2013, p. 359.

[258] *Action 8-10 Final Report, cit.*, p. 89, where it is stated that the legal owner of an intangible would be entitled to all returns attributable to the intangible only if in substance, it performed and controlled all of the important functions related to the development, enhancement, maintenance and protection of the intangibles; it controls other function outsourced to independent enterprises or associated enterprises and compensate those functions on an arm's length basis; it provides all assets necessary to the development, enhancement, maintenance and protection of the intangibles; and bore and controlled all of the risks and costs related to the development, enhancement, maintenance and protection of the intangible.

risk as well as have the financial capability to assume the risk. The risk control feature requires the capability to perform decision-making functions and the actual performance of such functions related that specific risk, mainly as to whether and how to take the risk, whether and how to respond to it and whether and how to mitigate it[259]. Some authors, in this respect, highlight that the risk control's concept underlines the important role of human capital in value creation[260].

Consequently, it is clear that control over risk and the performance of DEMPE functions are the two main areas of consideration when assessing to whom and how much intangible-related profit must be allocated.

Neither the legal ownership nor the bearing of costs related to the development of intangibles, taken separately or together, entitle an entity within an MNE group to retain the benefits or returned with regard to intangibles without more.

In other words, to the extent that one or more members of MNE group other than the legal owner performed functions, used or contributed assets, or assumed risks or costs related to the DEMPE functions, returns attributable to the intangible must be accrue to such other members.

For the transfer pricing analysis, hence, it is critical to understand an MNE's global business by identifying all factors that contribute to value creation, including the risks assumed by each member, specific market characteristics, location, business strategies and MNE group synergies.

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[259] OECD TPG 2017*, op. cit,* para 1.65.

[260] Cf. R. PETRUZZI – X. PENG, *The Profit Split Method: A Holistic View of BEPS in Transfer Pricing*, Transfer Pricing International, 2017, pp. 110-120.

The group synergies that can be attributed to «deliberate concerted group actions» should generally be shared between the members of the group in proportion to their contribution to the creation of the synergy[261].

In conclusion, following the new Guidance, ownership for transfer pricing purposes corresponds to the "entitlement", which may or may not align with – or even correspond to – the legal notion of ownership.

4.3. The "hard-to-value-intangibles" and the arm's length principle.

After identifying the entities claiming legal and/or economic ownership, the next step would be to assess the contributions these entities make towards the creation of the intangibles' value.

The involved entities, indeed, should be properly remunerated by allocating the intangible-related-profits in accordance with the relative contributions that they have made.

By referring with regard to the consideration made above with regard to the new value creation approach and its relationship with the ALP and related methodology, the current section aims at analyzing a specific case in which the transactions are under or overestimated.

In general, the compensation that must be paid to members of the MNE group that contributed to the DEMPE functions has to be determined on an "*ex ante*" basis, namely on the basis of future income expected to be derived by a member of the MNE group at the time of a transaction.

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[261] *Action 8-10 Final Report, cit.*, p. 48 (OECD Guidelines, para. 1.162).

Consequently, it could be possible to have cases in which the actual (*ex post*) [262] profitability is different than anticipated (*ex ante*) profitability, because of risks materializing in a different way to what was anticipated thorough the occurrence of unforeseeable developments[263].

The question that arises in such circumstances, hence, is how the profits or losses – relating to the difference between actual and the anticipated profitability – should be share among members of an MNE group that have contributed to the DEMPE functions.

The entitlement of any member of MNE group to *ex post* profits or losses as a result of unanticipated events would depend on the terms and conditions of the relevant contracts and on the functions performed, assets used and risks assumed in connection with these event that give rise to the deviation between the anticipated and actual outcomes.

Transaction for which valuation is highly are particularly susceptible to such under or overestimations of value. This happens in the case that OECD, in the section D, specifically defines "hard-to-value-intangibles" (HTVI).

It refers to intangible that may be hard to value in case no reliable comparable exist, or when the level of success of the intangible is still difficult to predict at the time of the transfer. Such cases may arise when for instance the intangible is not yet fully developed at the time of the transfer or when it involves a completely new type of exploitation of the intangible.

Because of the existence of an information asymmetry between the taxpayer and tax administration, the OECD allows tax

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[262] *Action 8-10 Final Report, cit.*, p. 82, which noticed that the ex post remuneration refers to «the income actually earned by a member of the group though the exploitation of the intangible».

[263] *Action 8-10 Final Report, cit.*, p. 83.

administration to use *ex post* evidence on the financial outcomes of an HTVI transaction as presumptive evidence on the appropriateness of the *ex ante* pricing arrangements. This means that tax administrations may use financial outcomes, such as the sales resulting from the exploitation of the intangible, to make adjustment to the *ex ante* transfer price.

The *ex post* outcomes provide information on the determination of the valuation at the time of the transaction, but a potential revised valuation should not be based on actual income or cash flow without also taking into account risk-adjusted possibilities of such actual income or cash flow materializing, at the time of the transfer of the HTVI[264].

As already noticed such possibility to undertake *ex post* transfer pricing adjustments based on the *ex post* outcomes derived by the exploitation of the intangibles is another aspect – others than those analyzed above (see §3.2) - of the new approach enshrined by the TPG 2017 that can be regard as hard to reconcile with the ALP itself.

[264] It is worth noting that on 21 June 2018, the OECD released, after the Discussion Draft for public comments on 23 May 2017, final guidance for tax administrations on the application of the application of the approach to hard-to-value-intangibles (the Final Guidance) as stipulated in Action 8-10 of the Final Report. The Final Guidance has been incorporated into the OECD Transfer Pricing Guidelines, as an annex to Chapter VI. The main goal of such Final Guidance is to reach a common understanding and practice among tax administrations on how to apply adjustments resulting from the application of the HTVI approach. The new guidance aims at: presenting the principles that should underline the application of the HTVI approach by tax administrations; providing a number of examples clarifying the application of the HTVI approach in different scenarios; and addressing the interaction between the HTVI approach and the access to the mutual agreement procedure under the applicable tax treaty.

5. *The legal status of the BEPS Project and the OECD Transfer Pricing Guidelines.*

Outlined the discipline as above, it is worth exploring the legal nature of the recommendations of the BEPS Project and the Transfer Pricing Guidelines (TPG) in order to understand how they may affect the domestic tax legislations.

Concerning the recommendation of the BEPS Project it is sufficient to note that they represent principles of *soft law*[265] which does not have legal force. The enforcement of such principles, in fact, is based on the *moral suasion*[266] of the Inclusive Framework.

The latter, which is composed by different countries, mainly, aims at reviewing and monitoring the level of the implementation of the whole BEPS package with respect to the *minimum standard*.

The mechanism that has been chosen for this purpose is a peer review process, such as documents which discuss whether countries

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[265] D. RING, *Who is Making International Tax Policy?: International Organizations as Power Players in a High Stakes World*, *Boston College Law School Research Paper*, Fordham International Law Journal, 2010, p. 4 who notes that «despite the formal, hard law power of the state over tax policy, international organizations influence the actual design of international tax policy and tax rules in a variety of ways, up and including the creation or exercise of "soft law" power».

With respect to the recommendations, they are defined as an invitation to behave in a certain way, but without specifying the legal consequences that they may have (M. VIRALLY, *La valeur juridique des recommandations des organisations intenationales*, Annuaire Français de Droit International, 1956, pp. 66-96). With respect to the recommendations aimed at Member States, although formally they do not impose any legal obligation, always in the view of Virally they may have legal consequences depending on the powers which have been delegated to the international organization.

However, for a deep analysis, see I. DUPLESSIS, *Le vertige et la soft law: reactions doctinales en Droit International,* Revue Quèbècoise de Droit International, vol. Hors-série, Études en hommage à la Professeure, 2007, pp. 245-268.; M. GOLDMANN, *inside Relative Normativity: From Sources to Stansard Instruments for the Exercise of International Public Authority,* German Law Journal, 2008, pp. 1865-1908; K.W. ABBOTT, - R.O. KEOHANE - A. MORAVCSIK - A. SLAUGHTER - D. SNIDAL, 2000, *The Concept of Legalization*, International Organization*,* 2000, pp. 401-419.

[266] See Assonime Circ. n. 9, 1st August 2018, pp. 21-22.

have implemented the minimum standards for exchanging information and for improving and accelerating the procedures for resolving disputes on the application of tax treaties in national law[267].

With regard to the legal status of the OECD Transfer Pricing Guidelines, the issue is closely connected with the proper origin and development of the arm's length principle. Indeed, the latter takes its origin from the American and British legislations, passing later to the Model Conventions of the League Nations and of the OECD, assuming, then, an international dimension.

In particular, it was from the end of the 1960s onwards that the US, through the Department of Treasury, began to actively impulse their articulation in other countries and within the OECD[268].

The introduction of the arm's length principle in the League of Nations[269] and in the OECD Model Convention essentially obeyed the pressures and influence exerted by the US[270] which highlighted the need to resolve transfer pricing issues at an international level deriving from

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[267] Cf. A. DE GRAAF – K. J. VISSER, *BEPS: Will the Current Commitments and Peer Review Model Prove Effective?*, EC Tax Review, 2018, pp. 45-46.

[268] Indeed, the United States was the first country which dealt with transfer pricing issue in detail and in 1968 the Department of the Treasure prepared precise regulations for certain types of inter-company transactions. As several authors have noted the United States started an international campaign to promote international cooperation in this area and exerted a great influence in the OECD during the seventies (R. S. AVI-YONAH, *International Tax as International Law – An Analysis of the international Tax Regime,* Cambridge, 2007; L. EDEN – M. T. DACIN – W. P. WAN, *Standards across borders: cross-border diffusion of the arm's length standard in North America*, Accounting Organization and Society, 2001, pp. 1-23;

[269] In 2013, the United Nations Committee of Experts published a practical manual, *Practical Manual on Transfer Pricing for Developing Countries,* New York, 2013, which intends to provide practical assistance to the tax authorities of developing countries in applying the arm's length standard while recognizing the particular needs of those countries. Moreover, the Manual deals with building capacity to handle transfer pricing issues in developing countries, audits and risk assessment techniques and dispute resolution procedures, as well as a description of transfer pricing practices in Brazil, China, India and South Africa.

[270] See J. CALDERÒN, *The OECD Transfer Pricing Guidelines as a Source of Tax Law: Is Globalization Reaching the Tax Law?*, Intertax, 2007, p. 8.

a non-uniform tax treatment of the cross-border transactions over the direct foreign investment flows[271].

With the publication of the OECD Transfer Pricing Guidelines[272] the arms' length standard became officially an international source.

Originally, indeed, the arm's length principle was covered by the domestic law of each country[273]. The action of OECD has been standardizing the different national practices concerning the application and interpretation of the arm's length principle, operating in a complementary form respect of the domestic legislations of the Member States.

The Guidelines, in particular, as well as the OECD recommendations, are a type of soft law[274].

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[271] There are some authors that consider that the implementation of the arm's length principle at an international level has brought with it a contrary result, inasmuch as its application has caused an increase of the legal security for the taxpayers and a maximization of the possibilities of abuse or evasion. See, R. AV-YONAH, *The rise and fall of arm's length: a study in the evolution of US International taxation*, Virginia Tax Review, 1995, p. 89 et seq.; R. H. ROSENBLOOM, *Banes of an Income Tax: legal fictions, elections, hypothetical determinations, and related-party debt,* Tax Notes International, 2003, p. 995-996; J. M. ELLIOT – C. EMMANUEL, *International Transfer Pricing,* in *The International Taxation System*, Boston, 2002, p. 158.

[272] The 1979 OECD Transfer Pricing Guidelines on Multinational Enterprises, indeed, were highly influenced the US approach.

[273] See HAMAEKERS, *Arm's Length – How Long?*, in an *International and Comparative Taxation,* The Hague, 2002, p 29 et seq.

[274] The term soft law has no universally accepted definition. In the context of international taxation, it can be used to describe a quasi-legal instrument which does not have any legal binding force, but is intended to have a direct influence on the practice of States and taxpayers. See CHRISTIANS, *Hard Law and Soft Law in International Taxation*, Wisconsin International Law Journal, 2007, p. 2; Guzman-Meyer, *International Soft Law*, Journal Legal Analysis, 2020, p. 17.

In this respect, interesting is Ey, *Countries implementation of BEPS Actions 8-10 and 13,* August 2015, where it is pointed out that «in 24 out of the remaining 25 OECD countries, the OECD TP Guidelines have soft-law status. This means that they are referred to as a source of interpretation of the arm's-length principle by tax authorities or courts, but they are not binding and cannot contradict existing legislative rules». Instead, concerning non-OECD countries «only 12 reported having a reference to the OECD TP Guidelines in domestic legislation, out of which 4 countries (El Salvador, Georgia, Nigeria and Panama) reported the reference to be "ambulatory." The guidelines were reported to have soft-law value in 30 countries, while 11 countries

Nevertheless, although they do not entail the mandatory legal enforcement effects that the hard law provisions have, do constitute a source of law in matters not covered by the ordinary hard law of the OECD Member States and often a coordination tool between the different domestic legislations.

According to some authors, in fact, even though the Guidelines are soft law in nature, they are arguably more important than any hard law on transfer pricing[275].

Such thesis is based on different evidences.

First, on the basis that Guidelines are adopted by consensus, namely unanimity, in the OECD, as well as the proper contribution of the private sector in their implementation.

Second, the Guidelines interpret the meaning of the arm's length principle provided for by Article 9 of the OECD Model Convention, which has been included virtually in every bilateral tax treaty. Consequently, it is considered that these OECD Guidelines constitute an agreed interpretation of the arm's length principle established in the referred Article to the effects of the application of the bilateral tax treaties that follow the OECD Model Convention[276]. It seems, thus, that the integration of the OECD TPG, in the OECD Model, through its

indicated that the OECD TP Guidelines have no relevance. The remaining 11 non-OECD countries surveyed do not have transfer pricing rules».

[275] VOGELAAR, *The OECD Guidelines: their philosophy, history, negotiation, from, legal nature, follow up procedures and review*, in *Legal problems of Codes of Conduct for MNEs*, Frankfurt, 1980, pp. 129 - 131.

[276] See JINYAN LI, *Soft Law, Hard Realities and Pragmatic Suggestions: Critiquing the OECD Transfer Pricing Guidelines,* in *MPI Studies in Tax Law and Public Finance*, 2012, Spring, p. 78. The Author, for instance, makes the example of United Kingdom where the Guidelines are explicitly referenced in the domestic law (28AA Paragraph. 2(1)(b)) incorporates Article 9 of the OECD Model and the Transfer Pricing Guidelines into UK transfer pricing legislation)

Commentaries, has exerted a decisive influence on their integration in the domestic law of the OECD member States[277].

In addition, it cannot be underestimated the fact, highlighted by different authors, that the arm's length principle has expanded its field of application across the legal systems of OECD Member and non-OECD States due, mainly, to its implementation through the model conventions of the League of Nations and the OECD Model Convention.

The reason for this is that the arm's length principle had been technically shaped as a rule of allocation of income (referred to persons that could manipulate their attribution) established in the domestic legislation of the States, which later has been used functionally at an international level like a principle of distribution for the taxing power[278].

In other words the arm's length principle is arguably the only universal tax principle because of the influence of the Guidelines.

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[277] See, T. VETTEL, *Die normative Bedeutung der OECD – Verrechnungpreisrichtlinien*, in Lang, M. (ed.), *Die neuen Verrechnungspreisrichtlinien der OECD,* Vienna, 1996, pp. 9-29; J. M. CALDERON CARRERO, *The OECD Transfer Pricing Guidelines as a Source of Tax Law: Is Globalization Reaching the Tax Law?,* Intertax, 2007, pp. 4-29; A. BULLEN, *Arm's Length Transaction Structures – Recognizing and restructuring controlled transactions in transfer pricing*, Amsterdam, 2011.

[278] See LANGBEIN, *The unitary method and the myth of arm's length*, Tax note, 1986, pp. 625-681; Carroll, *Taxation of Foreign and National Enterprises*, League of Nations, Geneva, 1933.

Some authors, moreover, talk about the arm's length standard as a norm of customary international law. Such principle, indeed, has become a general state practice and, moreover, the negative reaction of the international community to the application by some states of the US of the formulary apportionment method to multinationals show that the arm's length principle is generally see as compulsory (C. Thomas, *Customary International Law and State Taxation of Corporate Income: The Case for the Separate Accounting Method*, Berkeley Journal of International Law, 1996, pp. 99-136). Similary, AVI- YONAH, *International Tax as International Law, op.cit.*.

Professor Vogel[279], moreover, has explained the relevance of such soft law – OECD Model and OECD Guidelines – considering that such material have been object of a recommendation by the OECD Council which compel the States to examine if the recommended measured are suitable. Furthermore, the recommendation need to be adopted by mutual agreement of all member countries of the OECD, circumstance that reinforces its expansive force at an international level[280].

In this sense, the hard and soft law are inter-dependent and the latter derives authority, and extends the meaning of the former[281].

From the analysis carried out, in conclusion, it is clear that Guidelines play a central role in the transfer pricing discipline, influencing often the tax practices and domestic law of the countries.

At the same time, nevertheless, it cannot be neglected that the Guidelines have the value of mere soft law since they cannot have any legally binding force, basically deferring their effectiveness to the discretion of the States.

6. *First considerations on transfer pricing rules and "value creation" approach.*

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[279] K. VOGEL, *Double Taxation Conventions*, *op. cit.* Intro para. 80.

[280] OECD Agreement, Article 6, 14 December 1960 which set out that any Member States that abstains the approval of a Council recommendation does no invalidate such a recommendation nor does it impede its adoption, but it does limit its efficiency in front of the other Sates.

[281] ENGEL, *Interpretation of tax treaties under International Law,* IBFD, 2004, pp. 457-458, who held that the OECD materials constitute a sort of "elaborative soft law" that can be described as principles that provide guidance to the interpretation, elaboration or application of hard law. Such soft law reflects the consensus of the member countries as to the proper interpretation and application of the provisions pf existing tax treaties that are based on the OECD Model Convention.

The current section has tried to show that with the globalization of the economy, especially in the last years, intangible assets due to their peculiarities constitute the major value-driver for a multinational company. As non-physical value drivers, intangibles do not have a fixed geographical location and can be easily reallocated without significant costs.

From a tax perspective, such features of intangible have allowed a complex, but legal, "slalom" between the national legal systems which had the fundamental effect of dissociating the tax imposition and the economic substance[282]. The *fil rouge* of such aggressive tax planning is represented by the fact that through a formal application of transfer pricing rules (namely the ALP) only a small margin would be expressive of the value produced by the company.

In such a context, the BEPS Project has provided the alignment of the taxation with value creation in order to ensure a fair entitlement of the profit-related intangible between the different entities involved in the value chain. The Actions 8-10, in particular, stress that the allocation of the returns should not be based on a mere formal approach, but on a substantial approach which implies the entitlement of the intangible-related profits to the entity that performs functions and assumes risks regarding the DEMPE functions.

As a matter of fact, in order to make effective the new "value creation approach", it would be necessary to reform the international transfer pricing system, since the arm's length principle as traditionally structured into TPG 2017 brings outcomes that are not aligned with the value creation.

This is caused mainly by, on the one hand, the "subjective" nature of the ALP that leaves a "grey area" where taxpayers may move

[282] See Assonime Circ. n. 9, 1st August 2018, p. 5 et seq.

arbitrarily and, on the other side, by the fact that it is based basically on an evident fiction according to which the different entities of the group are separated and not integrated, so that the ALP uses market comparable to source income according to the most prevalent market transactions and not according to how a MNE really operates.

This section, in this sense, tried to prove that, even if not perfect, a formulary apportionment appears to be better suitable for the new business environment and less arbitrary, as formulary arrangements are seen less susceptible to manipulation by intra-MNE contractual arrangements. This would reduce, accordingly, the possibility of disputes between countries which is one of the primary purposes at the basis of the BEPS Project as it aims at harmonizing the rules of the countries to achieve the same goal.

However, the adoption of a formulary solutions *tout court* is not effortless, given that its effectiveness strictly depends on the existence of a large consensus of the states on the determination of each elements of the formula. In this respect, we believe that the adoption of hybrid systems could represent a more reasonable and profitable alternative, as desired by prominent scholars.

Such a conclusion, furthermore, appears even more proper in the face of the increasingly growing phenomenon of the digitalization of the economy. It is worth anticipating here, indeed, that the "boomerang" of the digitalization of the economy is making more complex the alignment of the value creation with the place where functions are performed, assets are used, and risks assumed, since new kinds of intangibles are emerging as important value contributors within the value chains of both digital and non-digital companies (such as data, user participation, the spread of multi-sided business models). In this respect, the following section, after describing the different steps reached by international and European policymakers, will try to

understand where, within the new digital business models, it can be deemed that value is created and, accordingly, how hybrid solutions under a transfer pricing perspective could represent, at least for some forms of new intangibles, a valid alternative.

Chapter V –

The Digitalization of the Economy and the "Value Creation" Challenges

Section I

The rise of the Digitalization of the economy and the International Tax Debate

TABLE OF CONTENTS: 1. The advent of the Digitalization of the Economy; 1.1. Business Models and the impact of the Digitalization; 2. Value Creation's challenges within the Digitalization of the Economy; 3. The response of Policy Makers and States to the tax challenges posed by the Digitalization of the Economy: the profit attribution future; 3.1. The OECD's approach on the tax challenges of the digitalization of the Economy; 3.1.1. The evolution of the OECD's approach in 2019; 3.1.2. The OECD 2019 Public Consultation Document and the related Programme of Work to Develop a Consensus Solution to the Tax Challenges Arising from the Digitalisation of the Economy: revised nexus and profit allocation rules; 3.1.3. The 2019 Public Consultation Document, Secretariat Proposal for a "Unified Approach" under Pillar One; 3.2. The European Commission's Proposal on Significant digital Presence; 3.3. The Taxation of Technical Services under the New Article 12A of the UN Model.

3. The advent of the Digitalization of the Economy.

The French Colin and Collin Report begins with the following statement: «the digital revolution has taken place»[283]. This is the indisputable reality of our times, and both the extent and effects of digitalization have thoroughly been covered in the literature in recent years.

As it has been noted in literature, the term "digital economy" is not defined[284]. In this sense, the report by a group of experts assembled by the European Commission to advise on tax issues related to the digital economy states that «defining what constitutes the digital economy has proven problematic, because of the ever-changing technologies of the ICT sector and widespread diffusion of the digital economy within the whole economy»[285]. However, all the attempts to elaborate a definition have in common that the use of ICT plays a pivotal role in defining the phenomena of digital economy[286]. The OECD, for instance, states that «the digital economy is the result of a transformative process brought by information and communication technology»[287].

As all attempts to define the term digital economy are inconclusive, it is best to conclude by adopting the words of the US Supreme Court Judge, Potter Stewart, as used by Hellerstein, in

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[283] P. COLLIN – N. COLIN, *op. cit.*.

[284] A. J. COCKFIELD, *The Law and Economics of Digital Taxation: Challenges to Traditional Tax Laws and Principles*, Bull. Intl. Fiscal Docn. 12, 2002; B. WESTBERG, *Taxation of the digital Economy – An EU Perspective*, Eur. Taxn., 2014.

[285] European Commission, *Report of the Commission Expert Group on Taxation of the Digital Economy*, para. 11, 28 May 2014.

[286] N. GAOUA, *Taxation of the Digital Economy: French Reflections*, Eur. Taxn, 2014.

[287] OECD, *Addressing the Tax Challenges of the Digital Economy*, p. 11

describing the phenomenon of the digital economy: «we know it when we see it»[288].

Nonetheless, this fast development and adoption of new information technology (IT) such as social media, mobile, cloud, the Internet of Things, artificial intelligence and 3D printing is creating new human and business development opportunities, and it will continue to reshape and transform how we work, force us to rethink what the workplace is, and give us the option to work anywhere and anytime.

As the main literature noticed, indeed, technology is breaking down geographic, cultural and personal barriers in incredible new ways[289] and is transforming the traditional economy - based on «brick and mortar» - into a new *avatar* based on "click & order", namely a new kind of economy built on digital technology, characterized by being more global than local, more sharing than exploitative and more data driven than ever.

This cycle of digital economy is the result of the development and adoption of new technologies and innovations over several decades.

Prior to the digital age, three other industrial revolutions have been already taken place. With the mechanization in the middle of the 18th century the first revolution was initiated by the development of mechanical working and power machines by using water and steam power. At the beginning of the 20th century the second industrial revolution took place: electrification, Taylorism and "Fords" assembly line lead to the mass production without any handmade or customer

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[288] See, W. HELLERSTEIN, *Jurisdiction to Tax in the Digital Economy: Permanent and Other Establishments*, Bull. Int'l Tax'n, 2014, referencing US: SC, 1964, *Jacobellis v. Ohio*, 378 US 184, 197, 1964 (J. Stewart, concurring).

[289] See, F. J. LÒPEZ LUBIÀN – J. ESTEVES, *The New Digital Economy,* in *Value in a Digital World*, *How to assess business models and measure value in a digital world*, Switzerland, 2017, p. 1.; C. D'SOUZA - D. WILLIAMS, *The Digital Economy*, Bank of Canadian Review, 2017, p. 7.

specific products. In the 1960's the third industrial revolution finally evoke. Computerization has enabled automation-driven rationalization as well as variant-rich serial production[290].

From that moment, with the subsequent invention of the Internet and the World Wide Web, the large-scale development and advancement of the digital revolution occurred[291].

Nevertheless, there is no consensus in the literature as to if the digitalization should be seen as an evolution of the third revolution (ICT) or as a distinct fourth revolution.

According to Gordon, digital technologies represent an evolution of the ICTs that are less transformative and have far less scope to generate significant, sustained increases in productivity compared with innovations in earlier eras [292].

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[290] W. BAUER – S. SCHLUND – T. HORNUNG – S. SCHULER, *Digitalization of industrial value chains – a review and evaluation of existing use cases of industry 4.0 in Germany*, LogForum 14 (3), 2018, p. 331.

[291] See, F. J. LÒPEZ LUBIÀN – J. ESTEVES, *The New Digital Economy,* in *Value in a Digital World*, op. cit. p. 2, where the author reports the main milestones which lead to the digital revolution. These are: «*i)* 1947-1979, the transistor, which was invented in 1947, paved the way for the development of advanced digital computers. This led to a communication revolution; *ii)* 1980s, the personal computer became mainstream in the form of desktop machines. The first cellphone was also introduced during this decade. In 1983, Motorola released its first commercial mobile phone; *iii)* 1990s, Tim Berners-Lee invented the World Web Wilde in 1989 and it became publicly available in 1992. Throughout the 1990s, the Internet proved to be one of the greatest communication advances of the century. By the end of the decade, the impact of the Internet on the everyday lives of many citizens had already occurred; *iv)* 2000s, developing countries started to accelerate Internet and mobile access and adoption; globally the number of Internet users continued to grow exponentially, e-commerce started to boom and television began to switch from analogue to digital signals; *v)* 2010 and beyond, the Internet reached 2 billion users in 2010 and 3 billion users in 2014, and social media users grew significantly. Once a luxury, mobile communication has also become crucial: around 70% of the world's population own a mobile phone, and around 70% will have smartphones by 2020. In 2015, mobile Internet usage exceeded fixed/desktop Internet usage. Technology has become ubiquitous and the famous mantra of "Everyone, Anytime, Anywhere» has started to become a reality».

[292] R. GORDON, *Secular Stagnation: A Supply-Side View*, American Economic Review, 2015, pp. 54-59; Id., *Perspectives on the Rise and Fall of American Growth*, American Economic Review, 2016, pp. 72-76, where he pointed out that the ICT

In contrast, Schwab[293] believes that a fourth industrial revolution is underway. It is characterized by a much more ubiquitous and mobile internet, by smaller and more powerful sensors that have become cheaper, and by artificial intelligence and machine learning. In other words, digital technologies that have computer hardware, software and networks at their core are not new, but, despite of the third industrial revolution, they are becoming more sophisticated and integrated and are, as a result, transforming societies and the global economy.

Brynjolfsson and McAfee have famously referred to this period as «the second machine age», whereas the first machine age (the period since the first industrial revolution) featured the automation of tasks reliant on manual labor, the second machine age will see many cognitive or knowledges-based tasks automated and cheaply produced at great scale. In their book it is stated that that the world is at an inflection point where the effect of these digital technologies will manifest with «full force» through automation and the making of «unprecedented things»[294].

In Germany, as a matter of fact, at the Hannover Fair in 2011 was coined for the first time the term "Industry 4.0". The former term can be understood as an expected fourth industrial revolution due to intelligent digitalization and automation of products and value chain processes[295].

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revolution's impact on productivity growth was short-lived and «tended to be channeled into a narrow sphere of human activity involving entertainment, communication, and the collection and processing of information».

[293] See K. SCHWAB, *The Fourth Industrial revolution,* Journal of Economic History, 2016, pp. 63-82.

[294] See E. BRYNJOLFSSON – A. MCAFEE, *The Second Machine Ages: Work, Progress and Prosperity in a Time of Brilliant Technologies*, New York, 2014.

[295] W. BAUER – S. SCHLUND – T. HORNUNG – S. SCHULER, *op. cit.*, p. 331 et seq.

In other words, it is possible to identify the different revolutions as represented by the figure below.

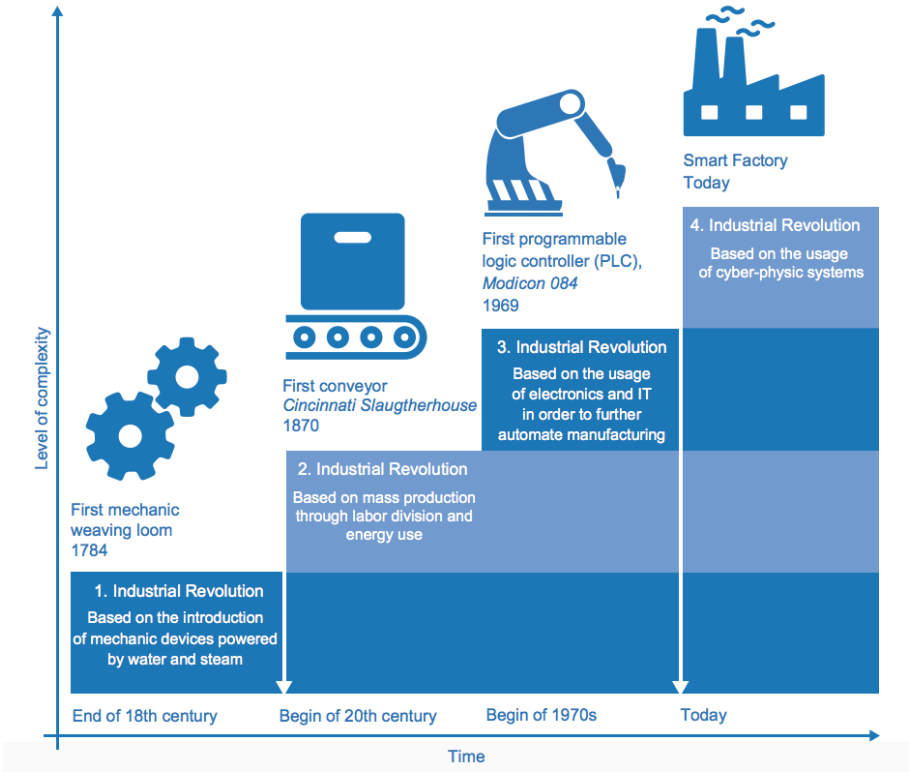

Figure 1: From Industry 1.0 to Industry 4.0[296]

However, what is clear is that the phenomenon of digitalization is causing a tremendous transformation to the existing industries by changing the nature of innovation, product development as well as interactions between producers and consumers. By 2020, the number of overall connected devices worldwide is expected to reach 30 billion.

[296] Figure from R. T. KREUTZER – T. NEUGEBAUER – A. PATTLOCK, *Digital Business Leadership, Digital Transformation, Model innovation, Agile Organization, Change Management*, Berlin, 2018, p. 5.

According to the World Economic Forum (WEF), the estimated value of this digital transformation will amount to $ 100 trillion by 2025[297].

Such intensity, magnitude, speed and transformational power of the digital economy inevitably puts pressure on governments to design and address modern and innovative policies fit for the digital age.

1.1. Business Models and the impact of Digitalization.

Before turning our attention to the tax challenges of the digitalization of the economy, it appears crucial – to better comprehend the related tax issues – to take a look at the different kinds of digital business models and at their main characteristics in a nutshell.

As noted in the previous paragraph, the current new Era of digitalization is revolutionizing the way business is conducted in industrial value chains.

We are witnessing a new age, where industry is becoming increasingly "smart" through the use of the Internet of Things, intensive data exchange and predictive analytics.

However, while technological disruption is changing the competitive landscape, their full impact on business structures, processes are less understood and vary significantly across companies in the same industry. The main reason of such "random process"[298] is the lack of a generally accepted definition of the term "business model" within which to provide systematic analysis.

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[297] World Economic Forum, *Identifying value at stake for society and industry*, available at http://reports.weforum.org/digital-transformation/identifying-value-at-stake-for-society-and-industry/.

[298] See. O. A. EL SAWY – F. PEREIRA, *Business Modelling in the Dynamic Digital Space, An Ecosystem Approach*, London, 2013, p. 13

Business model, indeed, has become one of the rapidly growing concepts in the last decade. The origins of the expression business model can be traced back to the writings of Peter Drucker[299], and the term started becoming widely adopted by practitioners during the dotcom of the 1990s.

Even if there have been attempts to provide a shared understanding of the business model concept[300], the latter can be seen as having progressed in four different stages[301].

In the initial phase, when the term business model started to become prominent, a number of authors suggested business model definitions and classifications[302]. Then, during the second phase authors started completing the definitions according to its architecture, describing the structure and the synthesis of business model construction[303]. In a third phase authors define business model by

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[299] P. DRUCKER, *The Theory of the Business,* Harvard Business Review, 1994.

[300] D. ANDREINI – C. BETTINELLI, *Business Model Innovation, From Systematic Literature Review to Future Research Directions*, Switzerland, 2017, p. 28.

[301] J. GORDIJN – A. OSTENWALDER- Y. PIGUER, *Comparing two business model ontologies for designing e-business models and value constellations.* In 18th BLED Conference, June 6–8, 2005.

[302] H. CHESBROUGH - R. S. ROSENBLOOM, *The role of the business model in capturing value from innovation: Evidence from Xerox corporation's technology spin-off firms,* Industrial and Corporate Change, 2002, pp. 529–555, define a business model as a «heuristic logic that connects technical potential with the realization of economic value». According to such definition, hence, a business model is a tool that helps companies to make strategical decisions, such as whether to and if so how to introduce, develop and manage new technologies in the firm or new ventures; J. MAGRETTA, *Why business models matter*, Harvard Business Review, 2002, pp. 86–93, who sees business models as stories that describe how enterprises work. According to other authors, instead, business model is an illustration of strategic decisions and others describe business model as organizational activities that design the functioning of companies (G. HAMEL, *The end of progress*, Business Strategy Review, 2000, pp. 69–78.).

[303] See C. BADEN-FULLER - M. S. MORGAN, *Business models as models,* Long Range Planning, 2010, pp. 156–171, who state that «one role of business models is to provide a set of generic level descriptors of how organizes itself to create and distribute value in a profitable manner»; P. TIMMERS, *Elctronic commerce – strategies and models for business-to-business trading*, London, 2000, who defines business model as

detailing the content of every dimension and component of the business model[304]. Finally, in the last stage, the focus is on the theory building and dynamic modeling[305].

This approach, in particular, seems to dominate. Under such perspective, a business model represents how firms will convert resources and capabilities into economic value, making visible how the company acquires and uses different forms of capital to create value[306].

In this conceptualization, digital business models occur when the role of information technology (IT) and its relationship to the business deeply changed over the last 20 years, transforming the way in which

architecture for product, service and information flows, including a description of the various business actors and their roles; and a description of the potential benefits for various business actors; and a description of the source of revenue.

[304] B. W. WIRTZ - A. PISTOIA - S. ULLRICH - V. GÖTTEL, *Business models: Origin, development and future research perspectives*, Long Range Planning, 2016, pp. 36–54, where the authors categorize business models definitions according to the characteristics of the business model components, namely: strategic activities and managerial decisions, resources, networks and relationships and value outcomes; M. W. JOHNSON – C. M. CHRISTENSEN – H. KAGERMANN, *Reinventing your business model,* Harvard Business Review, 2008, pp. 50-59, for them «business model consists of four interlocking elements that, taken together create and deliver value […] customer value proposition […] profit formula […] key resources […] key processes».

[305] See, R. CASADESUS-MASANELL – J. E. RICART, *From strategy to business models and onto Tactics*, Long Range Planning, 2010, pp. 195–215 talk about dynamic interrelations between business model elements; B. DEMIL – X. LECOCQ, *Business model evolution*. *In search of dynamic consistency,* Long Range Planning, 2010, pp. 227–246, argue that «the resources and competences of a firm, its organizational system and the value propositions it offers are permanently interacting, in ways that increase or decrease its performance»; B. W. WIRTZ - A. PISTOIA - S. ULLRICH - V. GÖTTEL, *op. cit.,* where it is stressed that «in order to understand how the firm gains competitive advantage it is important to analyze the business model from a dynamic perspective, being aware that, over time, there may be the need for business model development»; A. SORESCU – R. FRANBACH – J. SINGH – A. RANGASWAMY – C. BRIDGES, *Innovations in retail business model*, Journal of Retailing, 2011, pp. 3-26, they refer to the business model as «a well-specified system of interdependent structures, activities, and processes that serves as a firm's organizing logic for value creation (for its customers) and value appropriation (for itself and its partners)».

[306] V. BEATTIE – SJ SMITH, *Value Creation and Business Models: Refocusing the Intellectual Capital Debate*, British Accounting Review, 2003, p.1.

enterprises create their value within their value chains, as the figure below shows.

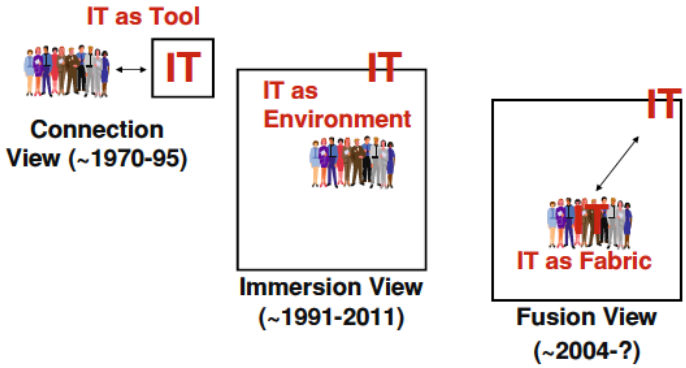

Figure 2: Changing role of technology in business[307]

Traditionally, indeed, IT was seen as a supporting element of the process of differentiation. Through the increasing relevance and strategic use of information, technology and business are effectively fused into a fabric. Consequently, as properly noticed, «it no longer makes sense to talk about information technology as a tool or environment that is kept at arm's length from business activities»[308].

Consistent with this definition of business model, the analysis of digital business models needs to consider the combination and integration of resources, innovative technologies and information[309].

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[307] Figure from O. A. EL SAWY – F. PEREIRA, *op. cit.*, p. 19.

[308] O. A. EL SAWY – A. MALHOTRA – S. GOSAIN – K. M. YOUNG, *IT-intensive value innovation in the electronic economy: Insights from Marshall industries*, MIS Quarterly, 1999, pp. 305-335.

[309] See, C. SHAPIRO – H. R. VARIAN, *Information Rules: A strategic Guide to the Network Economy*, Boston, 1998. According to R. AMIT – C. ZOTT, *Value creation in e-business,* Strategic management Journal, 2001, p. 511, a digital business models «depicts the content, structure and governance of transactions designed so as to create value through the exploitation of business opportunities».

The conversion of revenue in value within the digital business models, in other words, is represented by the way of generating revenue through the use of data and information in a specific form of products or services[310].

Digitalization, indeed, on the one hand, has enhanced the manner in which traditional brick-and-mortar business operate, and, on the other hand, has also opened the doors for new business models that operate substantially in the digital sphere (so-called "highly digitalized business"[311]). In other words, the digital economy represents both an era of revolutionary business models and the evolution of existing business models[312].

Concerning the traditional business models, they experience a horizontal and vertical integration of value-chains through the increasing deployment of digital assets. As noticed, this trend results in a strong connectedness of operators within a traditional business model and enhances value ecosystem[313]. Practical examples for these developments are the Internet of Things, the inclusion of robotics and 3D printing which lead to disruption of existing business structures and are often conducted via innovation centers (so-called "hubs") close to

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[310] For an overview, see K. TÄUSCHER, *Business Models in the Digital Economy: an Empirical Study of Digital Marketplaces*, Fraunhofer, p. 10; A. GAWER – M. COSUMANO, *How companies become platform leaders,* MIT Sloan Management Review, 2008, pp. 28

[311] L. SPINOSA – V. CHAND, *A Long-Term Solution for Taxing Digitalized Business Models: Should the Permanent Establishment Definition Be Modified to Resolve the Issue or Should the Focus Be on a Shared Taxing Rights Mechanism?*, Intertax, 2018, p. 477.

[312] Cf. D. BONNET – G. WESTERMANN, *The best digital business models put evolution before revolution*, Harvard Business Review, 2015.

[313] M. OLBERT - C. SPENGEL – AC WEMER, *Measuring and Interpreting Countries' Tax Attractiveness for Investments ion Digital Business Models,* Intertax, 2019, p. 150.

the head unit[314]. The integration of digital technologies within traditional business models aims at efficiency gains and an increase in potential sales through extended or new channels.

Beside the traditional business models, as already mentioned, there are new kind of digitalized business models. These can be simply declined into two general main categories: the B2C and B2B business models.

Digital B2C business models offer targeted and individualized products and services such as advertising and platform services to private end users. Paying customers are commercial advertising clients or consumers making use of online services that are independent from the service provider. Such business model relies on an online platform and the enabling proprietary software, which are typically developed at the principal location of the parent company, as well as substantial IT infrastructure. The core activities within these business models are the development and maintenance of the IT infrastructure and its online services as well as content management and marketing. These latter two activities are partly performed by personnel at locations near to the customers as the graphic below show.

According to the existing international tax rules, a significant taxable nexus is only created in the country of residence of the parent company.

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[314] M. OLBERT - C. SPENGEL, *International Taxation in the Digital Economy: Challenge Accepted?*, World Tax J., 2017, where it is stated that «recently, large multinational companies have been founding spin-off subsidiaries to centralize all activities elaborating on the digital transformation. In particular, specific human capital is allocated to these units. Several companies also found subsidiaries that are equipped with significant amounts of capital. These so-called "innovation hubs" are used to acquire or promote high-technology ventures».

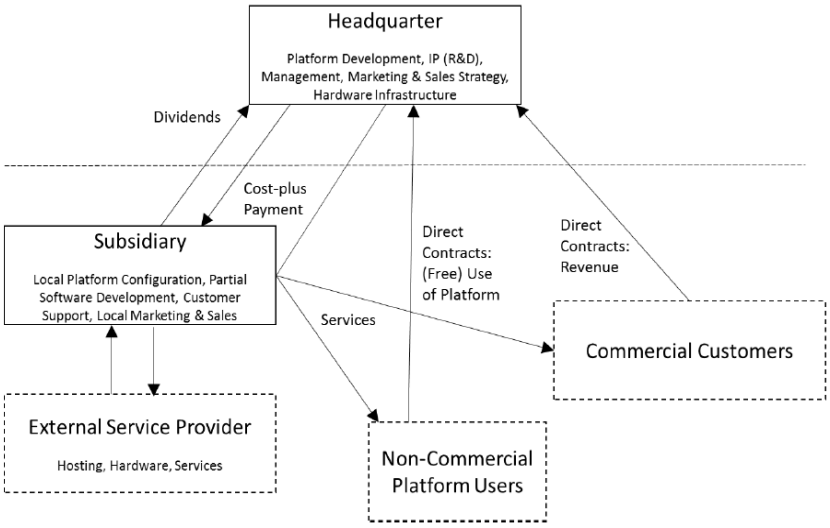

Figure 3: Digital B2C Business Model[315]

Concerning the digital model B2B, instead, it offers digital products to commercial clients.

Such business, in particular, run a massive server landscape at their main location while it operates through smaller complementary hardware, such as data center, generally outsourcing them to external providers.

This kind of business is typically represented by the cloud computing that create value by providing a broad set of on-demand computing services to customers.

Cloud computing enables a range of technology-based activities to take place on a network of remote servers hosted on the Internet rather than on a local serve or personal computer. This enables business to outsource some activities and not make upfront investments on hardware.

In addition, computing service include virtual servers in the cloud, the ability to run and manage web apps using remote computing,

[315] Graphic from M. OLBERT – C. SPENGEL, *op. cit.,* p. 24.

the ability to run code on remote computers in response to event and the ability to run batch code jobs at scale[316].

Practical examples of similar B2B business models are Saleforce, a leading provider of cloud software for marketing activities, and SAP SE, with its increasing product range of cloud application and big data analytics[317].

Software development is, hence, the core activity that is mainly conducted at the location of the parent company implying that the latter owns the corresponding IP. Revenues stem from the direct sale or the licensing of digital product or service.

In this regard, sales are another important function which is planned and managed centrally but carried out locally through subsidiaries and local partners. These local entities foster customer relationship to facilitate the specific individualization of the digital offers.

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[316] OECD/G20, *Tax Challenge Arising from the digitalization, Interim Report*, 2018, p. 74.

[317] For a deep analysis of this type of cloud computing business model, see C. M. DASILVA – P. TRKMAN – K. DESOUZA – J. LINDIČ, *Disruptive technologies: a business models perspective on cloud computing*, Technology Analysis and Strategic Management, 2013, p. 1164, where the authors highlight that «Saleforce.com is facing resistance from some corporate IT departments. The reason is not technological, rather because Saleforce.com is disrupting the CRM industry and IT departments. Today, end-customers can dodge IT departments as no installation is required to use the service. The traditional IT department no longer controls the data and system making its services less indispensable or even redundant […] ».

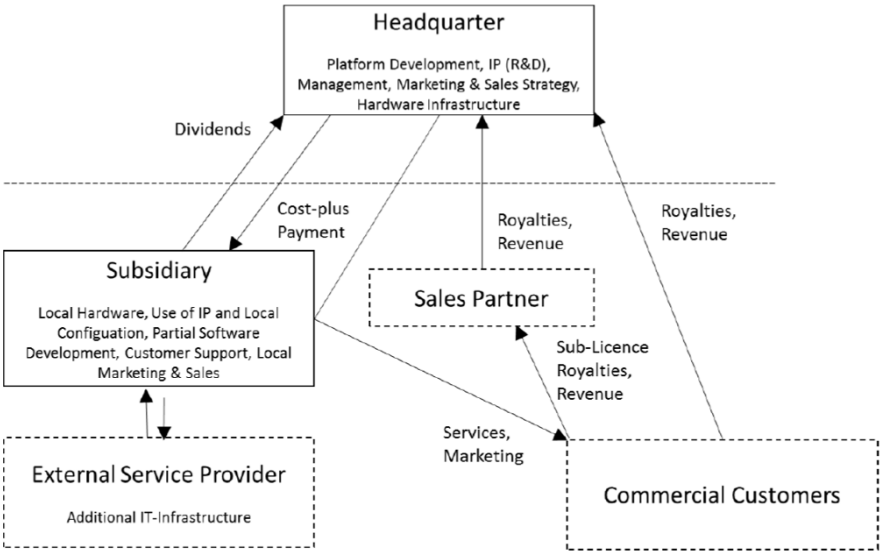

Figure 5: Digital B2B Business Model[318]

Similar to B2C the primary taxable nexus is at the level of the parent company's jurisdiction. Current international tax principles, indeed, attribute most of the business' value to the development and maintenance of the IT infrastructure and digital products. Local sales activities and the functions of customer's support are regarded routine and compensated via cost-plus method.

Therefore, profits from cross-border cloud transactions are primarily taxed in the residence State of the provider without establishing a PE at the location of the server or the customer under current tax law.

Despite such individual technologies phenomena, it is worth pointing out that the digitalization of the economy includes also the transformation of the entire traditional business models, changing their

[318] Graphic from M. OLBERT – C. SPENGEL, *op. cit.,* p. 26.

process of value creation and establishing new products and business models within traditional boundaries.

Similar to the B2C, the parent company engages in the core activities of the business developing software and creating assets. Local subsidiaries engage in customer management and sell the digital products to commercial clients. However, these local entities compensate the parent company for the use and sale of the digital products via royalty payments[319].

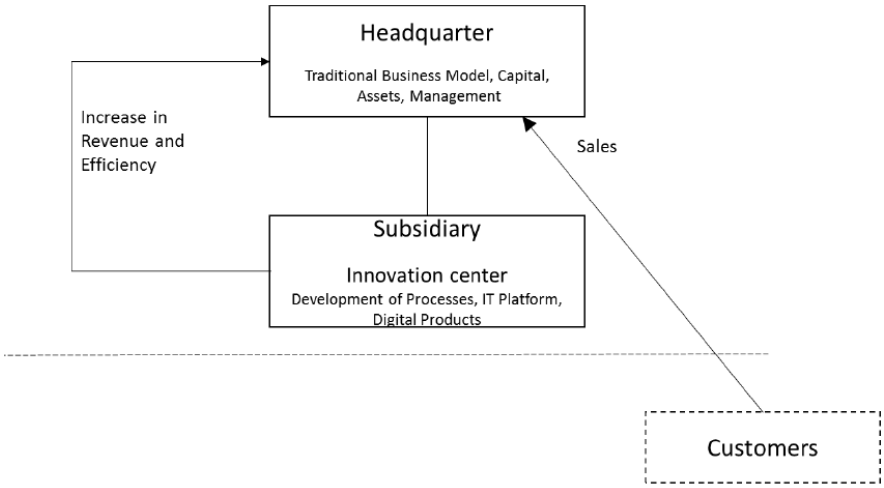

Figure 6: Structure of Digitalizing traditional Business Models[320]

2. Value Creation's Challenges within the Digitalization of the Economy.

The taxation of the digitalization of the economy has become a topical and politically relevant tax issues around the world in recent

[319] See, A. BAL, *Tax implications of Cloud Computing – How Real Taxes Fit into Virtual Clouds*, Bull, Intl. Taxn., 2012; ID. *The Sky's the Limit – Cloud-Based Services in an International Perspective*, Bull. Intl. Taxn., 2014.

[320] Graphic from M. OLBERT – C. SPENGEL, *op. cit.,* p. 27.

years, opening what the main literature defines as the "Pandora's box", in which the digital sector is only one of the major issue post-BEPS that can no longer be kept inside the box[321].

[321] See, A. P. DOURADO, *Digital Taxation Opens the Pandora Box cit.*, p. 5 where it is affirmed that, indeed, «in the academic literature, revisiting the digital sector is a new opportunity to discuss the whole structure of the international tax system». It is worth noting that during the last two years a considerable body of the literature has been produce on the topic. Here, to get an idea, a non-exhaustive overview. M. P. DEVEREUX & J. VELLA, *Response to the EU Commission's Consultation – Fair Taxation of the Digital Economy*, Oxford University Centre for Business Taxation, 2018; M. P. DEVEREUX & J. VELLA, *Implications of Digitalization for International Corporate Tax Reform*, Oxford University Centre for Business Taxation WP, 2017; S. de Jong, W. NEUVEL & Á. UCEDA, *Dealing with Data in a Digital Economy*, Int'l Transfer Pricing J., 2018; G. W. KOFLER, G. MAYR & C. SCHLAGER, *op. cit.* Eur. Tax'n, 2018; A. MEHTA, '*Equalization Levy' Proposal in Indian Finance Bill 2016: Is It Legitimate Tax Policy or an Attempt of Treaty Dodging?,* Asia-Pac. Tax Bull., 2016; K. Andersson, *Taxation of the Digital Economy*, Intertax, 2017; J. Á. G. REQUENA & S. M. GONZÁLEZ, *Adapting the Concept of Permanent Establishment to the Context of Digital Commerce: From Fixity to Significant Digital Economic Presence*, Intertax, 2017; Y. BRAUNER & P. PISTONE, *Adapting Current International Taxation to New Business Models: Two Proposals for the European Union*, Bull. Int'l Tax'n, 2017; G. W. KOFLER - G. MAYR - C. SCHLAGER, *Taxation of the Digital Economy: 'Quick Fixes' or Long-Term Solution?*, Eur. Tax'n, 2017; M. OLBERT - C. SPENGEL, *op. cit.*; U. SCHREIBER - L. M. FELL, *International Profit Allocation, Intangibles and Sales-Based Transactional Profit Split*, World Tax J., 2017; M. K. SINGH, *Taxation of Digital Economy: An Indian Perspective*, Intertax, 2017; M. AGRAWAL, *India at the Forefront in Implementing BEPS-Related Measures: Equalization Levy in Line with Action 1*, Int'l Transfer Pricing J., 2016; W. J. G. PAARDEKOOPER - M. VAN DE VEN - A. VAN ESDONK & Y. C. CATTEL, *Tax Considerations for the European Union's Digital Single Market Strategy*, Intertax, 2016; C. H.J.I. PANAYI, *International Tax Law Following the OECD/G20 Base Erosion and Profit Shifting Project*, Bull. Int'l Tax'n, 2016; O. POPA, *Taxation of the Digital Economy in Selected Countries – Early Echoes of BEPS and EU Initiatives*, Eur. Tax'n, 2016; S. WAGH, *The Taxation of Digital Transactions in India: The New Equalization Levy*, Bull. Int'l Tax'n, 2016; D. W. BLUM, Permanent *Establishments and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – The Nexus Criterion Redefined?*, Bull. Int'l Tax'n, 2015; Y. BRAUNER - A. BAEZ*, Withholding Taxes in the Service of BEPS Action 1: Address the Tax Challenges of the Digital Economy*, IBFD White Paper, 2 Feb. 2015; L. CERIONI, *The New 'Google Tax': The 'Beginning of the End' for Tax Residence as a Connecting Factor for Tax Jurisdiction?*, Eur. Tax'n, 2015; J. Pellefigue, *Transfer Pricing Economics for the Digital Economy*, Int'l Transfer Pricing J., 2015; M. STEWART, *Abuse and Economic Substance in a Digital BEPS World*, Bull. Int'l Tax'n, 2015; M. DE WILDE, *Tax Jurisdiction in a Digitalizing Economy; Why 'Online Profits' are so Hard to Pin Down*, Intertax, 2015; I.d., *Comparing Tax Policy Response for the Digitalizing Economy: Fold or All-in*, Intertax, 2018; T. FALCÃO - B. MICHEL, *Assessing the Tax Challenges of the Digital Economy: An Eye-Opening Case Study*, Intertax, 2014; N. GAOUA, *Taxation of the Digital Economy: French Reflections*, Eur. Tax'n, 2014; P. GUPTA, *'Cloud' – A Technological Odyssey*, Asia-Pac. Tax Bull.,

As showed above, the digital economy has dramatically modified the way of doing business by reshaping traditional value chain according to innovative new schemes.

Nowadays, the most valuable car rental service (Uber, valuated at about 68 billion USD) owns no cars or drivers; the most valuable hotel and short-stay service (AirBnB valued at about 30 billion USD) owns no hotel or properties; Google, on the other hand, is one of the current most valuable companies in the world and most of the whole of the enormous valuation is derived from invaluable intangibles of Google networks and the intellectual capital in terms of highly skilled manpower[322].

This scenario clearly challenges the ability of market jurisdictions to tax profits generated within their borders, as the international tax framework traditionally relies on physical features in order to recognize

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2014; W. Hellerstein, *op. cit.*; M. K. SINGH, *Taxing E-Commerce on the Basis of Permanent Establishment: Critical Evaluation*, Intertax, 2014; L. QUARATINO, *New Provisions Regarding the Taxation of the Digital Economy*, Eur. Tax'n, 2014; B. WESTBERG, *Taxation of the Digital Economy – An EU Perspective*, Eur. Tax'n, 2014; A. BAL, *Tax Implications of Cloud Computing – How Real Taxes Fit into Virtual Clouds*, Bull. Int'l Tax'n, 2012; D. PINTO, *The Need to Reconceptualize the Permanent Establishment Threshold*, Bull. Int'l Tax'n, 2006; R. M. BIRD, *Taxing Electronic Commerce: The End of the Beginning?*, Bull. Int'l Tax'n, 2005; A. J. COCKFIELD, *op.cit.*; C. E. MCLURE, *op.cit.*; W. HELLERSTEIN, *State Taxation of Electronic Commerce*, Tax L. Rev., 1996/1997; R. S. AVI-YONAH, *International Taxation of Electronic Commerce*, Tax L. Rev. 507, 1996/1997.

[322] See, R. K. GUPTA IRS, *Recent trends in transfer pricing, op.cit.*, p. 699 where it is pointed out, furthermore, that Forbes highlights that Uber alone is currently valued more than the icons of the industrial economy, such as GM, Ford Motors or even Honda Motors and it is catching up to Volkswagen and BMW. As the graphic below showed, it took less than six years to surpass the century old giant General Motors (cf. Forbes, *At $ 68 Billion Valuation, Uber Will Be Bigger than GM, Ford, and Honda,* 2015, available at https://www.forbes.com/sites/liyanchen/2015/12/04/at-68-billion-valuation-uber-will-be-bigger-than-gm-ford-and-honda/#75d2521a32e3). See also, . D. TEECE – G. LINDEN, *Business models, value capture and the digital enterprise*, Journal of Organization Design, 2017, where it is pointed out that «a platform is a combination of hardware and software that provides standards, interfaces, and rules that allow providers of complements to add value and interact with each other and/or users»; See, 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*, Bul. Intl. Taxn., 2018, p. 6.

the existing of a nexus and, thus, the jurisdiction to tax of a country (*supra* Chap. I). The taxable nexus typically arises where businesses invest in the core activities.

The business model analysis carried out in the previous paragraph, as a matter of fact, has displayed that within the digital transformation of traditional business models, key activities are performed essentially by the parent company or innovation centers. Regarding the international expansion in the B2C and B2B sector, on the other side, digital business models operate slim organizational structures with only few activities and assets, such as minor administrative personnel or the use of IT infrastructures and data centers in the market countries.

Consequently, only a small share of the total profits is allocated to the local entities, and the principal taxable nexus arises at the main location of the parent company according to current rules of taxation.

In other words, digitalization allows enterprises to spread its core functions across multiple jurisdictions without any physical presence[323].

As the new international tax "mantra" is the allocation of profits where value is created[324] – as stated by the OECD's BEPS Project (see *supra* Chap. II and III) – cross-border profits should be taxed among the different countries involved in the process of the value creation within a business model, overcoming the traditional binomial residence and source jurisdiction.

The current international tax rules, in this respect, seems to be unsuitable for properly tracking and allocating the value created among

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[323] A. P. DOURADO, *op. cit.*, p. 567, where in this respect, the Author states that «international coordination regarding what to tax, where to tax and how to tax depends on that diagnosis».

[324] M. OLBERT – C. SPENGEL, *op. cit.*, p. 45.

the companies operating in the digital economy, since they required the existence of a physical nexus in order to legitimate the jurisdiction to tax of a different country of the residence[325].

As noticed by the European Commission, indeed, digital businesses havedifferent characteristics in terms of how value is created, due to their ability to conduct activities remotely, the contribution of users in their value creation, the strong reliance on intangibles assets, as well as a tendency towards winner-takes-most market structures rotted in the strong presence of network effects and mainly the value of big data[326].

The OECD itself[327] highlights as well that the heavy reliance on intangibles assets, the role of data and user participation, work together to enable, especially for highly digitalized businesses, to create value by activities closely linked with a jurisdiction without needing to establish a physical presence.

In other terms, there is a general consensus in believing that the main value drivers of the new digital business models are represented by both data and user's participation[328].

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[325] In this sense, see A. S. SAMARI, *European Union – digital Economy and Profit Allocation: The Application of the Profit Split Methods to the Value Created by a "Significant Digital Presence"*, Intl. Transfer Pricing J., 2019, p. 1.

[326] European Commission, COM (2018) 148 final, *Proposal for a council Directive on the common system of a digital services tax on revenues resulting from the provision of certain digital services*, Explanatory Memorandum, p. 2.

[327] OECD/G20 *Base Erosion and Profit Shifting, Tax Challenges Arising from Digitalization – Interim Report 2018.* See, T. ROSEMBUJ, *Taxing Digital,* Barcelona, 2015, p. 33 where the author affirm t that «the data processing is the digital essence: without data there is no algorithm and without algorithm it is difficult to argue that there is a digital good»; V. MAYER SCHÖNBERGER – K. CUCKIER, *Big Data*, Italy, 2013, p. 142 where the authors state that «the data's value is calculated on the basis of all possible ways in which they could be used in the future and not merely on the basis of its present use».

[327] OECD/G20 Base Erosion and Profit Shifting, *Tax Challenges Arising*

[328] OECD/G20 Base Erosion and Profit Shifting, *Tax Challenges Arising from Digitalization – Interim Report 2018*, where, indeed, it is stated that «there is no

Regarding data, indeed, it is frequently said that it is «the new gold or lifeblood» of the digital economy[329]. As noticed by the OECD[330] «although with different intensities across companies, the use, collection and analysis of data is becoming an integral part of the business models of the most digitalized firms».

Every company collects and manages data, nevertheless, only those that are able to exploit their information to accelerate innovation and improve customer experiences seem to improve their competitive position.

There is a common perception that the mere process of collecting data does not add value. It is not a raw data that is a profit driver, rather the insights derived from data can give a company a competitive advantage. In order to become a profit driver, hence, collected data need to be processed and analyzed thanks to a specific, extremely valuable algorithm[331], in conjunction with other functions, such as human resources[332] and IT.

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consensus on their relevance and importance. Indeed, while there is a general agreement that data and user participation are common characteristics of digitalized business, there are differences of opinion on whether and the extent to which data and user participation represent a contribution to value creation by the enterprise».

[329] A. BAL, *(Mis)guided by the Value Creation Principle – Can New Concepts Solve Old Problems?*, Bull. Intl. Taxn., 2018, p. 3; World Economic Forum, *unlocking the Value of Personal Data: Form Collection to Usage*, 2013, where it is pointed out that «data have swept into every industry and business function and are now important factor of production, alongside labor and capital».

[330] See OECD/G20, *Tax Challenge Arising from Digitalization – Interim Report 2018*, p. 53.

[331] See, R. PETRUZZI – S. BURIAK, *op. cit.*, p. 18.

[332] OECD, *Human Capital Investment – An International Comparison* (OECD 1998); *The Well-Being of Nations – The Role of Human and Social Capital* (OECD 2001); *Human Capital* (OECD 2007); and *Supporting Investment in Knowledge Capital, Growth and Innovation* (OECD 2013). See also World Economic Forum, The Human Capital Report (2013), which states that: «[a] nation' s human capital endowment – the skills and capacities that reside in people that are put to productive use – can be a more important determinant of its long-term economic success than virtually any other resource»; R. J. TAVARES, *Human Capital in Value Creation and Post-BEPS Tax Policy: An* Outlook, Bull. Intl. Taxn., 2015, p. 591; OECD, *Interconnected*

Users participation, on the other side, appears also a key for the success of digital business models. One of the common views is that user participation is an important value driver for certain types of digital business and deserves, as data, a recognition in the rules for allocating and justifying taxing rights among countries[333]. Indeed, as pointed out by prominent scholars, the customer/user, especial within the highly digitalized business models, does not play the same role as the customers of traditional businesses. While the latter can be considered as "passive customers", in simply buying (i.e. consuming the products or services provided by a company), the former can be regarded as "active consumers", considering that they do not only receive a product or service, but also contribute to enhancing its value, especial providing their data which enable companies to use them in exchange[334].

Jurisdiction in which users are located, consequently, should be entitled to tax a portion of digital companies' profits.

However, also for the user participation there are many questions – still in discussion at both international and European – that need to be addressed. First, not all users contribute to value generation and value generated by individual users varies significantly; second, how determine a user's location, as several proxies can be considered; third,

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Economies: Benefiting from Global Value Chains, p. 209 (OECD 2013), which states that «knowledge-based capital has become a driver of success in global value chains (GVCs) The value created by a GVC is unevenly distributed and depends on the ability of participants to supply sophisticated and hard-to imitate products and services. Increasingly, such products or services stem from forms of knowledge-based capital such as brands, basic R&D, design and the complex integration of software with organizational structures. Knowledge-based capital also allows companies to shape the architecture of a GVC in order to capture a larger share of the value created».

[333] HM Treasury, *Corporate Tax in the Digital Economy: position paper update*, March 2018, p. 7.

[334] R. PETRUZZI – S. BURIAK, *op. cit.*, p. 14, they refer to the user who generate valuable data as «unconscious contributors and/or employees. Such customers "work" for the company by generating a high value that is then monetized in exchange for free or cheaper services».

whether a user can also destroy value for the company and how it can affect a value chain analysis of an enterprise. For instance, as properly pointed out, it might happen in the case of user who post offensive statements on social media platforms. Such behavior can cause a reputational damage and force the platform provider to undertake some extra efforts to track and delete the offending posts. In this sense, it seems logical to expect that if positive user contributions are taxed, negative user contribution should consider as a factor that reduce the company tax bill[335].

The aforesaid findings not only lay challenges with regard to the need of identifying a new form of taxable nexus but also for the consequent allocation of the related profits, namely for the performance of a transfer pricing functional analysis, since they influence directly how an enterprise creates value.

As showed in the previous chapters, the internationally accepted principle underlying profit allocation is the arm's length principle (ALP). The application of the ALP, specifically, requires the determination of the distinct contributions to the creation of value of each associated enterprise – or/and PE – through the analysis of the functions performed, assets used, and the risk assumed by each entity (functional analysis). Establishing the exact nature and location of the functions performed, the assets used and the risks assumed in the current scenario post-BEPS, indeed, is the primary proxies used to reflect real economic activities and value creation.

However, detecting the relevant functions performed by the highly digitalized business models through new types of intangibles (mainly data and users' participation) is complex, since most of the time

[335] In this sense, A. BAL, *op. cit.*, p. 7.

operate in a jurisdiction without maintaining any physical presence, or without any significant people functions.

Consequently, the further question that arises is whether in order to guarantee a proper attribution of profits is opportune that the arm's length principle remains the tax standard for transfer pricing purposes.

These are the main questions that the following paragraphs intend to tackle in order to deepen the concept and the function of value creation within the digitalization of the economy.3. The response of Policy Makers and States to the Tax Challenges of the Digitalization of the Economy.

3. The response of Policy Makers and States to the Tax Challenges of the Digitalization of the Economy.

3.1. The OECD's approach on the tax challenges of the digitalization of the Economy: from the Action 1 to the Interim Report.

The tax challenges arising from the digitalization of the economy were identified as one of the main areas of the BEPS Project, leading it the 2015 BEPS Action 1 Report on *Addressing the Tax Challenges of the Digital Economy* (Action 1 Report)[336].

The Action 1 recognized that the digitalization presents important challenges for international taxation and that it would be difficult to

[336] OECD (2015), *Addressing the Tax Challenges of the Digital Economy,* Action 1 – 2015 Final Report, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris.

"ring-fence" the digital economy from the rest of the economy for tax purposes because of the increasingly pervasive nature of digitalization.

The digitalization of the economy, as a matter of fact, exacerbates the risks of BEPS due to the mobility of new intangibles, remote sales, artificial fragmentation of physical operation in the country in which profits are obtained, and to the shifting of the co-created value through transfer pricing.

The broader tax challenges were identified as follow: *i)* a new nexus rule in the form of a «significant economic presence» test; *ii)* the use of data and the respective attribution of value and; *iii)* the characterization of payments made for digital products or related services.

All these challenges chiefly relate to the question of how taxing rights on income generated from cross-border digital activities should be allocated among countries. In other words, the focus of the current OECD's analysis is on the feasibility of different technical solutions that are consistent with the need to grant the allocation of profits consistent with the value creation.

Even if BEPS Project try to float three types of solutions, the Action 1 was not able to deliver a solution or even a set of concrete recommendations for the reformulation of the tax regime applicable to the digital economy, postponing a final update of the Report in 2020.

Such inability to deliver a standard solution was proved by the variety of responses by stakeholders, most of which chose to move unilaterally to secure their tax bases.

After the release of the BEPS Package, indeed, the G20 Finance Ministers mandated the Task Force on the Digital Economy (TFDE), through the Inclusive Framework on BEPS, to deliver an interim report on the implication of digitalization for taxation by April 2018. Such 2018 Interim Report, nevertheless, leaves us in a very similar manner,

although it includes much progress in the understanding of the challenges presented by the digitalization of the economy[337].

In this report, the OECD identifies three common characteristics of digitalized business models: digitalized business models can supply digital services where they are not physically established, accessing great number of customers around the world (so-called "scale without mass"); they intensively rely on specific software such as social platforms which allow user interaction (reliance on intangibles include also intellectual property assets); finally, there is a strong relationship between the firm and users, so much that most of the value of the enterprise is provided by for the user itself (user's value creation)[338].

With regard to the potential new approaches to taxing digital business models, the OECD considers the implementation and impact of the BEPS package and reviews the domestic interim measures. The review covers alternative PE thresholds as adapted in Israel and India, additional withholding taxes, turnover taxes as Italy's levy on digital transactions, and specific regimes targeted at large firms, namely the diverted profits tax in the United Kingdom or the recent base erosion and anti-abuse tax (BEAT) of the 2017 US tax reform.

The OECD does not recommend any of these or any other targeted measures as interim solutions. On the contrary, it seems to favor the revision and adaption of the current framework with a particular focus on nexus and profit allocation.

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[337] OECD, *Tax Challenges Arising from Digitalization – Interim Report 2018: Inclusive Framework on BEPS 2018*. Consequently, an interim report, Tax Challenges Arising from Digitalization – Interim Report 2018 (the Interim Report) was agreed March 2018

[338] OECD, *Interim Report cit.*, p. 24.

However, the OECD committed to continue working to deliver a final report in 2020 aimed at providing a consensus-based long-term solution, regarding the profit's allocation and nexus rules.

3.1.1. The evolution of the OECD's approach in 2019.

The OECD 2019 Public Consultation Document and the related Programme of Work to Develop a Consensus Solution to the Tax Challenges Arising from the Digitalization of the Economy: revised nexus and profit allocation rules.

As OECD points out, «conscious of the challenging time frame and the importance of the issues, the Inclusive Framework further intensified its work after the delivery of the Interim Report»[339].

To this end, a policy note and a public consultation document was published by the OECD on the last 23 January 2019[340] and on 13 February 2019[341]. In the policy note, in particular, the Inclusive Framework agreed to examine and develop some proposals on a "without prejudice" basis.

These proposals were grouped into two pillars which could form the basis for consensus. "Pillar one" focuses on the allocation of taxing rights, and seek to undertake a coherent and concurrent review of the

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[339] OECD (2019), *Programme of Work to Develop a Consensus Solution to the Tax Challenges Arising from the Digitalization of the Economy*, OECD/G20 Inclusive Framework on BEPS, OECD, Paris, 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.

[340] OECD, *Addressing the Tax Challenges of the Digitalisation of the Economy: Policy Note,* OECD/G20 Base Erosion and Profit Shifting Project (OECD Publishing 23 Jan. 2019).

[341] OECD, *Addressing the Tax Challenges of the Digitalisation of the Economy – Public Consultation Document,* OECD/G20 Base Erosion and Profit Shifting Project (OECD Publishing 13 Feb. 2019).

profit allocation and nexus rules; "pillar two", on the other side, addresses the remaining BEPS issues and seeks to develop rules that would provide jurisdictions with a right to "tax back" where other jurisdictions have not exercised their primary taxing rights or the payment is otherwise subject to low levels of effective taxation.

Our analysis will focus solely on the proposals contained in the "pillar one".

With the subsequent public consultation document, indeed, the OECD finally marks a significant step in the technical debate on the taxation of the digitalization of the economy since it acknowledges the role of the jurisdiction where value is created by a business activity through "remote active presence" (*i.e.* the active presence of an enterprise in a jurisdiction without having physical presence within its territory) in the allocation of taxing rights which is not recognized in the current framework for allocating profits[342]. All of the proposals aim at recognizing, in other terms, the value created in a jurisdiction where users are located, even if the enterprise has no physical presence[343].

Under pillar one, in fact, the OECD has articulated three proposals: *i)* "user participation"; *ii)* "marketing intangibles"; and *iii)* "significant economic presence".

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[342] P. PISTONE – J. F. PINTO NOGUEIRA – B. ANDRADE, *The 2019 OECD Proposals for addressing the tax challenges of the digitalization of the economy: an assessment,* International Tax Studies, 2019, p. 3, where the authors in the footnote n. 3 highlight that «this is a major achievement compared to the doubts that were raised on the need to allocate taxing rights on cross-border income that existed at the time the IBFD Task force on the Digital Economy starts its studies on taxation of the digital economy and remotely operated business models».

[343] S. E. Shay, *Comment on Selected Aspects of Proposals in Public Consultation Document on Addressing the Challenges of the Digitalization of the Economy*, March 6 2019, p. 2, where he argues that «I applaud the willingness of the Inclusive Framework to consider fundamental changes to the structure of the international tax system that go beyond what was contemplated in the BASE Erosion and Profit Shifting (BEPS) Project».

The "user participation" proposal is based on the premises that the engagement and active participation of users is a critical component of value creation for certain highly digitalized businesses, since it contributes to the creation of the brand, the generation of valuable data, and the developments of a critical mass of users which helps to establish market power.

This value generated by user participation is not captured in user jurisdictions under the existing international tax framework. Consequently, the proposal seeks to revise profit allocation rules and nexus rules to accommodate the value creating activities of an active and engaged user base, so that the user jurisdictions would have the right to tax the additional profits allocable to them.

One of the main weakness, highlights by most, is that the "user participation" proposal may raise issues of "ring-fencing" the digital economy, since it is conceived expressly to apply only to a limited set of representative business models of the digitalization of the economy, thereby reducing its impact primarily to social media platforms, search engines and online marketplaces[344].

Moreover, such proposal would modify current profit allocation rules to require that an amount of profit should be allocated to the jurisdictions in which those active users are located. The public consultation document, in this regard, proposes a "non-routine" or "residual" profit split approach, according to which profits attributed to the routine activities of an MNE group continue to be determined in accordance with the traditional methods (namely, at an arm's length return), while the profits that remain after routine activities will be allocated between the jurisdictions in which the business has users.

[344] In this sense, see among others Accountancy Europe, *OECD Public Consultation – Addressing Tax Challenges of the Digitalization of the Economy*.

However, it has been noticed that the dividing line between routine and non-routine spheres does not appear clear both in qualitative and quantitative terms[345]. The latter issue, in particular, concerns the uncertainty of setting the proportion of returns from non-routine activities that would be attributed to the market country.

Even if, as above mentioned, the "user participation" proposal may raise issues of "ring-fencing" tax rules in contrast with the same OECD view, and leaves doubts upon the separation between "routine" and "residual" profits, its great merit appears to be the acknowledgement of the contribution of users to value creation, as it would allow the capturing of location-specific rents that otherwise escape under the current nexus and international allocation rules[346].

Regarding the "market intangibles"[347] alternative, like the user participation proposal it would change the profit allocation and nexus rules, as any business that earns income through marketing intangibles (i.e. brand, trade name, customer data) would be in scope.

The marketing intangible proposal addresses situations where an MNE group can reach into a jurisdiction either remotely or through a limited local presence to develop a user/customer base and other marketing intangibles.

The link between marketing intangibles and the market jurisdiction can rise in two ways: on the one hand, some marketing intangible, such as brand and trade name, are reflected in the favorable

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[345] P. PISTONE – J. F. PINTO NOGUEIRA – B. ANDRADE, *The 2019 OECD Proposals for addressing the tax challenges of the digitalization of the economy: an assessment*, Intl. Tax Stud., 2019, p. 2.

[346] In this sense, P. PISTONE – J. F. PINTO NOGUEIRA – B. ANDRADE, *op.cit.*, 2019, p. 5.

[347] It is worth noting that, as pointed out by the OECD, the term "marketing intangibles" has the same meaning as is set in the OECD Transfer Pricing Guidelines. See OECD 2019, *op. cit.*, p. 11.

attitudes in the minds of customers and so can be considered to have been created in the market jurisdiction; on the other hand, other marketing intangibles (such as customer data, customer relationships and customer lists) are derived from activities targeted at customers and users in the market jurisdiction. The value creation, hence, is characterized by the positive attitude in the mind of customers through customer information and data that allow an active intervention of the firm in the market.

Like the "user participation" proposal, also "marketing intangibles" proposal would modify the current transfer pricing rules and treaty rules distinguishing between routine and non-routine profits. The allocation of non-routine returns from marketing intangibles, in particular, would apply regardless of which entity in the MNE group owns legal title to the marketing intangibles, and regardless of which entities in the group factually perform or control DEMPE functions and assumed related risks[348].

Such proposal, nevertheless, seems to give rise to a "double-track" for the allocation of profits related to intangibles: one for the trade intangibles, for which it shall be applied the criterion of DEMPE functions performed and risks assumed, as provided by the Actions 8-10 of the BEPS Project; and another one for the marketing intangibles

[348] Specifically, OECD highlighted that «the special allocation of some or all non-routine returns from marketing intangibles, and the related expansion of the market country's taxation rights, would apply regardless of which entity in the MNE group owns legal title to the marketing intangibles, regardless of which entities in the group factually perform or control DEMPE functions related to those intangibles […], regardless of how risks related to the marketing intangibles would be allocated under existing transfer pricing rules, and regardless how those rule would ordinarily allocate income related to the marketing intangibles and their associated risks» (OECD 2019, *op. cit.*, p. 15).

for which the adoption of the traditional arm's length criteria will concern solely the routine profits.

The proposal is grounded, as matter of fact, on the idea that unlike trade intangibles, marketing intangibles are able to avoid easier exercising of the DEMPE functions and related risk management functions in the market jurisdiction which, as analyzed in the previous chapters, under today's rules govern the allocation of income from marketing intangibles.

Against this backdrop, according to the main commentators, the proposal suffers from some weaknesses.

The main Achille's heel, indeed, is characterized by the technical difficult to disentangle value creation at the level of marketing and trade intangibles[349]. There are no clear rules to distinguish what is attributable to one or the other. Moreover, marketing intangibles are an open-ended category so that new marketing intangible can develop in the future, and any country could recognize and require valuation of the new intangible, leading to disputes. In addition, as well as for the user participation proposal, the differentiation between non-routine and routine profits may create an unnecessary complication, since the dividing line between these two kinds of profits is very difficult to draw[350].

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[349] See, S. E. SHAY, *op. cit.*, 2019, p. 4 where it is pointed out that «there is not a clear line between a marketing intangible and a trade intangible for purposes of these issues. Take the Apple iPhone as example. Is the investment in the design features of the phone a marketing intangible or a trade intangible directed at product performance? I would suggest that Tim Cook and Jony Ive might argue cogently that much of the design was to enhance customer delight in owning the product. Many designs are patented, but many are copyrighted and trademarked as well. The trade versus marketing intangible distinction is not meaningful nor sustainable across a broad range of fact patterns».

[350] P. PISTONE – J. F. PINTO NOGUEIRA – B. ANDRADE, *op. cit,* p. 23.

Coming to the third and last proposal, the "significant economic presence" proposal shares content with the long-term solution proposed by the European Union in March 2018[351], as we will discuss in the following paragraphs[352].

Such proposal allows the market country to exercise its jurisdiction on business profits derived by remotely operated businesses that lack a physical presence in its territory, whenever such businesses actively participate – on the basis of factors that evidence a purposeful and sustained interaction - in the economic life of that country[353].

The "Significant Economic Proposal", specifically, shapes the nexus in line with the PE concept and stretches it out by deeming the existence of a virtual PE when a sustained (and not a mere occasional) remotely interaction with a jurisdiction is established in a jurisdiction. In other terms, despite the "user participation" and "marketing intangible" proposals assume that the principle of "value creation" should remain the appropriate guide for determining where profit should be allocated within the context of direct taxation, the "Significant Economic" proposal, instead, is anchored to the traditional idea of the permanent establishment's concept.The proposal, moreover,

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[351] Cf. European Commission, Proposal for a Council Directive laying down rules relating to the corporate taxation of a significant digital presence, COM (2018) 147 final (21 March 2018).

[352] This alternative was already proposed in the past by different authors. We refer to P. HONGLER & P. PISTONE, *op.cit.*; A. BÁEZ MORENO & Y. BRAUNER, *Withholding Taxes in the Service of BEPS Action 1: Address the Tax Challenges of the Digital Economy*, IBFD White Paper, 2015.

[353] OECD, *Public Consultation Document cit.*, p. 16 where it is specified that «one or more of the following factors […]: 1) the existence of a user base and the associated data input; 2) the volume of digital content derived from the jurisdiction; 3) billing and collection in local currency or with a local form of payment; 4) the maintenance of a website in a local language; 5) responsibility for the final delivery of goods to customers or the provision by the enterprise of other support services such as after-sales service or repairs and maintenance; or 6) sustained marketing and sales promotion activities, either online or otherwise, to attract customers».

contemplates that the allocation of profits to a significant economic presence could be based on a functional apportionment method which received criticism among the international community. For instance, some commentators have highlighted that the significant economic presence initiative does not need to operate outside the arm's length principle[354].

From the point of view of the IBFD Task Force on the Digital Economy the proposal at issue was identified as «inclusive, neutral, fair, effective and simple». "Inclusive", since it solves the international tax nexus and allocation problems by adjusting the categories of international taxation without ring-fencing digitalized business; "neutral" since it does not create tax prejudice across the different business models; "fair" because it recognizes that market jurisdictions have the taxing rights on remotely operated businesses in the absence of a physical presence; effective since it allows market jurisdiction to collect revenue; "simple", since it requires no assessment of complex factors, such as the differentiation between routine and no-routine profits or the boundaries of marketing intangibles[355].

However, even if all the different proposals leave many questions that have not yet been resolved, they all require changes to nexus and profit allocation's rules.

Concerning nexus all the proposals share the approach to re-think the traditional nexus concept in order to allocate taxing rights to the jurisdiction of the customer e/o user in situation where value is created

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[354] Uber, for instance, has noted that this proposal departs from the traditional standards (Uber, *Uber - Addressing the Tax Challenges of the Digitalization of the Economy*, March 2019, p. 8). This does not necessarily need to be like that. The significant economic presence (SEP) can work on an arm's length basis with adjustments into the allocation of profits to the SEP (namely in recognizing the functions that take place at the level of the SEP jurisdiction)..

[355] In the same sense, see P. PISTONE – J. F. PINTO NOGUEIRA – B. ANDRADE, *op. cit.*, p. 29.

by a business activity through (possibly remote) participation in that jurisdiction that is not recognized in the current framework for allocating profits.

The development of a new nexus rule can be achieved through two macro alternatives: on the one hand, amending the definition of "permanent establishment", provided by the Art. 5 [and Art. 7] of the OECD Model convention to deem a PE to exist where an MNE exhibits a remote yet sustained and significant involvement in the economy of a jurisdiction and to accommodate the new profit allocation rules. This would also require a consideration of any impact of such an amendment on other provisions that use the PE concept and other issues. Alternatively, the development of a new nexus could take place introducing a new standalone rule establishing a separate nexus, either through a new taxable presence or a concept of source.

With regard to the profit allocation, on the contrary, what is clear from the analysis of these proposals is that they would entail solutions that go, partially or completely, beyond the arm's length principle.

In this regard, with its subsequent Programme Work[356], the OECD tried to suggest some concrete possible methods to determine the profit subject to the new taxing rights.

The first two proposed profit allocation rules to apply to a business' digital value chain are a modified residual profit split method (MRPS) and a fractional apportionment method which is a modified formulary apportionment used among the U.S. States (see, Chap. III).

[356] OECD (2019), *Programme of Work to Develop a Consensus Solution to the Tax Challenges Arising from the Digitalisation of the Economy*, OECD/G20 Inclusive Framework on BEPS, OECD, Paris, www.oecd.org/tax/beps/programme-of-work-to-develop-aconsensus-solution-to-the-tax-challenges-arising-from-the-digitalisation-of-the-economy.htm.

The MRPS method would allocate to market jurisdictions a portion of an MNE group's "non-routine" profits that reflects the value created in markets that are not recognized under the existing profit allocation rules. The MRPS will require four steps, being: 1) determine total profit to be split; 2) remove "routine" profits, using either current transfer pricing rules or simplified conventions; 3) determine the portion of the "non-routine" profit that is within the scope of the new taxing rights, using either current transfer pricing rules or simplified conventions; 4) allocate such an in-scope "non-routine" profit to the relevant market jurisdictions, using a consensus-based allocation key.

The aim of the reform of the residual profit split is to attribute the residual – or excess – profit of certain digital activities by using, as an indicator, the value created by the user participation in the market jurisdiction. In this way, the excess profit will be taxed in the state in which it was generated. Indeed, for the OECD «the MRPS method would allocate to market jurisdictions a portion of an MNE group's non-routine profit that reflects the value created in markets that is not recognized under the existing profit allocation rules».

The other possible method, according to the OECD, is the "fractional apportionment" which involves the determination of the amount of profits subject to the new taxing rights without making any distinction between routine and non-routine profit. This method will require three steps: *i)* determine the pool of profits to be divided (by a group or business line); *ii)* select an allocation key; *iii)* apply this formula to allocate a fraction of profit to the market jurisdiction.

The primary issues for which a consensus will need to evolve to provide a workable solution is the modalities of computation of the profits that will be subject to the fractional apportionment mechanism. Moreover, it will be necessary also choosing a financial accounting regime and measures upon which the profit determination will be based,

as well as the factors that could be considered in constructing the formula that would be used to apportion the relevant profit. Lastly, it will be crucial also designing rules to coordinate the effect of the fractional apportionment method and the current transfer pricing system, without giving rise to double taxation or double non-taxation.

A valid example is the "fractional apportionment" as adopted recently by the government of India[357]. According to such approach, the taxable profits of a trans-national corporations (TSN) in a jurisdiction will apportion using a formula[358]. In particular, the taxable profits are determinined by multiplying the TNC's Indian revenue with its global operating margin. The final step will apportion these profits between India and the other countries that play a role in generating TNC's profits through a formula based on four "allocation keys", such as sales, users, assets and employees. As can be observed, the formula allows to consider both the contribution of supply side activities (all the way from research and development) and those from the demand side (as marketing and sales). Such Indian approach is regarded by someone the route for a strong change in the consideration of apportionment rules as valid policy alternative for reform of international tax rules under the Inclusive Framework[359].

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[357] Government of India, Ministry of Finance, Department of Revenue Central Board of Direct Taxes, *Report on Profit Attribution to Permanent Establishment*, April 2019. It is worth noting that the Indian committee's proposal represents an alternative to the OECD's AoA approach and it is based on the United Model Tax Convention, which indeed does not follow the OECD's AoA approach.

[358] It is clear that this is different both to the traditional approach of transfer pricing, which first divides the TNC into a group of separate entities, and then determines the profits made by each as they trade with each other and with third parties, and it is also different from the "unitary taxation with formulary apportionment" (see Chap. IV), since the fractional approach starts with the profits derived from a particular jurisdiction (such as India) rather than the TNC's global profits.

[359] See, L. NARAYANAN, *Taxing Digital Transactional Corporations: Indian Policy Initiatives*, International Centre for Tax and Development, available at

A third proposal, instead, implies a "distribution-based" approach that focuses on dual considerations of allocating profits to the market jurisdictions and the proper pricing of marketing and distribution activities. In contrast to the MRPS method, such method will address the profits related to routine activities associated with marketing and distribution. One possibility would be to specify a baseline profit in the market jurisdiction for marketing, distribution and user-related activities. The baseline profit may be adjusted based on, for instance, the MNE group's overall profitability. This mechanism can also allow, in order to attract a consensus for it, a portion of an MNE group's non-routine from, by example, to be reallocated to market jurisdictions.

However, for developing a consensus on this method, there are five issues that must be addressed. First of all, it is necessary the development of rules that provide a universal base line of profit attributable to marketing, distribution, and user-related activities through the selection of a minimum or maximum return for baseline. Second, the assessment of factors for potential adjustments of the baseline profit, such as, as mentioned above, group's profitability as well as potentially its losses, that effectively allocate a proportion of routine and non-routine profits to market jurisdictions. Third, the determination of how the adjusted profits may be allocated to market jurisdictions wherein the relevant group has no established a tax presence. Finally, it is needed to integrate the distribution approach into the current transfer pricing system without giving rise to double taxation or double non-taxation.

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https://www.ictd.ac/blog/taxing-digital-transnational-corporations-indian-policy-initiatives/.

3.1.2. The 2019 Public Consultation Document, Secretariat Proposal for a "Unified Approach" under Pillar One.

On October 9 2019, the OECD released its Secretariat Proposal for a "Unified Approach" under Pillar One Public Consultation Document.

The Unified Approach is intended to include four elements: *i)* scope, *ii)* economic nexus, *iii)* formulary apportionment profit allocation, and *iv)* binding dispute resolution.

The rationale behind such an approach is the acknowledge that in the current environment the customer engagement and interaction, data collection and exploitation, and marketing and branding are significant for digital business and can more easily be carried out from a remote location. This includes highly digitalized businesses which interact remotely with users, who may or may not be their primary customers, as well as other businesses that market their products to consumers and may use digital technology to develop a consumer base.

From such perspective, the "unified approach" focuses on large consumer-facing businesses, broadly defined, e.g. business that generates revenue from supplying consumer products or providing digital services that have a consumer-facing element.

As the OECD pointed out, it is clear that further discussion will be necessary to articulate and clarify, for instance, how a consumer-facing business might be defined.

Concerning the nexus rules, the "Unified approach" supports the idea of introducing a new standalone rule, on top of the permanent establishment rule, to limit any spillover effects on other existing rules.

In this regard, the new nexus rule would address this issue by being applicable in all cases where a business has a sustained and

significant involvement in the economy of a market jurisdiction, such as through consumer interaction and engagement, irrespective of its level of physical presence in that jurisdiction. In other terms, the taxable nexus is given by the existence in a jurisdiction of a sustained and significant consumer interaction and engagement. The simplest way of operating the new rule would be to define a revenue threshold in the market as the primary indicator of sustained and significant involvement in that jurisdiction.

The revenue threshold, moreover, would not only create a taxable nexus for business models involving remote selling to consumers, but it captures all forms of remote involvement in the economy of a market jurisdiction.

Once it is determined the country in which there is a sustained and significant consumer involvement, the other question that the "Unified Approach" addresses regards the amount of profits allocable in that jurisdiction. On this purpose, the OECD in its last public consultation document argues that as the new taxing rights would create a nexus for an MNE group even in the absence of a physical presence, it would be impossible to use the existing rules to allocate profit to this new nexus in cases where no functions are performed, no assets are used.

As recognized in the Policy Note of 2019, the "Unified Approach" reaffirms the need to go beyond the two cornerstones of the current international tax system, such as the arm's length principle and the limitations on taxing rights determined by reference to a physical presence (see Chap. I). Better said, the approach chosen by the OECD appears a hybrid.

The OECD believes that the current rules work properly for the greatest part of the routine transactions. Therefore, on the one hand, the new rules beyond the ALP would allow for the taxation at an

appropriate level of business activities in the market jurisdictions, on the other hand, and at the same time the current transfer pricing rules will operate in the market jurisdiction where they work relatively well (i.e. for routine transactions).

The "Unified Approach", indeed, provides by for new profit allocation rules, should be based upon a formulaic approach without the need for precise arm's length benchmarking. This method, in particular, is based on the so-called "three-tier-profit" allocation mechanism, such as three possible types of taxable profit that may, according to the circumstances in any particular case, be allocated to a market jurisdiction.

"Amount A" consists of a share of deemed residual profit of an MNE group allocated to market jurisdictions using a formulaic approach without the need of precise arm's length benchmarking. The deemed residual profit would represent the profit that remains after designating a deemed "routine" profit on the activities of the group or business line.

Such method would replicate features of both residual profit split method (RPS), by introducing a threshold based on profitability to exclude the remuneration of "routine" activities, and the fractional apportionment method by using a formula-based calculation. As OECD recognizes, this combination presents two advantages. First, it permits the isolation of the deemed non-routine profits earned by a business, and, second, the use of simplified conventions facilitates the administration of the new profit allocation approach alongside the current transfer pricing rules and reduce disputes, as required in the "Pillar One".

Concerning the simplified convention, once "non-routine" profits are determined, it is necessary to split them between the portion that is attributable to the market jurisdiction and the portion that is attributable

to other factors, then, not targeted by the new taxing right (for instance, trade intangibles, capital and risk etc.).

The proposed approach assumes that a share of the deemed non-routine profit attributable to the market jurisdiction would be determined in accordance with a formula, such as "non-routine" profit multiplies by an internationally–agreed fixed percentage which could be differentiated according to the different type of industries or business lines.

The final step provides for the allocation of the portions of the deemed "non-routine" profit – as determined above – among the eligible market jurisdictions. This allocation, mainly, should be based destination countries on the basis of sales.

The second and third types of profit ("Amount B" and "Amount C") would apply only by reference to the presence of a traditional nexus in the market jurisdiction (a subsidiary or permanent establishment), and not in the case of a taxable presence resulting from the application of the new non-physical nexus rule (which would give rise to "Amount A").

In particular, the "Amount B" represents a fixed remuneration for baseline marketing and distribution functions that take place in the market jurisdiction. Lastly, "Amount C" represents an additional amount – which goes beyond the standard level of functionality and therefore they provide a profit in excess of the fixed return contemplated under Amount B – for the case in which taxpayers and tax administrations consider that the marketing and distribution activities, taking place in the market jurisdiction or in the case in which the MNE perform other business activities in the jurisdiction unrelated to marketing and distribution activities. In both cases, an additional profit ("Amount C") is due to the application of the ALP. Consequently,

it would require robust measures to resolve disputed and prevent double taxation.

The OECD proposes, moreover, that the starting point for the determination of the "non-routine" residual will be the identification of the MNE group's profits based upon the consolidated financial statements under the accounting standards of the headquarters jurisdiction, according to the Generally Accepted Accounting Principles (GAAP) or the International Financial Reporting Standards (IFRS).

3.2. The European Commission's Proposal on Significant Digital Presence.

Before analyzing the European approach, it is worth noting that, even prior to the publication of the OECD's reports on addressing tax challenges concerning the digitalization of the economy, it was the European Commission's view that the existing tax rules were not able to capture business models that generate profit from digital services in a jurisdiction without having a physical presence creating a misalignment between the place where value is created and where taxes are paid by multinational enterprises[360].

[360] In this respect, since its report of May 2014, the EU High Level Expert Group on Taxation of the Digital Economy advocated for improvement in the tax environment for young, innovative (especially digital) companies, while simultaneously speaking out against a new concept of "digital taxable presence", and the call for new taxation approaches to the digital economy has gained enormous political momentum in the last year (European Commission, *Report of the EU High Level Expert Group on Taxation of the Digital Economy*, pp. 6 and 41). Consequently, in September 2017, the Commission discusses both long-term and short-term solutions. For the former it seems that the Commission favors a revision of the PE concept that could be implemented through the common consolidated corporate tax base (CCTB). Concerning the latter, the Commission listed the following three options: *i)* an equalization levy on turnover of digitalized company; *ii)* a withholding tax on digitalized companies; *iii)* a levy on revenues generated from the provision of digital

Few days after the publication of the OECD *Interim Report*, the European Commission released, on 21 March 2018, two proposals for directives in order to address the issue of a fair taxation for the digital business models in face of the lack of an international consensus and the increase of unilateral measures on behalf of certain Member States. The EU Commission's proposal includes, on the one hand, a corporate taxation of a significant digital presence (hereafter "SDP proposal") [361], and, on the other hand, a common system for a digital services tax ("DST proposal")[362].

The former represents a more stable comprehensive solution that provides criteria establishing a "digital footprint" of a business in a jurisdiction. The latter proposal, on the contrary, offers a short-term solution in the form of 3% turnover tax on certain digital services aiming to harmonize the taxation of digital services in the single market[363].

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services or advertising activity (European Commission, *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, 21 Sept. 2017, pp. 1-11).

However, for a deeper analysis of the European excursus, see G. KOFLER – J. SINNIG, *Equalization Taxes and the EU's 'Digital Services Tax'*, Intertax, 2019, p. 180.

[361] European Commission Proposal for a Council Directive laying down rules relating to the corporate taxation of a significant digital presence, COM (2018) 147 final, EU Law IBFD.

[362] European Commission 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, EU Law IBFD.

[363] For a deeper view, see R. MASON – L. PARADA, *The Illegality of Digital Services Taxes Under EU Law: Size Matters*, Virginia Law and Economics Research Paper No. 2018-16 (6nov. 2018); G. KOFLER – G. MAYR – G. SCHLAGER, *Taxation of the Digital Economy: A Pragmatic Approach to Short-Term Measures*, Eur- Tax'n., 2018; G. KOFLER – J. SINNIG, *op. cit.*; C. DIMITROPOULOU, *The Proposal EU Digital Services Tax: An Anti-Protectionist Appraisal Under EU Primary Law,* Intertax, 2019, p. 268; ID., *The Digital Services Tax and Fundamental Freedoms: Appraisal Under the Doctrine of Measures Having Equivalent Effect to Quantitative Restrictions*, Intertax, 2019, p. 201. It is worth noting that DST proposal has received the most direct criticism due to its potential to create additional (double) taxation and legal uncertainty for taxpayers, to clash with international trade regulation and to be

However, for the purposes of our analysis we only focus on the long-term solution, such as the SDP's proposal with the intention of highlighting its significance.

In attempting to tackle the mismatch between the place where profits are taxed and the place where value is created, the SDP proposal intends to establish a new threshold for the allocation of taxing rights that departs from the traditional PE threshold.

Such long-term solution, in other terms, as the OECD "Significant Economic Presence", involves a change to the PE status, which requires amending Member States' double taxation treaties.

According to the Art. 4 of the SDP Directive, based on new kind of PE threshold, taxing rights may be allocated to the jurisdiction where users are located subject to the fulfilment of certain quantitative conditions necessary to substantiate a significant digital footprint, such as revenues, number of users and number of contracts [364].

Even if such proposal has the favor of the most authoritative scholars[365], nevertheless, many of them doubted the opportunity of using such quantitative benchmarks in defining SDP nexus.

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ring-fencing and distortive. Moreover, DST would severely limit the flexibility of EU Member States in terms od international tax competition. In this sense, see J. BECKER – J. ENGLISH, *EU Digital Services Tax: A Populist and Flawed Proposal*, Kluwer International Tax Blog, 2018, available at http://kluwertaxblog.com/2018/03/16/eu-digital-services-tax-populist-flawed-proposal; Bloomberg, *Europe's Digital Tax is a Bad Idea*, 2018, available at https://www.bloomberg.com/view/articles/2018-04-11/europe-s-digital-tax-is-a-bad-idea.

[364] Mainly, according to article 4 of the Proposal SDP «the proposed rules for establishing a taxable nexus of a digital business in a Member State are based on revenues from supplying services, the number of users of digital services or the number of contracts for a digital service […]. For the three user-based criteria mentioned above (revenues, number of users and number of contracts) different applicable thresholds are set. There is a significant digital presence in a Member State if one or more of the following criteria are met: if the revenues from providing digital services to users in a jurisdiction exceed EUR 7 000 000 in a tax period, if the number of users of a digital service in a Member State exceeds 100 000 in a tax period or if the number of business contracts for digital services exceeds 3 000».

[365] Among the many see P. HONGLER & P. PISTONE, *op. cit.*

Indeed, although the quantitative thresholds aim at providing clarity and certainty and creating a level playing field for all market participants, may be either circumvented or considered arbitrary[366].

First, fixed numbers in relation to the existence of a significant user base in a jurisdiction seem to not consider market differences between the various EU Member States, in terms of geography, size of economy and number of inhabitants[367]. According to this point of view, in fact, more flexible numbers or relative numbers (i.e. percentage), rather than fixed amounts, would be preferable, depending on the overall number of established individuals and companies[368].

Second, as noticed by some scholars, it is questionable whether this benchmark based on the number of users always relate to the value creation by users. Considering that not all users contribute equally to a digital enterprise and that different business models allow for a different degree of engagement and involvement of users, the number of users could be an arbitrary threshold reflecting neither significant economic activity nor value created by users[369]. Furthermore, concerning the location of the user, if the latter moves from one jurisdiction to another, either for professional or personal reasons, there is a risk that the user could be counted more than once for the purpose of examining whether one of the thresholds has been met.

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[366] Cf. D. W. BLUM, *op. cit.*, p. 319.

[367] See Y. BRAUNER – P. PISTONE, *Adapting Current International Taxation to New Business Models: Two Proposals for the European Union,* Bull. Intl. Taxn., 2017, p. 4.

[368] D. W. BLUM, *op. cit.*, p. 319.

[369] See R. PETRUZZI – V. KOUKOULIOLI, *The European Commission's Proposal on Corporate taxation and Significant Digital Presence: A Preliminary Assessment*, European Taxation, 2018, p. 395, where they clarify that «the creation of an account on a multi-faceted digital interface (for example intermediation platform) does not equal a contribution of value to a digitalized business, since it requires the active involvement and interaction of the user with other users».

The same revenue threshold might also be problematic in terms of whether it is an appropriate proxy for value creation and SDP, since the threshold seems not to consider market differences.

The decision to focus the proposal on users and their data as important value drivers, additionally, do not consider that the value contributors may vary depending on the business model under consideration and the activities of each particular users[370].

In such perspective, absolutely interesting is the idea that a better solution might be simply refer to the concept of value creation as a tool in assessing taxable nexus to a country [371].

Once a digital PE is deemed to exist in a member State based on an SDP, the amount of profits that should be attributed to that digital PE must be determined.

The European Commission has opted for the adoption of the AOA which means that the significant digital presence should be attributed to the profits it would have earned if it were a separate entity engaged in the same or similar highly digitalized businesses[372] (see Chap. I).

As noted by the EU legislator, however, the AOA needs to be adapted in a consistent manner, since the general criterion of significant

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[370] In this respect, see R. PETRUZZI – V. KOUKOULIOLI, *op. cit.*, p. 398.

[371] See 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?*, Bull. Intl. Taxn., 2018, p. 18, where the Authors pointed out that «this definition would be very broad and could potentially align taxation with the value creation. However, its broad scope could generate uncertainty for taxpayers and increase disputes not only between taxpayers and tax administrations, but also between different tax administrations.».

[372] According to the article 5, par. 1, «the profits attributable to or in respect of the significant digital presence shall be those that the digital presence would have earned if it had been a separate and independent enterprise performing the same or similar activities under the same or similar conditions, in particular in its dealings with other parts of the enterprise, taking into account the functions performed, assets used and risks assumed, through a digital interface.».

people functions emphasized in the AOA Report is evidently not enough to catch the value created by a significant digital presence.

Since, in respect of a digital PE, the non-resident enterprise does not have a physical presence in the source jurisdiction, including through the presence of employees, who are traditionally understood as those performing the significant functions, the criterion of significant people functions, emphasized in the AOA Report[373], is not enough to catch the value created and, then, the relevant functions of digitalized business models by a digital significant presence.

This is specifically due to the fact that most of the time, the highly digitalized business models operate through a digital PE completely or almost dematerialized without maintaining any physical presence in the PE jurisdiction, typically through a digital interface or platform thanks to which the data are collected from the users[374].

As the digital PE concept implies the contribution of unique and valuable intangibles (such as user activities and data), also the DEMPE functions should be a typical aspect of a significant digital presence. The activities undertaken by the enterprise through a digital interface related to data and users, hence, should be considered economically significant functions for the attribution of economic ownership assets and risks to the significant digital presence[375].

In light of such a consideration, the EU legislator believes that the profit attribution to the SDP should consider the economically activities which are relevant for the development, enhancement and maintenance, protection and exploitation (DEMPE functions) of the enterprise's

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[373] OECD, *Report on the attribution of profits to permanent establishments* para. 16 (OECD 2010).

[374] See R. PETRUZZI – S. BURIAK, *op. cit.,* p. 3. The OECD also recognizes this problem, see 2015 OECD BEPS Action 1 *cit.*

[375] Article 5, paragraph 3.

asset, even if these functions are not linked to people function in the significant digital presence. Clearly, this approach ends up creating confusion, since, on the one hand, according to the traditional OECD standards, functions are performed where people are taking care of them, and, on the other hand, because such kind of analysis only applies to intangibles and not to other kind of economically significant activity (see, Chap. II)[376].

Furthermore, the methodology chosen by the EU legislator for the attribution of profits to the digital PE is the profit split method «unless the taxpayer proves that an alternative method based on internationally accepted principles is more appropriate having regard to the results if the functional analysis». In other terms, the European Commission adopted a solution based on which the profit split method would often be the most appropriate method to attribute profits to the significant digital presence.

It is worth noting, that the wording and meaning of such paragraph are strongly controversial. First, the idea of applying such method by default is completely new and is totally unknown under both the OECD TPG and the AOA. The profit split method, as it will be analyzed in the following, should be applied only in a specific circumstance. The reason of such cautiousness provided by the 2017 OECD TPG for the application of the method at the issue is that the

[376] A. S. SAMARI, *op. cit.*, p. 42, according to him, moreover, «it is useful remember that, according to the traditional OECD standards, functions are considered to be performed where people are taking care of them. Therefore, in the author's view, the EU legislator's approach towards the use deemed DEMPE functions seems to be in contradiction to the OECD Guideline's profit allocation […] how should profits be allocated to a significant digital presence being guided by DEMPE functions performed somewhere else?»; R. PETRUZZI – V. KOUKOULIOLI, *op. cit.*, p. 397 where they pointed out that «therefore, it is unclear how users and their significant role in value creation might relate to the DEMPE analysis. Moreover, the DEMPE concept is currently not included in the AOA».

selection of a method might considerably change the allocation of profits between different countries[377].

Consequently, a default application of such method to digital PEs might result inconsistent with the need of aligning value creation and profit attribution.

According to the paragraph 6 of article 5 «the splitting factors may include expenses incurred for research, development and marketing as well as the number of users and data collected per Member State». The Commission, however, admitted that these rules are only general principles and specific guidelines would have to be developed[378].

Leaving the analysis of users and data as possible allocation keys to the following section, it is worth noting here that the expenses incurred for research, development and marketing seems to not properly and reliably reflect the particular way in which value is created in the context of the most typical highly digitalized business models. In certain cases, as someone has pointed out, a digital PE could create an enormous amount of profits either without incurring aby marketing expenses or incurring just few marketing expenses thanks to global strategies[379] and synergies already developed. To sum up, the SDP proposal certainly has the great merit of being a remarkable step to make the international tax rules suited to the 21st century, even whether it leaves at the same time some relevant weakness.

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[377] OECD, *Transfer Pricing Guidelines cit.*

[378] European Commission SDP Proposal, p. 9.

[379] A. S. SAMARI, *op. cit.*, p. 32 where he makes this example: «let us consider, for instance, the domino effect stemming from the international dimension of a social network thanks to which new users are encouraged to subscribe just because they have several friends livings abroad, without being induced by any marketing strategy».

3.3. The Taxation of Technical Services under the New Article 12A of the UN Model.

Beside the European and OECD proposals, in order to complete the big picture of the different proposals at stake by policy makers, it is worth mentioning also the UN Model alternatives, since it bases its proposal on the different and general idea that the PE principle is not the only thresholds for taxing business profits in the current international tax system.

History shows, in fact, that there is another form of taxing business profit in the source country, namely through withholding taxes on royalties which do not require a presence within a country in order to tax the profits of an enterprise, but still carry on business in the source country where the object of the transaction, the equipment and, more significantly the user or consumer are located[380].

During the summer 2017, indeed, the Committee of Experts on International Cooperation Tax Matters[381] (hereafter "UN Committee")

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[380] UN Committee of Experts on International Cooperation in Tax Matters*, The Character and Purpose of Article 12 with Reference to "Industrial, commercial, Scientific Equipment" and Software-Payment Issues,* Discussion paper prepared by S. Wilkie for the 11th Session, Geneva, 11-23 Oct., 2015, E/C 18/2015/CRP 6 (13 Oct. 2015.

[381] It is worth reminding that in 1980, the UN Committee – which is a body of the Economic and Social Council (ECOSOC) of the United Nations – published the first version of the Un Model which was developed on the OECD Model (Un Model Tax Convention on Income and on Capital), 1st Jan. 1980, Model IBFD. The UN and OECD share the common goal of improving the flow of international trade, investment and technology. Nevertheless, the UN Model also is intended to provide an alternative to the OECD Model to better reflect the interests in developing countries (See, B. J. Arnold, *Tax Treaty News: An Overview of the UN Model (2011)*, Bull. Intl. Taxn., 2012, p. 523. For instance, it aims to promote greater inflow of foreign investment into developing countries to support their economic development process.

Nevertheless, it is important to point out that, in contrast to the OECD Model – as showed in the previous chapter - the UN Model is not binding on member countries and, thus, it does not constitute a formal recommendation of an international organizations.

published the fourth version of the UN Model. The main difference between the revised and previous version relates to the introduction of amended provisions addressing base erosion and profit shifting (BEPS).

The most significant step in the definition of the alternative threshold for the taxation of business profits is represented by the new relevant article 12A aims to address the taxation of fees for technical services with the specific goal to further strengthen source taxation and prevent the possibilities for base erosion[382].

Indeed, under the previous UN Model (2011), income from services derived by a resident of one contracting State was taxable only in the State of residence, unless the service provider had a PE or a fixed base in the other State (the source State) and the income was effectively connected with that PE or fixed base, or, in alternative, if the service provider stays in the other State for at least 183 days in any 12-month period[383].

If a developing country negotiates a tax treaty along the lines of the UN Model (2011), its domestic taxation rights were restricted if the non-resident service provider does not maintain a PE or fixed base in the source country or stay for the minimum period. Consequently, it was relatively easy for non-resident service provider to artificially avoid source State taxation of their income derived from service provided to residents of the latter State; for instance, simply dividing a

[382] Paras. 2 and 7 UN Model: Commentary on Article 12A (2017). The commentary can be found in full version in UN Committee, Fourteenth Session, *Issues related to the updating of the United Nation Model Double Taxation Convention between Developed and Developing Countries*, 2017. On such recent development, see Y. Zhu, *Proposed changes to the UN Model Tax Convention Dealing with the Cyber-based Services;* A. M. Jimenez, *BEPS, the Digital(ized) Economy and the Taxation of Services and Rpyalties*, Intertax, 2018, p. 631.

[383] See Art. 5, par. 7 and 14, UN Model (2011).

project between associated service providers or subcontractors to remain below the time limitation[384].

In contrast to this scenario, the UN Tax Committee with the article 12A has allowed the application of withholding taxes to all types of technical services, without the need for substantial physical presence in a State. The new provision grants for a gross source taxation payment for technical services at an agreed rate, as the UN Committee considers this to be a simple, reliable and efficient method to enforce taxes imposed on income derived by non-residents[385].

The source tax, as matter of fact, may apply to any payments for technical services irrespective of whether the services are performed in the source State or whether the non-resident service provider has a PE or fixed base in the latter State to which such payments are attributable.

The new source taxation may exclusively apply to payments for technical services. Similar to the service PE provision of article 5(3) (b)[386], article 12A does not include a general definition of services, but, it is possible to identify two main different approach on this point. According to the "activity-approach", a service is a process, demanding synchronous contact of a service provider and a service beneficiary to fulfil certain demands of a customer. On the other side, the "result-oriented concept", services represent products that are characterized by their similarity to intangible assets[387].

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[384] B. J. ARNOLD, *Article 5: Permanent Establishment,* Global Tax Treaty Commentaries IBFD, 2017, sec. 5.1.3.1.; M. LENNARD, *Updated on the United Nations Tax Committee Developments*, Asia-Pac. Tax. Bull., 2014, p. 20.

[385] Para. 32 UN Model: Commentary on Article 12A (2017), art. 12A (2) UN Model (2017).

[386] For a more deep analysis of this provision, see A. BÁEZ Moreno, *The Taxation of Technical Services under the United Nations Model Double Taxation Convention: A Rushed – Yet Appropriate – Proposal for (Developing) Countries?*, World Tax Journal, 2015.

[387] S. KUDERT, *Steuerberatung,* ESV, 1999, p. 75.

However, the term technical service is specified in the commentary on article 12A and it relates to services that require the application of specialized knowledge, skill or expertise by the service provider. Services of a routine character are not covered by the article[388].

Art. 12A (3), furthermore, defines "fees for technical services" as payments in consideration for any service of a managerial, technical or consultancy nature, unless one of three exceptions applies[389]. The adjective "technical" is used both as the overarching category to identify services that might be subject to article 12A and, on the other hand, together with the attributes "managerial" and "consultancy" to determine which services can be considered technical services.

Regardless these different concepts, however, services seem to be characterized by their intangibility and can, therefore, be provided remotely. This means that in their notion can be included also digital services[390].

Although UN Committee has not specifically developed article 12A to address tax challenges arising from digitalization of the economy, there is a general consensus about the circumstance that the new provision can act as an instrument to tackle some of the issues arising under that framework[391]. Indeed, the adoption of a withholding tax on fees for technical services has been referred – as highlighted

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[388] Para. 62 *UN Model: Commentary on article 12A (2017).*

[389] Art. 12A (3) UN Model (2017). For the definition of "managerial, technical and consultancy" refers to paras. 63-66 UN Model: commentary on Article 12A (2017).

[390] In this sense see, A. P. DOURAdo, *Is There a Light at the End of the Tunnel of the International Tax System?*, Intertax, 2018, p. 609.

[391] T. FALCÃO – B. MICHAEL, *Scope and Interpretation of Article 12A: Assessing the Impact of the New Fees for Technical Services Article,* British Tax Review, 2018, p. 437.

above – by the OECD as a valid unilateral measure against base erosion in the face of digitalization of the economy[392].

Nonetheless, it is worth noting that article 12A has a limited field of application within the digitalization of the economy. Indeed, it does not apply to all types of services provided through an online interface, since most of them are "generic" in nature and are not characterized by the required "technical" and "specialized" nature to be caught by article 12A. Rather, the new provision seem able to play a significant role only for the taxation of online advertisement business, which, as well known, is one of the most prominent businesses in the context of the digital economy[393].

However, it is worth noting that, the effectiveness of such measure depends mostly on the circumstance that the withholding tax might be creditable or not in the other State[394].

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[392] OECD/G20 Base Erosion and Profit Shifting Project, *Interim Report cit.*, para. 355.

[393] Based on the World Economic Forum's list of "the world's 20 largest tech giants", two companies out of the top five are engaged primarily in online advertising. These are Google/Alphabet and Facebook (see, J. DESJARDINS, *These are the world's largest tech giants, World Economic Forum*, 16 July 2018, available at: https://www.weforum.org/agenda/2018/07/visualizing-the-world-s-20-largest-tech-giants [Accessed 27 September 2018]). See also T. FALCÃO – B. MICHAEL, *op. cit.*, p. 437, where the authors clarify that «the payments received from the offshore sale of access to an automated online advertisement platform cannot be considered as "fee for technical services" under Article 12A, since granting access to an online platform does not entail specialized technical services. However, to better accommodate the needs of key account clients (that is, advertisers with big advertisement budgets), the networks typically set up a local subsidiary from which the employees provide tailor-made assistance to optimize the advertisement campaigns and to use the data generated by the network more efficiently».

[394] See, W. SCHÖN, *Ten Questions cit.*, p. 290 who, with specific regard to the tax challenges arise from the digitalization of the economy related to the tax regime of withholding tax, refers to the latter as a «quick fix» which suffer from different weakness. According to the author, indeed, «one of the major arguments against taxation on a gross basis lies in the fact that the profitability of Internet firms is so varied […]. When comparing Google and Yahoo, it becomes evident that they offer similar search functions but shows huge differences in profitability […]: It also leads us back to the question of where and how a withholding tax might be creditable at all […]». For an overview concerning the withholding related to the digitalization of the economy, see M. OLBERT – C. SPENGEL, *op.cit.*, pp. 17-18; A. BÁEZ Moreno, *A note*

A withholding tax on cross-border payments, actually, for digital sales and services levied by the market country is only creditable in the residence country of the taxpayer if the residence country agrees to this, either unilaterally or under a treaty.

Moreover, as properly pointed out, especially at the OECD and European level, tax competition among States - aimed at attracting foreign indirect investment - has led to the abolition, in practice, of withholding tax or to a reduction thereof[395].

Consequently, even if welcomed, it seems that such new provision can hardly be a rule applicable to all jurisdictions on a worldwide scale.

on Some Radical Alternatives to the Existing International corporate Tax and Their Implications for the Digital(ized) Economy, Intertax, 2018, p. 560 et seq; Y. Brauner, *Taxing the Digital Economy cit.*, p. 464.

[395] A.P. DOURADO, *op. cit.*, p. 609 where the author affirms that «even if the position of capital exporting and capital importing countries in EOCD countries is not static, corporations are not interested in withholding taxes, unless they could be credited somewhere. The move towards territoriality in OECD countries eliminates the possibility for crediting in residence countries, assuming that a withholding tax on services would be allowed, in line with Article 12A of the UN MC. It is therefore more than questionable whether taxes would be able to achieve consensus in the OECD and unanimity in the EU»; BÁEZ Moreno, *op. cit.*, p. 564 where he pointed out that «we cannot in any way ignore there are problems unique to a withholding tax solution, namely the fact of being imposed on gross-basis […]. If countries are seriously concerned about the impact of gross-basis taxation they may further balance its impact in other way, such as […] b) ensuring carryforward of foreign tax credits, special exemptions or even refund of taxes schemes».

Section II

Users and Data as possible taxable connecting factors and the implications for the Transfer Pricing Rules

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1. Value Creation and its implications for the Digitalization of the Economy for the Allocation of Taxing Rights.

As repeatedly stressed, the new paradigm of "taxing where value is created" reinforces a political momentum for a reassessment of the criteria upon which the determination of taxable nexus and profits should be based.

Unless we do not want to reform the international tax system towards destination-based tax systems as supported by someone[396], if interpreted consistently with the current international tax system and the outcomes of the BEPS Project, the concept of value creation should be construed in conformity with the still prevailing philosophy underlying the international allocation of business profits which means that value creation should not be different from the originating cause of income or profit (source) (see Chapter III). This implies that it should be interpreted as what the taxpayer does in return for which receives the income, including work in all forms as well as providing the use of assets, such as land, intellectual property or money[397].

The paradigm of taxing business profits where value is created, thus, can be interpreted as a restatement of traditional international tax standards that do not challenge «time-honored» concepts such as nexus based on source, rather a reassessment of the criteria (i.e. supply-side value drivers) upon which the determination of taxable nexus and profits should be based[398].Basing on this premise, some scholars have

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[396] M. DEVEREUX – J. VELLA, *Implications of Digitalization for International Corporate Tax Reform*, Working Paper series, July 2017.

[397] J. SCHWARZ, *op. cit.,* p. 2 where the author in this sense talks about «old wine in new bottle».

[398] J. BECKER – J. ENGLISCH, *op. cit.,* p. 165 for whom «the new paradigm reinforces a political momentum for a reassessment of conventional wisdom as to the criteria upon which the determination of taxable nexus and taxable profits should be based,

developed two different, but equally interesting, approaches for the establishment of new taxable nexus within the digitalization of the economy.

The first is the one developed by Prof. Schön, according to whom, in fact, the notion of source country can be related with the market country only when the taxpayers have established a presence which goes beyond the mere supply of goods and services. Market country cannot be a mere destination country to represent a valid source country.

Since corporate income tax is not a tax on the proceeds from sales and services, but a tax on capital income derived by shareholders (it is tax on return to capital), such a presence could be represented by an investment on capital of the digital enterprises in a specific market in order to access a specific customer base. So, the respective market country in such case can be considered legitimized to have a jurisdiction to tax in that country, not simply because there is a market with customers ordering goods and services, but because the company has invested into that market and expects a return on this investment[399].

For Schön, hence, the investment of the firms, rather than the value created by its users, can perform the role of taxable source in the market jurisdiction. The true value creating factor is the ability of the digital enterprise to run on large complimentary services on the basis of enormous investment in the local market.

The main idea, therefore, is to link taxable nexus to digital tangible and intangible investment aimed at increasing the awareness and attract more users.

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taking into account the relevant factors of production and supply-side value drivers kin the digitalized economy».

[399] W. SCHÖN, *Ten Questions about Why and How cit.*, p. 289.

On the other side, the proposal of Becker and English[400] deems that most of the user's services contribute value on the demand side, since some of their contribution to firms' profits emerge as a mere consumption externality. Nonetheless, the «sustained user relationship» (SURE), rather than the related tangible or intangible investment, can be considered an intangible asset of the firms - since it adds value to the firm - that, consequently, allow for the assignment of profits to user location.

Even whether both proposals are built on the same premise (the understanding of value creation's concept according to a supply-side perspective), they differ in their conclusions: for the former, as a matter of fact, only digital intangible and tangible investments can represent a factor of the value creation process of a firm; diversely, the latter considers that a stable engagement of users may be a supply-side factor of the enterprise.

To the purpose of determining whether and which one of these proposals can play a valid alternative for the allocation of taxing rights in the context of the digitalization of the economy, the following paragraphs will try to determine the different value contributors within the new digitalized business models and, in particular, when the user's contribution can constitute a function of the firm, and the related implications according to the two mentioned approaches.

2. The Different Degrees of Users Involvements and its Different Ways of Contribution within the Digitalization of the Economy.

[400] J. BECKER – J. ENGLISH, *op. cit.*

One of the main consequences of digitalization is that value is not only created by the company providing goods or services, but users of those goods and services can create value for the company and for other users.

As a matter of fact, the digitalization of the economy has cast light on the fact that part of the value creation happens outside the firm, even if – as already explained in the previous section (*supra* § 2) – the market price for these inputs is zero, namely no monetary payment between the firm and the input supplier (user) is observed.

It can be said that within the digitalization of the economy customers do not have the sole role of consumer, but between producer of content and user of content created by others and the company. Bruns, in this sense, offers the term of "produser" – which is a contraction of producer and user – to highlight this collapse or hybridization, of producing and using social media[401].

It has been argued, in fact, that consumers or users actually contribute to value creation by taking part in the production process and become "prosumers" [402]. Users provide services and inputs that add to the value creation by the firm but are not compensated in pecuniary returns. Starting from this premise, both the OECD, EU Commission and several OECD countries, like United Kingdom, have indicated that the user participation should play a role in the allocation of the tax base

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[401] A. BRUNS, *The Future is User-Led: The Path towards Widespread Produsage*, Fibreculture Publications, 2008, who defines "produsage" as being based on the collaborative engagement of communities of participants in a shared project. The hybrid word "produser" describes the role of users as being increasingly enmeshed with the more traditional role of producers; ID., *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage,* New York, 2008.

[402] R. PETRUZZI- S. BURIAK, *Addressing Tax Challenges of the Digitalisation of the Economy – A Possible Answer in the Proper Application of the Transfer pricing Rules?,* Bull. Intl. Taxn., 2018, p. 72; Y. BRAUNER – P. PISTONE, *Some Comments on the Attribution of Profits to the Digital Permanent Establishment*, Bull. Intl. Taxn. 2018, p. 72).

regarding the profits generated by multinational firms in the digitalized economy and, consequently, it cannot be ignored in the performance of a transfer pricing functional analysis, since the user involvement should be considered, for most of the new business models, a key function for the purpose of transfer pricing.

However, there are different degrees to which users are involved in value creation and the implications that they can have for the allocation of taxing rights.

The economic literature, indeed, has identified at least three perspectives of user participation which can be considered as value creator factors for the firm. We refer in particular to: *i)* enhancing network effects; *ii)* being engaged in digital content production; and *iii)* facilitating data mining [403].

The first category requires active user participation and probably leads to the most value being created. However, even without active participation, companies are able to collect data which create value for the company after it is processed and categorized. According to Bechmann, in fact, researches have demonstrated that this last category of passive and less demanding usage patterns is by far the most common[404].

At a first glance, the different kinds of user's contributions are susceptible to be divided into two already mentioned macro categories (*supra* Section I, §2): on the one hand, contributions that require an "active" participation and, on the other hand, contributions that imply a mere "passive" participation".

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[403] A. BECHMANN – S. LOMBORG, *Mapping actor roles in social media: Different perspectives on value creation in theories of user participation*, New Media & Society, 2012

[404] A. BECHMANN – S. LOMBORG, *op. cit*., pp. 765-781.

"Passive" user participation does not require necessarily the user to enter any information, but data is collected by the company, for instance, through cookies, even after the user is no longer on the specific platform of the business. "Active" users, on the contrary, involves an explicit user action. Data is actively created by a distinct user action and the content is limited to what user decides to share. Users generally transmit information in exchange for services, products or other goods with express intention, contributing to enhance the firm's value creation process[405].

Thereby, some scholars believe that "active users" should represent somehow a "function" of the firm. This means that the customers of highly digitalized business do not play the same role as the customers of traditional businesses. While the latter can be considered, in fact, to be a "passive customers", in simply buying, consuming the products or services provided by a company, the former can be regarded as "active costumers", considering that they not only receive a product or service but also contribute to enhancing value[406]. It is the activities of the customers, combined with the other activities, for instance, the development of the software to analyze data provided by customers, which permit the digitalized companies to monetize and realize further profits.

Accordingly, whether the supply-side perspective on "value creation" should inform the allocation of taxing rights to a jurisdiction other than the state of residence, it is necessary to investigate the degree to which active users are involved in value creation to verify if the

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[405] OECD, *Tax Challenges Arising From Digitalization cit.*, p. 55.

[406] PETRUZZI- S. BURIAK, *op. cit.*, p. 14 for whom «customers can, therefore, be viewed as "unconscious contributors" to the business value of highly digitalized company, i.e. almost as if they are "unconscious employees" in these companies 'value chain»

eventual contribution of the users emerge on the supply-side and, as such, constitute a valuable connecting factor for the establishment of taxing rights.

2.1. Network Effects and Digital Content Production: between contribution on the supply-side of a firm and consumption with positive externalities.

For most of the digital businesses the value that a user derive from a platform is strongly correlated with the number of another active user on the platform. The more users, the higher the value for those who do not use it yet[407].

Network externalities, hence, exist when the value of a product or service for one consumer is dependent on the number of other consumers of that product. A classic example is the telephone: the more people having telephone lines, the more valuable the telephone is to each owner.

Building such large user networks is central to the success of the business, helping them to achieve economies of scale and allowing them to take advantage of the low marginal costs that there may be in making a platform available to new users[408].

As English and Becker noticed, however, the mere creation and exploitation of network effects do not imply any specific and explicit user actions. A pure passive presence of user, indeed, is often sufficient to generate network effects as it is demonstrated by many traditional

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[407] J. BECKER – J. ENGLISCH, *op. cit.*, p. 167, for whom «these network effects are of special importance in the digitalized economy. A customer's valuation of Facebook depends on how many of her friends (or acquaintaces and colleagues) are on the platform. At the same time, by registering on and using the platform, the customer makes it more valuable to her friends».

[408] HM Treasury, *Corporate tax cit.*, p. 8.

business models. For instance, in the case of fax machine the value for the fax machine maker is given by the purchase of the fax machine which would presumably be a "passive" participation (simply buying).

However, the key difference between the fax machine business and the social media platform's business model is that sending faxes did not itself create additional profits for the fax machine maker, rather for the telephone networks along which the faxes were sent[409]. In contrast, social media platforms are able to analyze the data sent by its users, enabling the development of additional source of value thanks to a steady engagement of the users with the purpose to monetize via advertising.

As matter of fact, for some digital businesses users are the core of its networks and help to develop them through their engagement and actions which foster connections between users (sharing content, rating content and creating internal networks). This is the case of platforms that rely on user-generated content, where the value of the platform to a potential use is closely linked to the actions of other users on the platform or for platforms for which the quality of a service to a user is indirectly linked to the actions of other users. For instance, data provided by search engine users can affect and influence the searches made by other users and can improve how that engine can perform its function for other users.

Network effects, besides, are pivotal for those platforms that provide a marketplace for third-party buyers and sellers, where user utility is a function of the number of users on the other side of the intermediated market and the service those users are providing[410].

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[409] I. GRINBERG, *User Participation in Value Creation*, British Tax Review, 2018, p. 410

[410] HM Treasury, *Corporate tax cit*., p. 9.

On the other side, users play also an essential role within the data mining process - as it will be explained in the following - since through their engagement they facilitate the repeatedly collection of large amounts of data by the firm, by recurring use of an electronic interface operated by the firm or of data-transmitting devices controlled and harnessed by it, by a permanent user identity, or otherwise.

Different is the rationale behind the digital content provided by users to a network operated by the business. This is the case, for instance, when users upload photos or videos to social media, or where they actively influence the outcome of business production, such as when they modify or enhance basic design features in order to customize a product generated by 3D-printing[411]. For these activities, in addition, the majority of users do not require any pecuniary incentives to produce[412].

From the perspective of the firm, the production of user content is relevant only because it makes the users stay on the platform where the firm can target them with advertising. The firm, in other words, does not care about the quantitative and qualitative of the content, rather the users' activities serve to maintain the network. To give a better idea, it is helpful the example made by English and Becker concerning the pub

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[411] HM Treasury, *Corporate tax cit*., p. 9, where at para. 2.11 it is stated that «but the core business offering remains the content generated by users. It is the nature and quantity of that content that underpins the business's ability to attract users and generate revenues». In the same line, the OECD in its Interim Report argued that «promoting its user-to-user network is a key aspect of a social network company's business model: the more users and the more time they spend on the network (and the more they engage), the more content they create and the more they are available to be targeted by advertising. All of these factors are central to increasing the value of the advertising business of the platform».

[412] E. BRYNJOLFSSON – A. MCAFEE, *The Second Age, work, Progress, and Prosperity in a Time of Brilliant Technologies*, New York, 120, who noted that «users of Facebook, YoutTube, Twitter, Instagram, Pinterest and other types of online content not only consume this free content and gain the consumer surplus discussed above but also produce most of the content. There are 43,200 hours of new YouTube videos created each day, as well as 250 million new photo uploaded each day on Facebook».

owner who will not care so much about the stories that his guests tell, as long as they stay and pay for their drinks[413].

The user contributions in the form of production of contents, hence, are better described as "consumption which creates positive externalities"[414]. Consequently, they contribute to the "value creation" process on the demand side and, then, they cannot be represented a new form of valid nexus[415].

What is relevant for the value creation process of a digital enterprise is, consequently, the combined quantity of the active users that results in value creation, rather than the individual user's content per se. The more users are active on the platform, the more content is created, more users are attracted and more valuable is the platform. The users' production of content (activities), in other terms, can be described as a means for maintaining the network effects which is the only factor that might be deemed as a value driver contributor for a digital enterprise.

This is, in other words, what English and Becker defined as a "sustained access" (active) to a local network of users that could represent a valuable asset for a firm, as long as the activity must be repeated or permanent and qualitatively and quantitatively important[416].

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[413] J. BECKER – J. ENGLISCH, *op. cit.*, p. 170.

[414] It is worth reminding that consumption, in the economics, refers to the use of goods and services by households and it is distinct from consumption expenditure, which is the purchase of goods and services for use by households. See, C. D. CAROLL, *Consumption*, Encyclopedia Britannica, 2016.

[415] J. BECKER – J. ENGLISCH, *op. cit.*, p. 170 for whom user contributions are not be considered as a «disinterest instrument of production in the hands of the platform operator, but instead pursue her own agenda (of consumption) ».

[416] In this sense, see J. BECKER – J. ENGLISCH, *op. cit.*, p. 167, for whom network as such can be considered a business asset for which the firm spends resources and assets to actively create, manage and utilize the network; M. OLBERT – C. SPENGEL, *International Taxation cit.*, p. 37 where they argue that «ne should attribute substantial importance to all activities performed to sustain and enlarge the user base».

As an asset of the firm the value derives from the firm rather than from users. Certainly, to be relevant the number of users group needs to be of sufficient size and depth[417].

As far as we are concerned, the great merit of a such an approach is that it is suitable for different kinds of business models. Indeed, this continuous, symbiotic and reciprocal relationship of value exchange between users and firm can occur in different ways. It can be cultivated, for instance, both through a local user base of search engine, the supply of a bundle of hardware, a stream of services, and new products or enhancements (an example of this is Apple, who have bundled the sale of hardware, such as iPhone, and software or services, such as Apple Store) and through also a participative networked platform[418].

However, as some scholars pointed out, even when such contributions can be deemed an intangible asset of the firm, it is questionable whether they take place within the firm and even more whether they may be regarded as owned to the user location[419].

Companies, indeed, appear to not have any kind of control on the user's action. According to Ronald Coase's theory of the firm, in fact, an employee creates value for the firm because it acts under certain control of the company that leads to reduced transaction costs so that a

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It is worth noting that such a conclusion appears coherent with the current of thought that believe that for allocating tax jurisdiction with respect to income from activities, a substantial relationship between the activity and the state concerned is required. This means that an occasional activity is not significant enough to be considered a sufficient relationship with a state, even though an occasional activity can create an economic relationship with a state. In other words, «a sufficient relationship with a state should be considered present if a substantial income-producing activity is exercised in that state» (See, E.C.C.M. KEMMEREN, *Source of Income cit.*, p. 437; J. AULT, HUGH, *Comparative Income Taxation*, London and Boston, 1997, p. 431).

[417] J. BECKER – J. ENGLISCH, *op. cit.*, p. 171.

[418] JINYAN LI, *Protecting the Tax Base in the Digital Economy, Paper on Selected Topics in Protecting the Tax Base of Developing Countries,* JUNE 2014, PP. 24-25.

[419] HOFMANN – N. RIEDEL, *op. cit.*, p. 174.

continuous exchange of value take place between the firm and its employees. Under this point of view, in the absence of any control of the firm over users' activity, it seems difficult to attribute to users 'activities a function within the firm[420].

Nevertheless, part of the scholars has noticed that even if the level of control over a user is much reduced to that of a traditional employee, such control cannot be completely denied. There is, indeed, a certain control over the user activity by the digital company, since such activity is constantly monitored and managed by the business with the aim of extracting value from the symbiotic relationship created with the users[421].

The same Collin's Report argued that the user "labour" cannot be deemed per se as an intangible asset belonging to the company, since the company do not control the user, as understood by the accounting

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[420] R. H. COASE, *The Nature of the Firm*, Economica, 1937; ID., *The Institutional Structure of Production*, Am. Econ. Rev., 1992; H. A. SIMON, *A Formal Theory of the Employment Relationship*, Econometrica, 1951; I.D., *Organisation and Markets,* J. Econ. Persps., 1991; O. WILLIAMSON, *The Economic Institutions of Capitalism*, New York, 1985; T. ROSEMBUJ, *Taxation and Capitalism of Surveillance. Behavioral Surplus,* p. 7*,* for whom it is not correct to frame the relationship between enterprise and user as a barter, since the exchange received by the former (for instance, a free access to a platform) is the mechanism of the company to get data for its treatment and commercialization, where it gets the excess of profits. The idea of such relationship in terms of a mere exchange between independent parties which is not sufficient to justify the assignment of a tax nexus is advocated by P. HOFMANN – N. RIEDEL, *op. cit.*, p. 174, who provides a useful example. In particular, they argue that «if a US company contracts with an external freelancer in Germany that delivers a service against pay, the pay reduces the US firm's profit, and the service delivered by the freelancer enhances it. This would not establish a tax nexus for the US company in Germany. Analogously, if a digital company in the US obtains digital services from users in Germany against a barter pay, for example, free access to a platform, the former would enhance the US firm's profit, and the latter would reduce it. And no tax nexus would emerge in Germany. The only difference between the freelancer and the digital user example is that in the former case, the freelance earns monetary income that is subject to taxation in Germany, whereas in the latter case, the pay comes in the form of barter (free access to the platform) and hence remains untaxed. Assigning a tax nexus for the US company in Germany based on this difference seems inappropriate».

[421] W. HASLEHNER, *Taxing where value is created in a post-BEPS (digitalized) world?*, Kluwer International Tax Blog, p. 3.

regulations[422]. Nevertheless, the existence of community of users (network) that show their interest for the services provided by the company can be regarded as an asset in themselves, in accordance to the empirical "Metcalfe's law"[423], which states that "the value of a network is proportional to the square of the number of users connected to the system". From this perspective, network effects could represent an asset for an enterprise as long as it is not a merely passive acceptance of a free resource, but the company owns actual capacity to attract users[424].

On the other side, nevertheless, it is difficult to admit that such kind of asset (the sustained relationship with users) and the related profits can be considered always as owned by user location. According to existing tax rules, as seen in the previous chapters (*supra* Chap. IV), indeed, the ownership of the intangible could be attributed to those parties within the MNE that performed the functions, deployed the assets and bore the risks related to the creation of the intangible asset. Accordingly, only in the case in which the firm engages in the user country some of these activities to create or maintain the local user network that it is possible to attribute a taxable nexus at the user location[425].

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[422] P. COLLIN – N. COLIN, *Task force on Taxation of the Digital Economy,* Report to the Minister for the Economy and Finance, the Minister for Industrial Recovery, the Minister Delegate for the Budget and the Minister Delegate for Small and Medium-Sized Enterprises, Innovation and the Digital Economy, Jan. 2013, pp. 79-80.

[423] XING-ZHOU ZHANG – ZHI-WEI XU, *Tencent and Facebook Validate Metcalfe's Law*, Journal of Computer Science and Technology, 2015.

[424] P. SINGH, *Moneyball: A Quantitative Approach to Angel Investing"*, 2012, http://fr.slideshare.net/, who introduce the idea that "traction", meaning the increase in both the number of users and the intensity of their use of an application, was the "new intellectual property" to be considered in the valuation of digital economy startups.

[425] In this sense, Schön believe that it is necessary to investigate whether at the user location the firm has made a specific investment, such as, for instance, dedicated website (W. SCHÖN, *op. cit.*, p. 289).

This is the case, for instance, of Netflix in Italy, where the tax administration is investigating the company's tax position[426], since despite not having a physical presence in Italy, it seems to have an extensive network infrastructure – including servers, computers, fiber-optic cables – that effectively allow it to be able to transmit to Italian users movies and TV series in streaming, even at ultra-high-definition. This means that even without having a registered office, Netflix has a set of places that contribute to its activity and its revenues, allowing it to join its users and create a stable relationship with them.

Consequently, it is reasonable to conclude that some forms of repeated and sustained engagement of users (namely, network effects and facilitators of data mining), when manifested in a frequently, qualitative and quantitative relevant manner can be considered an intangible asset for the digital enterprise. In common with other intangibles, hence, the attribution of taxing rights to the user jurisdiction is legitimized only when in such territory the company performs some or all the functions or bears the related risks necessary to create or maintain such local user relationship[427].

3. The Role of Data within a "Value Creation" process of a Digital Enterprise.

3.1. The Nature of Data from an economic perspective.

[426] M. VALSANIA, *Netflix, pieno di utili anche se gli abbonati crescono meno del previsto*, Il Sole 24 Ore, 17 Oct. 2019.

[427] Differently, J. BECKER – J. ENGLISCH – D. SCHANZ, *op. cit.*, p. 10 where they also believe that the mere existence of a SURE is not sufficient to justify the existence of a taxable nexus, nevertheless, and on the contrary they suggest to tax a SURE only where it is feasible to observe and allocate cash flows linked to the use of a SURE.

Data become new markets without apparent regulation, adding those that are extracted from the human experience, information about people in all their dimensions, segments and characters. We are in the era of what Shoshana Zuboff calls as "surveillance capitalism" which transforms the free appropriation of personal data into predictive products and in behavioral surplus derived from trade in new behavior markets without regulation or legal constraints measures[428].

Data is seen in the current age as the new "raw material" of the Internet: following Bellanger's metaphor, indeed, individualized data is like the Indian cotton at the time when Ghandi claimed that a transformation would happen in India[429].

Digitalization is the means which allows some businesses to take advantages of the free collection of personal data for the manufacture of predictive products. Such informational commodity has the purpose of producing profits, maximized through the transformation of social and human behavior[430].

Mainly, the use of data can be functional to different ultimate purposes. As matter of fact, data collected regular and systematic from the user's activity can be used to measure and improve the performance

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[428] S. ZUBOFF, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, New York, 2019; A. SANGIOVANNI, *Democratic Control of Information in the Age of Surveillance Capitalism*, Journal of Applied Philosophy, 2019, where it is argued that «the real money these days lies in the information, not in social media or search engines as such. Companies, together with governments (most prominently, those of China and the US), are investing heavily in using this data and the algorithms used for processing it to form predictions about our behavior».

[429] P. BELLANGER, *Contribution a la Misiòn de expertos sobre la fiscalidad de la economìa digital- La liberté compétitive, Paris,* 2013.

[430] T. ROSEMBUJ, *Taxing Digital cit.*., p. 3, for whom, indeed, the informational merchandise is the result of the capture of the personal data and propitiates the commerce and the monetization for the information with which the so-called "new predictive products" are manufactured. Specifically, "an informational commodity is a digital or virtual information good of intangible nature, focused on the future behavior of the person, which will have to predetermine and change.

of an application and to manage key indicators through targeted adjustments. This activity is well known as "growth hacking" and it requires the collection of large amounts of data which are often restructured in near real time through tools available in the market or developed in-house[431].

User-generated data can be used also to customize the services provided. Data provided by users, indeed, allows to make the right recommendations, to show the user the right advertisements and, increasingly, propose a price to the user that has been determined by elasticity calculations and coincides exactly with the user's willingness to pay, which, in macroeconomics terms has the effect of maximizing the seller's surplus and cancelling out the consumer's surplus[432].

Data generated by one user, furthermore, can be used to provide service to other users, either by presenting them directly or they can be used for collaborative filtering in order to make recommendations to another user with similar characteristics.

Data from an application may be also sold to third parties by granting a license to use the data, subject to the limits of the consent granted by the user. Usually, this happens making data available on a software platform in the form of flaw of aggregated data or in the form of a flow of personal data, subject to the users' consent[433].

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[431] M. GRIFFEL, Growth Hackling: Lean Marketing for Startups, 22 October 2012; D. MCCLURE, *Startup Metrics For Pirates*, Nov. 2012; P. COLLIN – N. COLIN, *op. cit.*., where they specified that one particular form of growth hacking is "A/B testing" which consists in proposing a design variant to a group of users and measuring differences in performance compared to a control group.

[432] S. CLIFFORD, *Shopper Alert: Price May Drop for You Alone,* The New York Times, Aug. 2012. It is not a news that Google's PageRank algorithm provides customized search results based on the history of the user's previous searches, which reveal the user's interests and the way the user's queries are worded.

[433] For instance, Facebook uses the Open Graph Protocol and the Facebook Connect arrangements to enable users to identify themselves in other applications and to access their data collected by Facebook. See, S. AXON, *Facebook's Open Graph*

All these different ways of use of data prove that data-driven economic activities are the leading edge of the economic growth. Nevertheless, they seem to not fit naturally into the traditional economic categories, such as commodities and services.

Commodities are tangible things that can be stored for future use, while services are intangible and cannot be stored for use. Services should usually be consumed or used at the time of their production.

As Mandel argued, «data is neither a good or service»[434]. Data is intangible, like a service, but can easily store and deliver far from its original production point, like a good. As result, data represents a further economic category, together with commodity and service, which policymakers need to consider to have a more accurate picture of economic growth, consumption, investments, employment and trade.

Data, indeed, is identified as a digital good[435] which is «everything that can be stored in a computer's memory and transmitted through Internet»[436]. Mandel, in particular, highlights two features on the basis of which data can be considered digital good. First, for the fact that the trade of data does not require the opening of physical facilities abroad. Second, trade of data is not equivalent to the direct and

Personalizes the Web, Mashable, Apr. 2010; M. ARRINGTON, *Facebook Responds to MySpace With Facebook Connect*, TechCrunch, May 2008.

[434] M. MANDEL, *Beyond Goods and Services. The (Unmeasured) Rise of the Data-Driven Economy*, Oct. 2012, available at https://www.progressivepolicy.org/wp-content/uploads/2012/10/10.2012-Mandel_Beyond-Goods-and-Services_The-Unmeasured-Rise-of-the-Data-Driven-Economy.pdf.

[435] T. ROSEMBUJ, *Taxing Digital cit.*., pp. 28-29 where the author states that «the digital good is doubly public, because it is an intangible good of information. The ability of the digital good, once created for its immediate and instant deployment without restrictions on use or space, converts it by its very nature to a free corridor across the planet. This is what *Quah* qualifies as *aespatial*: being and not being anywhere and all at once».

[436] D. QUAH, *Digital goods and the new economy,* CEP Discussion Papers, London School of Economics, 2003.

traditional purchase of physical goods, since data are valuable even when users do not buy anything[437].

Against this backdrop, it is clear that data can be deemed as an intangible asset of a company. As matter of fact, data like the intangibles is a non-physical asset that is capable of being owned or controlled by the entity[438]. Some have even talked about "data rights" as digital elements that have an increasingly stronger participation in the "means of creating value"[439].

Several advisors' firms also view data as part of intangibles and believe that the collection, aggregation and analysis of data may significantly contribute to the creation of value. In this sense, the DEMPE framework should serve to appropriately identifies how and where digitalized and traditional businesses create value[440].

3.2. The "extraction" of Value from Data and its Tax Implications.

As showed above there are different ways of extracting value from data. Nevertheless, to enable such extraction, business have to go through a process that requires several interconnected phases.

The first phase is the data origination which involves the generation of digital data from online activities, such as transaction, production or communication. It also includes user generated content, like, as already seen, active data origination by users or customers, and data generated from user behavior, for instance, through cookies.

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[437] M. MANDEL, *op. cit.*

[438] S. DE JONG – W. NEUVEL – A. UCEDA, *op. cit.*, p. 58.

[439] OECD, *Tax Challenges of the Digitalisation. Comments Received on the Requested for Input – Part I*, OECD 2017, p. 118.

[440] OECD, *Tax Challenges of the Digitalisation. Comments cit.*, p. 178.

The second stage provides data collection which allows businesses to use large amounts of data (often labelled as "big data")[441] that helps making better business decisions and shape entire business models.

However, to concretely extract value from big data, business needs to go through an "entire discovery process that requires insightful analyst, business users, and executives who ask the right questions, recognize patterns, make informed assumptions, and predictive behavior" which represents the third relevant step for the extraction of value out of data[442].

In this sense, the original idea – during the rise of the digital economy – that data contains value similar to natural resources seems to be flawed[443]. Data needs to be transformed (processed) by the business that aim at value creation. In this perspective, raw data is not comparable to oil and could not be regarded as «natural resources» as provided by for article 5 (2) (f) of the OECD Model Convention[444].

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[441] MGI, *Big Data: The next frontier for innovation, competition, and productivity*, 2011, https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/big-data-the-next-frontier-for-innovation.

[442] E. BRYNJOLFSSON – A. MCAFEE, *op. cit.*, who argued that business can harness the forces of the three new types of assets: machines (intelligent computer), platforms (business models using software interfaces) and crowds (high-scale access to information and users). For that reason, there is a common «need to rethink the balance» between these new and old assets in order to understand «when, where, how, and why machines, platform, and crowds can be effective […] ».

[443] P. PISTONE – J. F. PINTO NOGUEIRA – B. ANDRADE, *op. cit.*, p. 10 for whom the circumstance that data needs to be transformed by businesses that aim at value creation «should be taken into account when thinking about corporate income taxation and data.».

[444] B. MARR, *Here's Why Data Is not the new oil*, Forbes, 5 Mar 2018, for whom, despite the oil which requires huge amounts of resources to be transported to where it is needed, data can be replicated indefinitely and moved around the world at the speed of light, very low cost, through fiber optic networks. Moreover, data also become more useful the more it is used; J. GOLDFERIN – I. NGUYEN, *Data is not the new oil*, Techcrunch, 2018, available at https://www.wired.com/story/no-data-is-not-the-new-oil/; W. BYRNES, *Byrnes'Comments on the OECD's "Unified Approach" to Allocation of Profits of Digital Business*, Kluwer International Tax Blog, Oct. 2019,

Data itself does not create value, but the ability of enterprises (both highly-digitalized and non- digitalized) to structure data is valuable[445].

In this perspective, the question that arises under a tax perspective is whether there is space for considering data sources as relevant factor for the allocation of taxing rights.

According to Olbert and Spengel[446], as data requires to be transformed to create value, processing, interpretation and analysis of data is perceived as a value-generated activity. Data mining, hence, which refers to the techniques, methods and algorithms to analyze large amount of data with the ultimate goal of transforming data into knowledge, can be considered as part of the business model that creates value out of data. This is confirmed, according to the same authors, by the empirical evidence that companies invest in data mining with the ultimate purpose of increasing their return on investment[447].

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where he argues that «but my thought that is if data is the new oil, then isn't data part of the national patrimony (except in the USA)? If it is part of the national patrimony, then its exploitation must be for the benefit of the national public under most countries' laws and even constitutions. And if so, then by example, an equivalent of an extractive industry royalty may be imposed by a country, as well as 'production' sharing agreements. Under a continental European approach to the communal society, I can envision an argument that data extracted from the public is akin to extracting natural resources. Anyway, data is not exclusive to one extractor, whereas oil becomes exclusive via the extraction process. Data does not deplete by its extraction and use but rather becomes more valuable. So I do not think "data is the new oil" is a good analogy. But if data is the new oil, then perhaps data should be subject to a similar tax regime».

[445] See, S. DE JONG – W. NEUVEL – A. UCEDA, *Dealing with Data in a Digital Economy*, Int. Transfer Pricing Journal, 2018, p. 59, the author, on the contrary, disagree with this view, since they believe that «the same as saying that clean water or air does not have value because "it always existed". That clean water or air has not been monetized yet, does not mean that it does not have value».

[446] M. OLBERT – C. SPENGEL, *Taxation in the Digital Economy – Recent Policy Developments and the Question of Value Creation*, International tax Studies, 2019, pp. 12 et seq.

[447] See, R. BOIRE, *Data Mining for Managers: How to Use Data to Solve Business Challenges*, 2014.

In particular, value creation through raw data requires several activities to transform raw data into valuable knowledge. First, a business has to decide upon the selection to extract target data from raw data. Then, this data must be processed and transformed into a format useful for the subsequent analysis. Finally, the next step requires an analysis of the data to recognize patterns in the data. Once these patterns have been interpreted, the value is finally created for the business model.

Such different functions of data mining's process, moreover, can be spread across different legal entities of a globally operating company or also a company might not engage in all steps of the data mining process, but outsource some parts of it, for instance, by selling data to third parties that then engage in further data mining activities (stand-alone businesses). This means, that businesses might be involved in one or more data mining process and use the data to generate revenue in different forms ("usage types")[448].

It is reasonable to support, thus, that under the perspective of transfer pricing common techniques of transfer pricing for traditional business models can be taken in consideration also for data-driven, since «there exist (stand-alone) businesses that engage in specific activities of the data mining process»[449]. Against this backdrop, common techniques of a functional analysis should identify the functions involved, assets used and risk assumed within the data mining process. Once identified them, the relative contribution of the different entities involved might then be determined by finding comparable

[448] To get an idea it is worth mentioning Netflix which, for example, is a company that makes an internal use of user data, since it collects, selects and processes data on its customers. Based on this internal data, Netflix improves and develops its service portfolio.

[449] M. OLBERT – C. SPENGEL, *Taxation in the Digital Economy cit.,* p. 14.

functions, assets and risk at the level of such stand-alone enterprise engaged in the same part of the mining process[450].

In the case in which, on the contrary, a firm is involved in more activities of the data mining process, finding comparable transactions becomes a more complicated task. Consequently, the application of the profit split method is more proper.

4. Transfer Pricing in the context of the Digitalization of Economy.

4.1. The prevalent tendency: towards forms of Residual Profit Allocation Methods.

The analysis carried out so far showed that irrespective of the way in which the nexus is determined, policy makers and the majority of the international tax literature advocated for an approach that somehow goes beyond the limitations of the arm's length principle.

The digital interaction in intra-firm operations, as a matter of fact, reduce the relevance of the ALP, as parts and totality of a global organization cannot be objectively separated, differentiated and compared as if they were independent companies.

In this respect, by referring to the considerations explained with regard to the general formulary apportionment system in the previous chapters (*supra* Chap. IV), it is worth noting that the proposals at stake advocated essentially for two main approaches for the attribution of

[450] M. OLBERT – C. SPENGEL, *op. cit.*, p. 14, for whom, for instance «proxies for the value of collected raw data can be derived from the prices that companies focusing on data collection demand for their services. Such companies exist across many industries».

profits within the digitalization of the economy: on the one hand, like provided by the European Commission, a profit split method, and, on the other side, a modify residual profit split methods which is characterized by the intention of bringing more "formula elements into the profit-based methods endorsed by the OECD"[451].

Beyond such approach, at the same time, scholars have suggested the develop of other new methods that need to be examined here in order to complete the analysis. In particular, we refer to the Residual Profit Allocation (RPA).

The current section, hence, aims at deepening the merits and eventual limits both of the profits split method as provided by the current transfer pricing rules and he different options of RPA elaborated by prominent scholars in order to make a comparison with the solution offered by the policy makers, especially by the last "Unified Approach".

4.2. The Profit Split Method under the OECD Transfer Pricing Guidelines.

Since the publication of the Transfer Pricing guidelines in 1995, the OECD has included guidance on the transactional profit split method and there has been a drift towards profit splits and other formulary methods in the allocation of the profit associated with particular transactions among of the entities of an MNE. This movement reflects the practical difficulties which derive from the application of the ALP, as discussed in the chapter 3.

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[451] J. OWENS, *The Taxation of Multinational Enterprises: An Elusive Balance,* Bull. Intl. Taxn., 2013, p. 443.

Since the revision of the Guidelines in 2010, the transactional profit split method has been applicable where it is found to be the most appropriate method to the case at the hand. With the revised guidance on the application of the Transactional Profit Split Method, which represents the latest in a series of move towards formulary methods, the OECD clarified and significantly expanded the guidance on when a profit split method may be the most appropriate method[452]. Although without changing the international consensus on the value of the arm's length principle as a guiding principle, with such last revised guidance the OECD introduced more formulary elements into transfer pricing and limited the application of the method not to unitary profits of an MNE buy to specific transactions or related sets of transactions.

Indeed, according to the new guidance, a profit split method may be considered as the most appropriate method whether one or more of the specific identified indicators occur.

Each party needs to make unique and valuable contributions which means that such contributions are not comparable to contributions made by uncontrolled parties in comparable circumstances, and that they represent a key source of actual or potential economic benefits in the business operations.

Another indicator relevant for the purpose of the transactional profit split method is that the business operations are highly integrated such that the contributions of the parties cannot be reliably evaluated in isolation from each other. In the same way, as the profit split method may be found to be the most appropriate method where, according to the accurately delineated transaction, each party to the controlled transaction shares the assumption of one or more of the economically

[452] OECD (2018), R*evised Guidance on the application of the Transactional Profit Split Method: Inclusive Framework on BEPS: Action 10*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Paris.

significant risks in relation to that transaction or the economically significant risks are separately assumed by the parties, but those risks are so closely inter-related and/or correlated that the playing out of the risks of each party cannot reliably be isolated. In other words, the PSM should be applied in particular when the value chain is highly integrated and several entrepreneurial entities carries out unique contributions, making comparable transaction unavailable[453].

The presence of formulary element, instead, results in a two-step approach. In particular, the transactional profit split method seeks to establish arm's length outcomes for controlled transaction in order to approximate the results that would have been achieved between independent enterprises engaging in a comparable transaction.

There are two different approaches for the application profit split methods, depending on the characteristics of the controlled transactions, and the information available: the contribution analysis and the residual analysis.

The former divides the relevant profits, which are the total profits from the controlled transactions under examination, between the associated enterprises in order to arrive at a reasonable approximation of the division that independent enterprises would have achieved from engaging in comparable transactions.

Where the contributions are such that some can be reliably valued by reference to a one-sided method and benchmarked using comparable, while others cannot, the application of a residual's analysis may be more appropriate.

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[453] H-K. KROPPEN et al., *Profit Split, the Future of Transfer Pricing? Arm's Length Principle and Formulary Apportionment Revisited from a Theoretical and a Practical Perspective*, in Fundamental of Transfer Pricing in Law and Economics, 2012, pp. 270-272; J. M. KADET, *Expansion of the Profit-Split Method: The Wave of the Future*, Tax Note International, 2015, p.1185

The residual analysis, indeed, divides the relevant profit from the controlled transactions under examination into two categories.

The first one includes profits attributable to contribution for which reliable comparable can be found ("routine profits"). This remuneration, consequently, would be determined by applying one of the traditional transaction methods or a transactional net margin method to identify the remuneration of comparable transactions between independent enterprises.

The second category, on the other hand, include contribution which are unique and valuable, and/or are attributable to a high level of integration or the shared assumption of economically significant risks. The allocation of such "residual" profit (or loss) would be based on an analysis of the relative value of such contributions by the separate affiliates within the firm – either asset-base or cost-based - supplemented where possible by external market data that indicate how independent enterprises would have divided profits in similar circumstances[454].

In other terms, for the profits derived from such particular contributions, the OECD Revised Guidelines proposes a limited profit split. Such approach, in particular, as explained, does not involve a pre-ordained rule – as it happens under formulary apportionment – but instead prefers a case-by-case approach. The main basis for the allocation of the residual, in particular, is the value of the contributions performed by the separate affiliates within the firm.

As scholars noticed, the OECD approach has created a fundamental distinction within the corporate group between limited risk affiliates, which are assigned a routine profit, and entrepreneurial affiliates, which participated in the residual profit of the overall

[454] OECD (2018) para 3.1.2.

enterprise[455]. According to the OECD, the division between limited risk and entrepreneurial entities will be derived by testing whether an affiliate's functions as well as its contractual relations with another group members are amenable to traditional transfer pricing analysis, such as whether information on comparable uncontrolled transactions is available.

4.3. The Residual Profit Allocation and its main schemes: The Residual Profit Allocation by Income (RPA-I) and the Residual Profit Sales Apportionment.

As previously said, the highly uncertain and often contentious nature of the ALP, especially in the current era post-BEPS, has driven the attention towards other alternatives methods of allocating multinational income among tax jurisdictions, especially within the digitalization of the economy. One of this new method, beyond the formulary apportionment method (*supra* Chap. IV), are those that belong to the family of residual profit allocation methods.

Within this family of methods, indeed, it is possible to identify different patterns which differ on a number of key design features, including, the calculation of "routine" profits and the locations to which "residual" profit is allocated, the formula used in that allocation and whether the scheme is applied on a product-line basis or a business-wide basis.

The current section will analyze the two main proposals of RPA.

The first scheme of residual profit allocation is the one proposed by Devereux and others, which is the Residual Profit allocation by

[455] M. P. DEVEREUX – A. J. AUERBACH – M. KEEN – P. OOSTERHUIS – W. SCHÖN – J. VELLA, *op.cit.*, p. 15.

Income (RPA-I)[456]. It is one of a family of schemes based on separating the total profit of a multinational enterprise into two parts (the "routine" and "residual" profit), which is characterized by the use of transfer pricing methodologies in a manner that allocates residual profits to the jurisdiction of sale.

In particular, the "routine" profits are allocated to the country where functions and activities take place. They represent the profit a third party would expect to earn for performing a particular set of functions and activities on an outsourcing basis.

The "residual" profit, on the other side, can be calculated in two ways. The first, so-called "bottom-up approach", identifies the residual gross income (RGI) earned in each destination country which is calculated as the value of sales to third parties in that jurisdiction less the costs of goods sold including expenses incurred in that country plus the transfer value of goods and services purchased from other parts of the MNE. Costs that cannot be directly allocated to specific sales (for instance, general sales and marketing, research and development, general and administrative) would be apportioned to each destination country based on that country's share of total RGI. In other terms, residual profits allocated to the market affiliates would be equal to RGI less a share of non-allocable costs, including any associated routine profit, where the share is based on the proportion of the MNE's total RGI earned by that affiliate.

The second way to calculate the residual profit is the so-called "top-down approach" by which the total residual income - calculated

[456] See M. P. DEVEREUX – A. J. AUERBACH – M. KEEN – P. OSTERHUIS – W. SCHÖN – J. VELLA, *Residual profit allocation by income. A paper of the Oxford International Tax Group chaired by Michael P. Devereux,* March 2019, 54; J. ANDRUS - P-OSTERHUIS, *Transfer Pricing After BEPS: Where Are We and Where Should We Be Going?*, The tax magazine, march 2017, p. 101.

simply as the total profits less the "routine" profits - can be allocated among destination countries in proportion to their RGI. This of course yields to identical result of the first method.

RPA-I would apply irrespective of the nature of the presence of the MNE in the destination country. Residual profit is allocated to destination countries whether there is a subsidiary, branch or simply a remote sale there.

Such an approach, hence, has the main appeal of being a hybrid. It adheres, in fact, to the existing transfer pricing rules where they are generally deemed to work reasonably well (to calculate the routine profit) and departs from these rules for the determination of residual profit to allow the apportionment of such profit based on the location of RGI, rather than sales.

It appears, moreover, more robust under the perspective of tax avoidance, since transfers within the MNE are not included in base "routine" and "residual" profit. Indeed, the "routine" profit of a country are based on costs of that country, without including purchases from the rest of multinational enterprise. At the same time, "residual" profit in a country is based on sales to third-party consumers in that country.

Another way in which residual profit could be allocated is represented by the proposal made by Avi-Yonah, Durst and Clausing which is characterized by a formulary apportionment regime differentiate between "routine" and "residual" profits[457].

The "routine" profits, indeed, would be determined by giving a mark-up for all expenses in a relatively arbitrary way, without comparison to the level of "routine" profit that might be expected for specific activities. In particular, according to such a proposal, "routine"

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[457] R. AVI-YONAH - K. CLAUSING, *Reforming Corporate Taxation in a global Economy: a Proposal to Adopt Formulary apportionment*, Brookings Inst., 2007.

profits would be determined on a cost-plus 7.5 percent mark-up basis and taxed where the costs incurred.

On this aspect, some scholars highlight that even if a single rate of mark-up applied to all expenses has the merit of simplicity, at the same time it has the disadvantage that it is not able to distinguish cases where there might be legitimate differences in the appropriate rate of mark-up. In other terms, there would be cases where the group earns less than a 7.5 percent markup on its costs. Consequently, it would raise the question of whether other countries would accept transfer prices based on a rate that is higher[458].

The remaining profit ("residual" profit) would be allocated to the various jurisdictions on the basis of a sales factor. Nevertheless, the sales do not trace through the allocable costs for units sold in any particular market as in the RPA-I proposal.

The proposal of Avi-Yonah et al is of course simpler, but does not allow to reflect the differing economic circumstances. This happens especially in the cases in which the ratio of the final selling price to the allocable cost per unit is not the same in all countries[459]. Moreover, the economic inefficiency could origin also by the fact that allocating residual profit by sales can shift taxable profits earned from sales in one country into another, affecting then real economic decisions.

Comparing the two different proposal of residual profit allocation it can observed that even whether both shared a number of advantages and disadvantages, the proposal of Devereux et al appears in general terms more precisely able to reduce the incentives for manipulation compared to other apportionment proposals and reduce the incentives

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[458] J. ANDRUS – P. OOSTERHUIS, *Transfer Pricing After BEPS: Where Are We and Where Should We Be Going*, The Tax Magazine, p. 101.

[459] M. P. DEVEREUX – A. J. AUERBACH – M. KEEN – P. OOSTERHUIS – W. SCHÖN – J. VELLA, *op. cit.*, p. 54.

to shift functions and activities to tax favored jurisdictions compared to pot- BEPS transfer pricing (see Chap. IV).

4.4. A Comparison between RPA schemes and Profit Split Method

Form the analysis carried out so far it follows that the distinction between "routine" and "residual" profits constitute the basis for both methods of profit split and residual profit allocation. However, there are also important differences between them.

As Devereux notices, one of such differences is the calculation of the "residual profits". As a matter of fact, within the RPA the "residual" profits are calculated at the level of the MNE as a whole, or on a product line basis. By contrast, under a profit split method the "residual" profits are allocated in more limited circumstances, between a limited number of affiliates of an MNE whose profits derived by strong synergies generated by the firm due to their highly integrated nature, influence or unique and valuable intangibles.

The RPA schemes, furthermore, can be applied to all MNE, while the application of the profit split method is limited only to MNE with specific features, such as high-integration and presence of hard-to-value intangibles, and even then, they apply differentially among affiliates of such MNEs, since the guidance differentiates between entities that are assigned routine profits and those that are assigned the residual profit[460].

In addition, unlike the OECD profit split method, RPA schemes may not apply the transfer pricing methodologies to identify the routine

[460] R. ROBILLARD, *BEPS: Is the OECD Now at the Gates of Global Formulary Apportionment,* Intertax, 2015, p. 448 et seq.

profits. For instance, as showed, the RPA schemes proposed by Avi-Yonah et al provides a fixed return on expenditure incurred by the entity in question irrespective of the functions performed and the risks assumed.

Finally, and more important, according to the OECD profit split, taxing rights over residual profits are allocated on an asset or activity basis, while RPA schemes tend to allocate it to destination countries. On this regard, as already highlighted in the previous chapters, even if an allocation based on the destination countries brings different benefits of improved economic efficiency, less profit shifting, and improved incentive compatibility, nevertheless it requires a radical change within the international tax framework[461].

4.5. The Transfer Pricing Future for the Digitalization of the Economy.

From the perspective of the digitalization of the economy, we believe that a complete overcoming of the arm's length principle and a shift towards formulary apportionment – even whether, as showed in the previous chapter, the latter has the great merit of simplifying the system, being somehow less arbitrary than the ALP – would be overambitious. The main weakness of a shift towards a formulary apportionment's approach is the necessary world-wide consensus from

[461] M. DEVEREUX – J. VELLA, *op. cit.*, p. 16 for whom, indeed, the allocation of the residual profit to destination countries imply allow different benefits in terms of improved economic efficiency, less profit shifting and improved incentive compatibility.

all the jurisdictions on the same tax base calculation and the same formula to apportion the MNE's global profits[462].

Against this backdrop, unless it gives rise to an international tax reform which shift the taxation of business profits towards destination-based schemes, in order to guarantee the consistency of the entire system, under a transfer pricing perspective it should be favored an interpretation that would be as much as possible consistent with the entire international tax framework.

Within a digitalized business model, consequently, the allocation of profits at related to the existence of a "sustained relationship with the users" and of a data mining process will be plausibly not fully assigned to the user country, since in most cases, the core business units of the firm also provide functions and bear risks related to the establishment and maintenance of the user networks.

This means, in other words, that the market jurisdiction will be entitled to a part of profit allocation not in the sense they provide a customer basis, but rather because they at least perform some complementary functions related to such intangible even without the need of a physical presence[463].

Under the perspective of the methods, it is clear that if the sustained relationship with the users and the data mining process involve more than an entity, the related profits should be split accordingly.

According to the author, the identification of methods should be different on the cases in which we consider data or users relationship as value creating factors.

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[462] International Fiscal Association, *Cahier de Droit fiscal cit.*, p. 242

[463] W. SCHÖN, *op. cit.*, p. 290.

Indeed, as mentioned above, we believe that for data mining process, common techniques of transfer pricing can be taken in consideration, since some scholars believe exist (stand-alone) businesses that engage in specific activities of such process. Moreover, when a firm put in place more activities of the data mining process a profit split method can be applied.

As a matter of fact, according to prominent scholars is pretty obvious that data have value, since they can be sold or transferred for compensation (in currency or in kind) or they can be lost, causing considerable damage for an enterprise[464].

For the attribution of profits related to the sustained relationship with users, instead, it should be applied a modified profit split method, as advocated by some scholars at the beginning of the international debate concerning the digitalization of the economy, since it has many advantages[465]. It is, on the one side, a conservative approach, as it allows the use of profit split method which is the most suited method to deal with the digitalization of the economy, both because it is less dependent on comparable which are hard, if not impossible, to find in

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[464] D. B. Laney, *Infonomics: The Economics of Information and Principles of Information Asset Management*, presented at the The Fifth MIT Information Quality Industry Symposium held on 13-15 July 2015, for whom data ca be valuated based on the following alternative six methods whose technical description go beyond the scope of the current work:

- Method 1: the value information (VI);
- Methods 2: the value of information for business (VIB)
- Method 3: loss of information value (LIV)
- Method 4: performance value of information (PVI)
- Method 5: the economic value of information (EVI)
- Method 6: market value of information (MVI).

[465] J. M. KADET, *op. cit.*, p. 1185; P. HONGLER – P. PISTONE, *op. cit.*, pp. 34-35; M. OLBERT – C. SPENGEL, *op. cit.*, p. 40 where the authors state that «the use of PSM for digital business models should be covered in a refinement of the transfer pricing guidance.

the digitalization of the economy, and because it is a two-sided method which considers both parties in the controlled transactions. On the other side, it permits the introduction of formulary elements that simplify, apportioning, the determination of the contribution between those jurisdictions that, even without a physical presence, contribute to add value to the firm through developing or maintaining the relationship with users.

We believe, in particular, that once it is determined a threshold according to which the relationship with users can be deemed "sustained" and, thus, relevant under a tax perspective, the attribution of related profits should be proportion to it.

On the contrary, the introduction of special measures which provide an up-front partial allocation of the profits to the destination country – as it happens for RPA schemes – or a complete move towards sales-based formulary apportionment, in the lack of a contextual change of the entire international tax framework, would end up contradicting the same provision of not "ring-fencing" extolled by policymakers which aim at ensure the neutrality with regard to the traditional business models[466].

In this sense, the OECD's "Unified Approach" is a reasonable scheme, since even if it allows the allocation of profits to the market jurisdiction on a sales-basis, however, the rationale behind it is different from those schemes which aim at a predetermined allocation of profits to the destination country.

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[466] W. Schön, *op. cit.*, p. 290, where the author states that «why should the destination-country get a sales-basis share in profits from digital transactions but not from traditionally derived sales and services? »; BlaBlaCar, *Comment in: OECD Tax Challenges of Digitalization, Comments Received on the Request for Input*, Part II, 25 October 2017.

Indeed, the main difference is that the "Unified Approach" is based on the BEPS concept of taxing profit where value is created. Consequently, the OECD idea is that market jurisdiction is relevant whether therein a value is created. Sales, hence, are identified as mere variables that allow to approximate the profits attributable to the market jurisdiction[467].

[467] OECD, *Unified Approach*, p. 15.

Bibliography

- ABBOTT, - KEOHANE - MORAVCSIK - SLAUGHTER - SNIDAL, 2000, *The Concept of Legalization*, International Organization, 2000
- AGRAWAL, *India at the Forefront in Implementing BEPS-Related Measures: Equalization Levy in Line with Action 1*, Int'l Transfer Pricing J., 2016
- AKEHURST, *Jurisdiction in International Law*, in W. M. REISMAN, *Jurisdiction in International law*, London, 1999
- ALBRECHT, *The Taxation of Aliens under International Law*, in 29 Brit. Y.B. Int'l L. 145, 1954
- ALLIX, *La Condition des Entrangers au Point de Vue Fiscal,*61 RdC, Boston, 1937
- AMABILE, *Creativity in context*, Boudler, 1996,
- AMIT - ZOTT, *Value creation in e-business,* Strategic management Journal, 2001
- ANDERSSON, *Taxation of the Digital Economy*, Intertax, 2017
- ANDREINI – BETTINELLI, *Business Model Innovation, From Systematic Literature Review to Future Research Directions*, Switzerland, 2017
- ANDS - OSTERHUIS, *Transfer Pricing After BEPS: Where Are We and Where Should We Be Going?*, The tax magazine, march 2017
- ANGIVIK, *The future of the arm's length principle*, TP Week, December 2017
- ARNOLD, *Article 5: Permanent Establishment,* Global Tax Treaty Commentaries IBFD, 2017
- ARNOLD, *International Tax Primer*, s ed., United Kingdom, 2015
- ARNOLD, *Tax Treaty News: An Overview of the UN Model (2011)*, Bull. Intl. Taxn., 2012

· AULETTA, Attività, Enc. Del dir., III, Milano 1958

· AULT, HUGH, *Comparative Income Taxation*, London and Boston, 1997

· AVI-YONAH - CLAUSING, *Reforming Corporate Taxation in a Global Economy: A Proposal to Adopt Formulary Apportionment*, in Furman – Bordoff (eds.), *Path to Prosperity: Hamilton Project Ideas on Income Security, Education and Taxes*, 2008

· AVI-YONAH – BENSHALOM, *Formulary Apportionment – Myths and Prospects*, World Tax J., 2011

· AVI-YONAH – XU, *Evaluating BEPS: A Reconsideration of the Benefits Principle and Proposal for UN Oversight*, Harv. Bus. I., 2016

· AVI-YONAH, *Between Formulary Apportionment and the OECD Guidelines: A Proposal for Reconciliation*, World Tax. J., 2010

· AVI-YONAH, *International Tax as International Law – An Analysis of the international Tax Regime,* Cambridge, 2007

· AVI-YONAH, *International Taxation of Electronic Commerce,* Tax L. Rev., 1997

· AVI-YONAH, *The rise and fall of arm's length: a study in the evolution of US International taxation*, Virginia Tax Review, 1995

· AVI-YONAH, *The Rise and Fall of Arm's Length: A Study in the Evolution of U. S. International Taxation,* Tax. Rev., 2007

· AVOLIO – SENCAR, *Stabile organizzazione e* Action *7 del progetto BEPS dell'OCSE*, in Mayr – Santacroce, *La stabile organizzazione delle imprese industriali e commerciali*, Milano, 2016

· AVOLIO, *Stabile organizzazione e attività preparatorie e ausiliarie: cosa cambia per le imprese con il BEPS,* Il Fisco, 2016

· AXON, *Facebook's Open Graph Personalizes the Web,* Mashable, Apr. 2010; M. ARRINGTON, *Facebook Responds to MySpace With Facebook Connect*, TechCrunch, May 2008

· BADEN - FULLER - MORGAN, *Business models as models,* Long Range Planning, 2010

· BÁEZ MORENO - BRAUNER, *Withholding Taxes in the Service of BEPS Action 1: Address the Tax Challenges of the Digital Economy*, IBFD White Paper, 2015

· BÁEZ Moreno, *A note on Some Radical Alternatives to the Existing International corporate Tax and Their Implications for the Digital(ized) Economy*, Intertax, 2018

· BÁEZ Moreno, *The Taxation of Technical Services under the United Nations Model Double Taxation Convention: A Rushed – Yet Appropriate – Proposal for (Developing) Countries?*, World Tax Journal, 2015

· BAGGIO, *Il principio di territorialità ed i limiti alla potestà tributaria*, Milano, 2009

· BAL, *(Mis)guided by the Value Creation Principle – Can New Concepts Solved Old Problems?*, Bull. Intl. Taxn., 2018

· BAL, *Tax implications of Cloud Computing – How Real Taxes Fit into Virtual Clouds*, Bull, Intl. Taxn., 2012

· BAL, *The Sky's the Limit – Cloud-Based Services in an International Perspective*, Bull. Intl. Taxn., 2014

· BAUER – SCHLUND – HORNUNG – SCHULER, *Digitalization of industrial value chains – a review and evaluation of existing use cases of industry 4.0 in Germany*, LogForum 14 (3), 2018

· BEALE, *A Treatise on the Conflict of Laws,* 1935

· BEATTIE - SMITH, *Value Creation and Business Models: Refocusing the Intellectual Capital Debate*, British Accounting Review, 2003

· BECHMANN – LOMBORG, *Mapping actor roles in social media: Different perspectives on value creation in theories of user participation*, New Media & Society, 2012

· BECKER – ENGLISH, *EU Digital Services Tax: A Populist and Flawed Proposal*, Kluwer International Tax Blog, 2018, available at http://kluwertaxblog.com/2018/03/16/eu-digital-services-tax-populist-flawed-proposal

· BECKER – ENGLISH, *Taxing where Value is Created: What's 'User Involvement' Got to Do with it?*, Intertax, 2019

· BECKER, *The Principle of Territoriality and Corporate Income Taxation, Part. 1,* Bull. Intl. Taxn. 5, 2016

- BELLANGER, *Contribution a la Misiòn de expertos sobre la fiscalidad de la economìa digital- La liberté compétitive, Paris,* 2013
- BENSHALOM, *The Quest to Tax Financial Income in a Global Economy: Emerging to an Allocation Phase*, Tax Rev., 2008
- BESSON, *Sovereignty*, Max Planck Encyclopedia of Public International Law, 2011
- BETHLEHEM, *The end of geography: the changing nature of the international system and the challenge to international law*, in European Journal of International Law, 2014
- BILLE, *La Souveraineté Fiscale de Etats et l'integration Economique internationale*, in II *Publication of the Bureu International de Documentation Fiscale*, Amsterdam, 1958
- BIRD, *Taxing Electronic Commerce: The End of the Beginning?*, Bull. Int'l Tax'n, 2005
- BIRD, *Why Tax Corporations?*, Bulletin, 2002
- BIRD, *Why Tax Corporations?*, Working Paper prepared for the *Technical Committee on Business Taxation*, Ottawa, Department of Finance, 1996
- BLABLACAR, *Comment in: OECD Tax Challenges of Digitalization*, Comments Received on the Request for Input, Part II, 25 October 2017
- BLOOMBERG, *Europe's Digital Tax is a Bad Idea*, 2018, available at https://www.bloomberg.com/view/articles/2018-04-11/europe-s-digital-tax-is-a-bad-idea.
- BLUM, *Permanent Establishments and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – The Nexus Criterion Redefined?*, Bull. Intl. Taxn., 2015
- BOIRE, *Data Mining for Managers: How to Use Data to Solve Business Challenges*, 2014
- BONNET – WESTERMANN, *The best digital business models put evolution before revolution*, Harvard Business Review, 2015
- BOOKS, *The Definition of Income*, Georgetown University Law Center, 2018
- BOOS, *International Transfer Pricing: The Valuation of Intangible Assets*, The Hague, 2003

· BOUNFOUR – T. MIYAGAWA, *Intangibles, Market Failure and innovation Performance,* Switzerland, 2015

· BOWMAN – AMBROSINI, *Value Creation versus Value Capture: Towards a Coherent Definition of Value in Strategy*, Brit. J. Mgt., 2000

· BRAUNER - BAEZ*, Withholding Taxes in the Service of BEPS Action 1: Address the Tax Challenges of the Digital Economy*, IBFD White Paper, 2 Feb. 2015

· BRAUNER – P. PISTONE, *Some Comments on the Attribution of Profits to the Digital Permanent Establishment*, Bull. Intl. Taxn. 2018

· BRAUNER – PISTONE, *Adapting Current International Taxation to New Business Models: Two Proposals for the European Union,* Bull. Intl. Taxn., 2017

· BRAUNER, *Formula Based Transfer Pricing*, in Brauner - McMahon (eds.), *The Proper Tax Base: Structural Fairness from an International and Comparative* Perspective, Kluwer Law International, 2012.

· BRAUNER, *Transfer Pricing in BEPS: First Round- Business Interests Win (But, Not in Knock-Out),* Intertax, 2015

· BRAUNER, *Value in the Eye of the Beholder: The Valuation of Intangibles for Transfer Pricing Purposes*, Virginia Tax Review, 2008

· BROWN, *An equity -based multilateral approach for sourcing income among nations*, Florida Tax review, 2011

· BROWNLIE, *Principle of Public International law 3*, Oxford, 1998

· BRUINS - EINAUDI - SELIGMAN - SIR JOSIAH STAMP, *Report on Double Taxation*, submitted to the Financial Committee, League Nations, Geneva, 5 April 1923, E. F. S.

· BRUNS, *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage,* New York, 2008

· BRUNS, *The Future is User-Led: The Path towards Widespread Produsage*, Fibreculture Publications, 2008

· BRYNJOLFSSON – MCAFEE, *The Second Machine Ages: Work, Progress and Prosperity in a Time of Brilliant Technologies*, New York, 2014

- BULLEN, *Arm's Length Transaction Structures – Recognizing and restructuring controlled transactions in transfer pricing*, Amsterdam, 2011
- BURROW, *Ireland to Stop New "Double Irish" Arrangements*, Tax Notes, 2015
- BYRNES, *Byrnes'Comments on the OECD's "Unified Approach" to Allocation of Profits of Digital Business*, Kluwer International Tax Blog, Oct. 2019
- CALDERON CARRERO, *The OECD Transfer Pricing Guidelines as a Source of Tax Law: Is Globalization Reaching the Tax Law?,* Intertax, 2007
- CALDERÒN, *The OECD Transfer Pricing Guidelines as a Source of Tax Law: Is Globalization Reaching the Tax Law?*, Intertax, 2007
- CARPENTIERI – MICOSSI - PARASCANDOLO, *Tassazione d'impresa ed economia digitale*, Assonime, 2019
- CARPENTIERI, *La crisi del binomio diritto-territorio e la tassazione delle imprese multinazionali*, Riv. Dir. Trib., 2018
- CARROLL, *Taxation of Foreign and National Enterprises*, League of Nations, Geneva, 1933
- CASADESUS - MASANELL – RICART, *From strategy to business models and onto Tactics*, Long Range Planning, 2010
- CAVELTI – JAAG – ROHNER, *Why Corporate Taxation Should Mean Source Taxation: A Response to the OECD's Actions Against Base Erosion and Profit Shifting*, World Tax J., 2017
- CERIANI - RICOTTI, *Riflessioni sul coordinamento internazionale della fiscalità d'impresa*, Rass. Trib., 2019
- CERIONI, *The New 'Google Tax': The 'Beginning of the End' for Tax Residence as a Connecting Factor for Tax Jurisdiction?*, Eur. Tax'n, 2015
- CHESBROUGH - ROSENBLOOM, *The role of the business model in capturing value from innovation: Evidence from Xerox corporation's technology spin-off firms,* Industrial and Corporate Change, 2002
- CHRÉTIEN, *L'exercice de la function legislative fiscal en droit de gens*, in *La Technique de droit public. Tome 2. Etudes en l'honneur de Georges Scells*, Paris, 1950

· CHRISTIANS, *Hard Law and Soft Law in International Taxation*, Wisconsin International Law Journal, 2007

· CHRISTIANS, *Taxing According to Value Creation,* Tax Notes International, 2018,

· CIPOLLINA, *CFC Legislation and abuse of freedom of establishment: the Cadbury Schweppes case*, in Riv. dirt. Fin., 2007

· COASE*, Organisation and Markets,* J. Econ. Persps., 1991

· COASE, *The Institutional Structure of Production*, Am. Econ. Rev., 1992; H. A. SIMON, *A Formal Theory of the Employment Relationship*, Econometrica, 1951

· COASE, *The Nature of the Firm*, Economica, 1937

· COCKFIELD, *Reforming the permanent establishment principle through a quantitative economic presence test*, Canadian Business Law Journal, 2003

· COCKFIELD, *The Law and Economics of Digital Taxation: Challenges to Traditional Tax Laws and Principles*, Bull. Intl. Fiscal Docn. 12, 2002

· COLLIN – COLIN, *Task force on Taxation of the Digital Economy,* Report to the Minister for the Economy and Finance, the Minister for Industrial Recovery, the Minister Delegate for the Budget and the Minister Delegate for Small and Medium-Sized Enterprises, Innovation and the Digital Economy, 2013

· CORDEIRO GUERRA, *Le fattispecie con elementi di estraneità, in Cordeiro Guerra*, Diritto Tributario internazionale, Padova, 2016

· CORRADO – HULTEN – SICHEL, *Intangible capital and US economic growth*, Review of Income and Wealth, 2009

· CORRADO – HULTEN, *Internationalization of Intangibles*, 2013

· COSCIANI, *Aspetti economici dell'imposta sulle società*, Quaderno dell'Associazione fra le società italiane per azioni, Roma

· COTTANI, *Formulary Apportionment: A Revamp in the Post-Base Erosion and Profit Shifting Era?*, Intertax, 2016

· COTTANI, *Transfer Pricing,* IBFD online book, 2011

· CREZELIUS, *Beschränkte Steuerpflicht und Gestaltungsmißbrauch, Der betrieb*, 1984

· D'SOUZA – D. WILLIAMS, *The Digital Economy*, Bank of Canadian Review, 2017

· DARBY – LERNASTER, *Double Irish More than Doubles the Tax Savings: Hybrid Structure Reduces Irish, U.S and Worldwide Taxation*, Practical US/International Tax Strategies, vol. 11, 2007

· DE GRAAF – VISSER, *BEPS: Will the Current Commitments and Peer Review Model Prove Effective?*, EC Tax Review, 2018

· DE JONG – NEUVEL – UCEDA, *Dealing with Data in a Digital Economy*, Int. Transfer Pricing Journal, 2018

· DE LANGE – LANKHORST - HAFKENSCHEID, *Recognition of Transactions between Associated Enterprises: On Behaving in a Commercially Rational Manner, Decision-Making Traps and BEPS*, Intl. Transfer Pricing J., 2015

· DE WILDE, *Comparing Tax Policy Response for the Digitalizing Economy: Fold or All-in*, Intertax, 2018

· DE WILDE, *Tax Jurisdiction in a Digitalizing Economy; Why 'Online Profits' are so Hard to Pin Down*, Intertax, 2015

· DEMIL – LECOCQ, *Business model evolution. In search of dynamic consistency,* Long Range Planning, 2010

· DESJARDINS, *These are the world's largest tech giants, World Economic Forum*, 16 July 2018

· DEVEREAUX - VELLA, *Are We Heading Towards a Corporate Tax System Fit for the 21st Century?*, Fiscal Studies, 2014

· DEVEREUX - VELLA, *Response to the EU Commission's Consultation – Fair Taxation of the Digital Economy*, Oxford University Centre for Business Taxation, 2018

· DEVEREUX – AUERBACH – KEEN – OSTERHUIS – SCHÖN – VELLA, *Residual profit allocation by income. A paper of the Oxford International Tax Group chaired by Michael P. Devereux,* March 2019

· DEVEREUX – DE LA FERIA, *Designing and implementing a destination-based corporate tax,* Oxford University Center for Business Taxation, Working Paper, 2014,

· DEVEREUX – VELLA, *Implications of Digitalization for International Corporate Tax Reform*, Working Paper series, July 2017

- DEVEREUX – VELLA, *Value Creation as the Fundamental Principle of the International corporate Tax System*, European Tax Policy Forum, 31 July 2018
- DEVEREUX, *The Digital Services "Sutton"* Tax, available at http://business-taxation.sbsblogs.co.uk/2018/10/23/the-digital-services-sutton-tax/
- DIMITROPOULOU, *The Digital Services Tax and Fundamental Freedoms: Appraisal Under the Doctrine of Measures Having Equivalent Effect to Quantitative Restrictions*, Intertax, 2019
- DIMITROPOULOU, *The Proposal EU Digital Services Tax: An Anti-Protectionist Appraisal Under EU Primary Law,* Intertax, 2019
- DODGE, *Does the new benefit principle (or the partnership theory) of income taxation mandate an income tax at both. The individual and corporate levels?*, Florida State University College of Law, Public Law and Legal Theory, Working Paper, March 2005
- DOURADO, *Aggressive Tax Planning in EU Law and in the Light of BEPS: The EC Recommendation on Aggressive Tax Planning and BEPS Actions 2 and 6*, Intertax, 2015
- DOURADO, *Digital Taxation Opens the Pandora Box: the OECD Interim Report and the European Commission Proposal,* Intertax, 2018
- DOURAdo, *Is There a Light at the End of the Tunnel of the International Tax System?*, Intertax, 2018
- DRUCKER, *The Theory of the Business,* Harvard Business Review, 1994
- DUPLESSIS, *Le vertige et la soft law: reactions doctinales en Droit International,* Revue Quèbècoise de Droit International, vol. Hors-série, Études en hommage à la Professeure, 2007
- DURST, *Analysis of a formulary system,* part VII: *the sales factor*, Tax management Transfer Pricing Report, 2014
- DUTRIEZ, *Attribution of Profits to a Permanent Establishment of a Company Engaged on Online Sales of Goods through a Local Warehouse,* International Transfer Pricing Journal, 2018
- EDEN – DACIN – WAN, *Standards across borders: cross-border diffusion of the arm's length standard in North America*, Accounting Organization and Society, 2001

- EGGER – EGGERT – WINNER, *saving taxes through foreign plant ownership*, Journal of International Economics, 2010
- EL SAWY – MALHOTRA – GOSAIN – YOUNG, *IT-intensive value innovation in the electronic economy: Insights from Marshall industries*, MIS Quarterly, 1999
- EL SAWY – PEREIRA, *Business Modelling in the Dynamic Digital Space, An Ecosystem Approach*, London, 2013
- ELLIOT – EMMANUEL, *International Transfer Pricing,* in *The International Taxation System*, Boston, 2002
- ENAUDI, *Premesse dottrinali della riforma fiscale sulle società per azioni,* Riv. soc. com., 1911
- ENGEL, *Interpretation of tax treaties under International Law,* IBFD, 2004
- ESCRIBANO, *Jurisdiction to Tax Corporate Income Pursuant to the Presumptive Benefit Principle. A Critical Analysis of Structural Paradigms Underlying Corporate Income Taxation and Proposals for Reform*, United Kingdom, 2019
- EVERS – MILLER – SPENGEL, *Intellectual property box regimes: effective tax rates and tax policy considerations*, International Tax and Public Finance, 2014
- EY, *Countries implementation of BEPS Actions 8-10 and 13,* August 2015
- FALCÃO - MICHEL, *Assessing the Tax Challenges of the Digital Economy: An Eye-Opening Case Study*, Intertax, 2014
- FALCÃO – MICHAEL, *Scope and Interpretation of Article 12A: Assessing the Impact of the New Fees for Technical Services Article,* British Tax Review, 2018
- FANELLI, *Introduzione alla teoria giuridica dell'impresa*, Milano, 1950
- FORBES, *At $ 68 Billion Valuation, Uber Will Be Bigger than GM, Ford, and Honda,* 2015, available at https://www.forbes.com/sites/liyanchen/2015/12/04/at-68-billion-valuation-uber-will-be-bigger-than-gm-ford-and-honda/#75d2521a32e3
- FORST, *The Continuing Vitality of Sourced-Based Taxation in the Electronic Age*, in Taxes Notes International, 1997
- FRANSONI, La territorialità del diritto tributario, Milano, 2004

- FRIEDERICH, *Gibt es eine Völkerrechtliche für die hohe der Besteuerung?,* Köln, 1972
- FUEST – HEBOUS – RIEDEL, *International debt shifting and multinational firms in developing economies*, Economics Letters, 2011
- FUEST – SPENGEL – FINKE – HECKEMEYER – NUSSER, *Profit Shifting and "Aggressive" Tax Planning by Multinational Firms: Issues and Options for Reform*, World Tax Journal, 2013
- FUEST, *Besteuerung multinationaler Unternehmen: keine Alleingänge!,* Wirtschaftdienst, vol. 93, 2013
- GADZO, *Nexus requirements for taxation of non-resident' business income: a normative evaluation in the context of the global economy*, available at https://www.academia.edu/31765430/Nexus_requirements_for_taxation_of_nonresidents_business_income_a_normative_evaluation_in_the_context_of_the_global_economy
- GADŽO, *The Principle of 'Nexus' or 'Genuine link' as a Keystone of International income Tax Law: A Reappraisal*, Intertax, 2018
- GAOUA, *Taxation of the Digital Economy: French Reflections*, Eur. Taxn, 2014
- GAOUA, *Taxation of the Digital Economy: French Reflections*, Eur. Tax'n, 2014
- GARBARINO – D'AVOSSA, *The OECD Intangibles Project and the Concept of "Intangibles Related Return"*, European Taxation, 2015
- GARCÌA - AYUSO, *Intangibles: Lessons from the past and a look into the future*, Journal of Intellectual Capital, 2003
- GAWER – COSUMANO, *How companies become platform leaders,* MIT Sloan Management Review, 2008
- GEYLER, *Steuerliche Mehrfachbelasting und ihre normative Abwehr*, Bd. I., *Mehrfachbesteuerung in Rechtssinn*, 1931
- GOLDFERIN – NGUYEN, *Data is not the new oil*, Techcrunch, 2018, available at https://www.wired.com/story/no-data-is-not-the-new-oil/
- GOLDMANN, *Inside Relative Normativity: From Sources to Stansard Instruments for the Exercise of International Public Authority,* German Law Journal, 2008

· GORDIJN - OSTENWALDER - PIGUER, *Comparing two business model ontologies for designing e-business models and value constellations* in 18th BLED Conference, June 6–8, 2005

· GORDON, *Perspectives on the Rise and Fall of American Growth*, American Economic Review, 2016

· GORDON, *Secular Stagnation: A Supply-Side View*, American Economic Review, 2015

· GRAVELLE, *The Economic Effects of Taxing Capital Income*, Cambridge, 1994

· GREIL, *The Dealing at Arm's Length Fallacy: A way Forward to a Formula-Based Transactional Profit Split?*, Intertax, 2017

· GRIFFEL, Growth Hackling: Lean Marketing for Startups, 22 October 2012

· GRINBERG, *User Participation in Value Creation*, British Tax Review, 2018

· GRIZIOTTI, *L'Imposition Fiscale des Entrangers*, RdC 1, 1926,

· GRÖNROOS, *Value co-creation in a service logic – a critical analysis. Mark. Theory*, 2011

· GROSSEFELD, *Basisgesellschaften im internationalen Steuerrecht,* Tübingen, 1974

· GRUBERT – MUTTI, *Tariffs and Transfer Pricing in Multinational Corporate Decision Making*, The Review of Economics and Statistics, 1991

· GUPTA, *'Cloud' – A Technological Odyssey*, Asia-Pac. Tax Bull., 2014

· GUPTA, *Recent Trends in Transfer Pricing Intangibles: GAAR and BEPS*, India, 2017

· GUZMAN - MEYER, *International Soft Law*, Journal Legal Analysis, 2010

· GUZMAN, *Choice of Law: New Foundations*, The Georgetown Law Journal, 2001

· HALLERSTEIN, *Jurisdiction to Tax Income and Consumption in the New Economy: A Theoratical and Comparative Perspective*, Georgia Law Review, 2003

· HAMAEKERS, *Arm's Length – How Long?*, in an *International and Comparative Taxation,* The Hague, 2002

· HAMEL, *The end of progress*, Business Strategy Review, 2000

· HAMMER, *Will the Arm's Length Standard stand the Test of Time? The Specter of Apportionment*, Intertax, 1996

· HANDL, *Extra-territoriality and transnational legal authority*, in Handl – Zekoll – Zumbansen, *Beyond Territoriality: Transnational Legal Authority in an Age of Globalization*, Leiden, 2012

· HARRIS, *Corporate/shareholder income taxation and allocating taxing rights between countries*, Amsterdam, 1996

· HASKEL – WESTLAKE, *Capitalism without Capital. The Rise of the Intangible economy,* Princenton, 2017

· HASLEHNER, *Taxing where value is created in a post-BEPS (digitalized) world?*, Kluwer International Tax Blog, 2019

· HECKEMEYER – OVERESCH, *Multinationals' Profit Response to Tax Differentials: Effect Size and Shifting Channels*, ZEW-Discussion Paper No. 13-045, 2013

· HELDERMAN, *A New Era in Determining Arm's Length Compensation for Intangibles? A Comparative Overview of Existing and Possible Future Transfer Pricing Principles,* Intl. Transfer Pricing J., 2013

· HELLERSTEIN, *A US Subnational Perspective on the "Logic" of Taxing income on a "Market Basis"*, Bull. Intl. Taxn., 2018

· HELLERSTEIN, *International Income Allocation in the Twenty-first Century: The Case for Formulary Apportionment*, Int'l Transfer Pricing J., 2005

· HELLERSTEIN, *Jurisdiction to Tax in the Digital Economy: Permanent and Other Establishments*, Bull. Int'l Tax'n, 2014

· HELLERSTEIN, *State Taxation of Electronic Commerce*, Tax L. Rev., 1996/1997

· HENSHALL, *Global Transfer Pricing,* London, 2016

· HENSHALL, *Global transfer pricing: principles and practice*, Haywards Heath, 2013

· HERZFELD, *The Case against BEPS: Lessons for Tax Coordination*, Fla. Tax. Rev., 2017

· HEY, *"Taxation Where Value is Created" and the OECD/G20 Base Erosion and Profit Shifting Initiative,* Bull. Intl. Taxn., 2018

· HIEMANN – REICHELSTEIN, *Transfer Pricing in Multinational Corporations: an Integrated Management and Tax Perspective*, in Schön - Kai A. Konrad (eds.), *Fundamentals of International transfer Pricing in Law and Economics,* Berlin, 2012

· HIGGINS, *Problem and Process: International Law and How we Use it*, Oxford, 1994

· HIGINBOTHAM, *When the Arm's Length Isn't Really Arm's Length: Issues in Application of the Arm's Length Standard,* Intertax, 1998

· HL BUXBAUM, *Territory, Territoriality and the Resolution of Jurisdictional Conflict*, in American Journal of comparative Law, 2009

· HMEPHILL, *Capitalism without Capital: The Rise of the Intangible Economy*, Cato Journal, 2018

· Hobbes, *Leviathan*, 1651

· HOFMANN – RIEDEL, *Comment on J. Becker & J. Englisch, "Taxing where Value is Created: What's "User Involvement" Got to Do with it?* Intertax, 2019

· HOFTSRA, *Inleidign tot het Nederlands Belastingrecht*, 1972

· HONGLER - PISTONE, *Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy*, IBFD White Paper, 2015

· HUIZINGA – LAEVEN, *International profit shifting within multinationals: A multi-country perspective*, Journal of international Economics, 2012

· IFA, *Cahiers De Droit Fiscal International,* Vol. 102, The Netherlands, 2017

· IZZO – MCCORMICK - REILLY, *A More Subjective Permanent Establishment Standard*, Daily Tax Report, Bloomberg 2016

· JENNINGS, *Extraterritorial Jurisdiction and the United State Antitrust Laws,* in Maryland Journal of International Law, 1957

· JIMENEZ, *BEPS, the Digital(ized) Economy and the Taxation of Services and Rpyalties*, Intertax, 2018

· JINYAN LI, *Protecting the Tax Base in the Digital Economy, Paper on Selected Topics in Protecting the Tax Base of Developing Countries,* 2014

· JINYAN LI, *Soft Law, Hard Realities and Pragmatic Suggestions: Critiquing the OECD Transfer Pricing Guidelines,* in *MPI Studies in Tax Law and Public Finance*, 2012

· JINYAN, *International taxation in the age of electronic commerce: a comparative study*, Toronto, 2003

· JOHNSON – CHRISTENSEN – KAGERMANN, *Reinventing your business model,* Harvard Business Review, 2008

· KADET, *Expansion of the Profit-Split Method: The Wave of the Future*, Tax Note International, 2015

· KEMMEREN, *Principle of Origin in Tax Conventions, A Rethinking of Models*, Tilburg, 2001

· KEMMEREN, *Should the Taxation of the Digital Economy Really be Different?,* EC Tax Rev., 2018

· KEMMEREN, *Source of income in Globalizing Economies: Overview of the Issues and a Plea for an Origin-Based Approach*, in Bulletin, 2006

· KENECHTLE, *Basic Problems in International Fiscal Law*, London, 1979

· KLEINBARD, *Stateless Income*, Florida Tax Review, 2011

· KLEINBARD*, The Lessons of Stateless Income*, Tax Law Review, 2011

· KLEINBARD, *Through a Latte Darkly: Starbuck's Stateless Income Planning*, Tax Notes, 2013

· KOFLER - MAYR - SCHLAGER, *Taxation of the Digital Economy: A Pragmatic Approach to Short-Term Measures*, Eur. Tax'n, 2018

· KOFLER – SINNIG, *Equalization Taxes and the EU's 'Digital Services Tax'*, Intertax, 2019

· KPMG, *The end of the arm's length principle?*, 2018.

· KREUTZER – NEUGEBAUER – PATTLOCK, *Digital Business Leadership*, *Digital Transformation, Model innovation, Agile Organization, Change Management*, Berlin, 2018

· KROPPEN et al., *Profit Split, the Future of Transfer Pricing? Arm's Length Principle and Formulary Apportionment Revisited from a Theoretical and a Practical Perspective*, in Fundamental of Transfer Pricing in Law and Economics, 2012

- KUDERT, *Steuerberatung,* ESV, 1999
- KUIJPER, *The European Community and the US Pipeline Embargo: Comments on Comments*, in German Yearbook of International Law, 1984
- LANDRETH – COLANDER, *History of Economic Thought: A Survey of Undergraduate Textbooks*, Boston, 2014
- LANGBEIN, *The Unitary Methods and the Myth of Arm's Length*, Tax notes, 1986
- LANTHIER, *The Concept of Residence*, in B. ARNOLD – J. SASSEVILLE, *Special Seminar on Canadian Tax Treaties: Policy and Practice*, Kingston, 2001
- LENNARD, *Act of creation: the OECD/G230 test of "Value Creation" as a basis for taxing rights and its relevance to developing countries*, 2018, available at https://unctad.org/en/PublicationChapters/diaeia2018d5a4_en.pdf
- LENNARD, *Updated on the United Nations Tax Committee Developments*, Asia-Pac. Tax. Bull., 2014
- LEPAK – SMITH – TAYLOR*, Value Creation and Value Capture: A Multilevel Perspective*¸ Academy of Management Review, 2007
- LEV, *Intangibles: Management, measurement and reporting,* Washington DC: Brookings Institution Press, 2000
- LÒPEZ LUBIÀN – ESTEVES, *The New Digital Economy,* in *Value in a Digital World*, *How to assess business models and measure value in a digital world*, Switzerland, 2017
- LOWE, *Blocking Extraterritorial jurisdiction the British Protection of Trading Interests Act*, American Journal of International Law,1980
- LUCKHAUPT – OVERESCH – SCHREIBER, *The OECD Approach to Transfer Pricing: Acritical Assessment and Proposal*, in Schön – Konrad, *Fundamentals of International Transfer Pricing in Law and Economics*, Spring, 2012
- LUPI – VERSIGLIONI, *Il reddito liquido" e la relativizzazione del principio di competenza,* Dial. Trib., 2015
- MABRY, *Multinational Corporations and U.S. Technology Policy: Rethinking the Concept of Corporate Nationality*, in the Georgetown Law Journal, 1999

- MACHLUP, *The production and distribution of knowledge in the united States*, USA, 1962
- MAGRETTA, *Why business models matter*, Harvard Business Review, 2002
- MANDEL, *Beyond Goods and Services. The (Unmeasured) Rise of the Data-Driven Economy*, Oct. 2012, available at https://www.progressivepolicy.org/wpcontent/uploads/2012/10/10.2012-Mandel_Beyond-Goods-and-Services_The-Unmeasured-Rise-of-the-Data-Driven-Economy.pdf.
- MANN, *Studies in International law,* Oxford, 1973
- MANN, *The doctrine of Jurisdiction in International Law*, 1964
- MARR, *Here's Why Data Is not the new oil*, Forbes, 5 Mar 2018
- MARTHA, *The Jurisdiction to tax in International Law: Theory and Practice of legislative Fiscal Jurisdiction*, Boston, 1989
- MAS-COLELL – WHINSTON – GREEN, *Microeconomic Theory*, Oxford, 1995
- MASON – PARADA, *The Illegality of Digital Services Taxes Under EU Law: Size Matters*, Virginia Law and Economics Research Paper No., 2018
- MAYER SCHÖNBERGER – CUCKIER, *Big Data*, Italy, 2013
- MAZZUCATO, *The Value of Everything. Making and taking in the Global Economy*, 2018
- MCLURE, *Implementing State Corporate Income Taxes in the Digital Age*, Nat'l Tax J., 2000
- MEHTA, '*Equalization Levy' Proposal in Indian Finance Bill 2016: Is It Legitimate Tax Policy or an Attempt of Treaty Dodging?,* Asia-Pac. Tax Bull., 2016
- MELIS, *Coordinamento fiscale dell'Unione Europea*, Enc. dir. Annali, Milano, 2007
- MENGER, *Principles of Economics*, Auburn, 1976
- MERKS, *Tax Evasion, Tax Avoidance and Tax Planning*, Intertax, 2006
- MGI, *Big Data: The next frontier for innovation, competition, and productivity*, 2011,https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/big-data-the-next-frontier-for-innovation.

- MIESZKOWSKI - MORGAN, *The national Effects of Differential State Corporate Income Taxes on Multistate Corporations'*, in Charles E. McLure, *The State Corporation Income Tax: Issues in Worldwide Unitary Combination*, 1984
- MORSE, *Revisiting Global Formulary Apportionment*, Va. Tax. Rev., 2010
- MORSE, *Value Creation: A Standard in Search of a Process,* Bull. Intl. Taxn. 2018
- MURPHY, *The Missing Billions – The UK Tax Gap,* Touchstone Pamphlet, 2008
- MUSGRAVE - MUSGRAVE, *Inter-Nation Equity,* in *Modern Fiscal Issue: Essays in Honor of Carl S. Shop*, Toronto, 1972
- NABBEN, *Intellectual Property Tax Planning in the light of Base Erosion and Profit Shifting*, Master Thesis, Tilburg University, 2017
- NAPOLITANO, *Il possesso e le attività produttive del reddito fiscale* d'impresa, Milano 1982
- NARAYANAN, *Taxing Digital Transactional Corporations: Indian Policy Initiatives*, International Centre for Tax and Development, available at https://www.ictd.ac/blog/taxing-digital-transnational-corporations-indian-policy-initiatives/.
- NAVARRO, *La modificaciòn de las pautas sobre precios de transferencia (Acciones 8-10): ¿cambio o evoluciòn?* in Almudí – Ferreras – Hernàndez (dirs.), *El plan de accíon sobre erosión de bases imponibles y traslado de beneficios (BEPS): G-20, OECD y Unión Europea*, Pamplona, 2017
- NAVARRO, *Los ajustes transaccionales en la normatva sobre precios de transferencia,* available at http://e-archivio.uc3m.es/handle/10016/23300, 2016
- NIELSEN, *The Arm's Length Test: A Rule of Law – or an Excuse for Arbitrary Taxation?*, Intertax, 1979
- NORR, *Jurisdiction to tax and International Income,* in Tax Law Review, 1962
- NOUEL, *The New article 7 of the OECD Model Tax convention: The End of the Road?*, Bull. Intl. Taxn., 2011
- OFFERMANNS – HUIBREGTSE – VERDONER – MICHALAK, *Bridging the CCCTB and the Arm's Length Principle – A Value Chain Analysis Approach*, European Taxation, 2017

· OLBERT - SPENGEL – WEMER, *Measuring and Interpreting Countries' Tax Attractiveness for Investments in Digital Business Models,* Intertax, 2019

· OLBERT - SPENGEL, *International Taxation in the Digital Economy: Challenge Accepted?*, World Tax J., 2017

· OLBERT – SPENGEL, *Taxation in the Digital Economy – Recent Policy Developments and the Question of Value Creation*, International tax Studies, 2019

· OWENS, *The Taxation of Multinational Enterprises: An Elusive Balance,* Bull. Intl. Taxn., 2013

· OXFAM, *Tax Havens: Releasing the Hidden Billions for Poverty Eradication*, Oxfam GB Policy Paper, 01 June 2000

· OXMAN, *Jurisdiction of States*, Max Planck Encyclopedia of Public International Law, 2007

· PAARDEKOOPER - VAN DE VEN - VAN ESDONK - CATTEL, *Tax Considerations for the European Union's Digital Single Market Strategy*, Intertax, 2016

· PANAYI, *Advanced Issues in International and European Tax Law*, Oxford, 2015

· PANAYI, *International Tax Law Following the OECD/G20 Base Erosion and Profit Shifting Project*, Bull. Int'l Tax'n, 2016

· PANKIV, *Post-BEPS Application of the Arm's Lenght Principle to Intangibles Structures*, Int.l. Transfer Pricing J., 2016

· PAPARELLA, *Possesso dei redditi ed interposizione fittizia. Contributo allo studio dell'elemento soggettivo nella fattispecie imponibile*, Milano, 2000

· PEGGY - MUSGRAVE, *Principles for Dividing the state Corporate Tax Base,* in Charles E. McLure, (ed.), *The State Corporation Income Tax: Issues in Worldwide Unitary Combination*, 1984

· PELLEFIGUE, *Transfer Pricing Economics for the Digital Economy*, Int'l Transfer Pricing J., 2015

· PENROSE, *The theory of the growth of the firm*, Oxford, 1959

· PETRUZZI - BURIAK, *Addressing Tax Challenges of the Digitalisation of the Economy – A Possible Answer in the Proper Application of the Transfer pricing Rules?,* Bull. Intl. Taxn., 2018

· PETRUZZI – KOUKOULIOLI, *The European Commission's Proposal on Corporate taxation and Significant Digital Presence: A Preliminary Assessment*, European Taxation, 2018

· PETRUZZI – PENG, *The Profit Split Method: A Holistic View of BEPS in Transfer Pricing*, Transfer Pricing International, 2017

· PETRUZZI – ROMERO J. S. TAVARES, *Transfer pricing and Value Creation*, Vienna, 2019

· PETRUZZI, *The Arm's Length Principle: Between Legal Fiction and Economic Reality*, in M. Lang *et al.* (eds.), *Transfer pricing in a Post-BEPS World,* The Netherlands, 2016

· PICHHADZE, *Exposing Unaddressed Issues in the OECD's BEPS Project: What About the Roles and Implications of Contract Interpretation Law and Private International Law* in *Transfer Pricing Arm's Length Comparability Analysis?*, World Tax Journal, 2015

· PINKERNELL, *Ein Musterfall zur internationalen Steuerminimierung durch US-Kozerne*, Steuer und Wirtschaft, Leseprobe, 2012

· PINTO, *E-commerce and Source-based Income Taxation*, in Online Books IBFD, 2003

· PINTO, *Exclusive Source or Residence-Based-Taxation – Is a New and Simpler World Tax Order Possible?*, Bulletin For International Taxation, 2007

· PINTO, *The Need to Reconceptualize the Permanent Establishment Threshold*, 18th Annual Conference of the Australian Tax Teachers'Association, 30 January 2006

· PISTONE – PINTO NOGUEIRA – ANDRADE, *The 2019 OECD Proposals for addressing the tax challenges of the digitalization of the economy: an assessment*, Intl. Tax Stud., 2019

· PISTONE, *Diritto tributario internazionale*, Turin, 2017

· PLEIJSIER, *Get rid of Corporate Income Tax*, Kluwer International Tax Blog, 2017

· POPA, *Taxation of the Digital Economy in Selected Countries – Early Echoes of BEPS and EU Initiatives*, Eur. Tax'n, 2016

· PORTER – MILLAR, *How information gives you competitive advantage,* 1985

- QUAH, *Digital goods and the new economy,* CEP Discussion Papers, London School of Economics, 2003
- QUARATINO, *New Provisions Regarding the Taxation of the Digital Economy*, Eur. Tax'n, 2014
- QURESHI, *The Public International Law of Taxation: Text, Cases and Materials*, London, 1994
- RAMSEY, *Escaping international Comity*, in Iowa Law Review, 1997-1998
- RECTENWALD, *A Proposed Framework for Resolving the Transfer Pricing Problem: Allocating the Tax Base of Multinational Entities on Real Economic indicators of Benefit and Burden*, Duke J. Comp. & Intl. L., 2012,
- REQUENA - GONZÁLEZ, *Adapting the Concept of Permanent Establishment to the Context of Digital Commerce: From Fixity to Significant Digital Economic Presence*, Intertax, 2017
- REYDAMS, *Universal jurisdiction: International and Municipal Legal Perspectives*, Oxford, 2010
- RICARDO, *on the Principles of Political Economy and Taxation*, 1817
- RING, *Who is Making International Tax Policy?: International Organizations as Power Players in a High Stakes World*, *Boston College Law School Research Paper*, Fordham International Law Journal, 2010
- ROBILLARD, *BEPS: Is the OECD Now at the Gates of Global Formulary Apportionment,* Intertax, 2015
- ROIN, *Can the Income Tax Be Saved? The Promises and Pitfalls of Adopting Worldwide Formulary Apportionment*, Tax. L. Rev., 2008
- ROSEMBUJ, *Taxation and Capitalism of Surveillance. Behavioral Surplus*
- ROSENBLOOM, *Banes of an Income Tax: legal fictions, elections, hypothetical determinations, and related-party debt,* Tax Notes International, 2003
- ROWE, *Capitalism without capital: the intangible economy of education reform*, Discourse: Studies in the Cultural Politics of Education, 2019

· RYNGAERT, *Jurisdiction in International Law: United States and European Perspective*, Oxford, 2013

· SACCHETTO, Territorialità (dir. trib.), Enc. del dir., XLVI, Milano, 1992

· SACCHETTO, *La tassazione delle società in Europa tra grandi scenari e realizzazioni concrete*, in Amatucci, *Gli aspetti fiscali dell'impresa*, Torino, 2003

· SAMARI, *European Union – digital Economy and Profit Allocation: The Application of the Profit Split Methods to the Value Created by a "Significant Digital Presence"*, Intl. Transfer Pricing J., 2019

· SANDELL, *The Double Irish and the Dutch Sandwich: How Some U.S. Companies Are Flummoxing the Tax Code*, Tax Notes International, 2012

· SANGIOVANNI, *Democratic Control of Information in the Age of Surveillance Capitalism*, Journal of Applied Philosophy, 2019

· SCELLES, *2 Precis de Droit International Public*, Paris, 1934

· SCHABAHAIAN, *The Andean Subregion and Its Approach to Avoidance or Alleviation of International Double Taxation*, Bull. for International Fiscal Documentation, 2019

· SCHANZ, *The apportionment formula under the European Proposal for a Common Consolidated Corporate Tax Base*, European Taxation, 2018

· SCHÖN, *International tax coordination for a second-best word (part III)*, World Tax Journal, 2010

· SCHÖN, *Ten Questions about Why and How to Tax the Digitalized Economy*, Bull. Intl. Taxn., 2018

· SCHOUERI, *Arm's Length: Beyond the Guidelines of the OECD*, Bull. Intl. Taxn., 2015

· SCHREIBER - FELL, *International Profit Allocation, Intangibles and Sales-Based Transactional Profit Split*, World Tax J., 2017

· SCHREIBER, *Sales-Based Apportionment of Profits*, Bull. Intl. Taxn., 2018

· SCHWAB, *The Fourth Industrial revolution,* Journal of Economic History, 2016

· SCHWARTZ, *Value Creation: Old wine in new bottles or new wine in old bottles?*, Kluwer International Tax Blog, May 21 2018

· SHAPIRO – VARIAN, *Information Rules: A strategic Guide to the Network Economy*, Boston, 1998

· SHAY, *Comment on Selected Aspects of Proposals in Public Consultation Document on Addressing the Challenges of the Digitalization of the Economy*, March 6 2019

· SIMMA – A. TH. MÜLLER, *Exercise and limits of jurisdiction*, in Crawford – KOSKENNIEMI, *The Cambridge Companion to International law,* Cambridge, 2012

· SINGH, *Moneyball: A Quantitative Approach to Angel Investing"*, 2012, http://fr.slideshare.net/

· SINGH, *Taxation of Digital Economy: An Indian Perspective*, Intertax, 2017

· SINGH, *Taxing E-Commerce on the Basis of Permanent Establishment: Critical Evaluation*, Intertax, 2014

· SKAAR ARVID, *Permanent Establishment: Erosion of a Tax Treaty Principle,* 1991

· SMITH, *An Inquiry into the Nature and Consequence of the Wealth of Nations, 1776*

· SMITH, *The Wealth of Nations*, 1776

· SORESCU – FRANBACH – SINGH – RANGASWAMY – BRIDGES, *Innovations in retail business model*, Journal of Retailing, 2011

· SPINOSA – CHAND, *A Long-Term Solution for Taxing Digitalized Business Models: Should the Permanent Establishment Definition Be Modified to Resolve the Issue or Should the Focus Be on a Shared Taxing Rights Mechanism?*, Intertax, 2018

· STAKER, *Jurisdiction*, in M. Evans, *International Law*, Oxford, 2010

· STEVENS, *The duty of Countries and Enterprises to Pay Their fair Share,* Intertax, 2014

· STEWARD, *Ireland Targets "Stateless" Companies in 2014 Budget'*, WTD, 2013

· STEWART, *Abuse and Economic Substance in a Digital BEPS World*, Bull. Int'l Tax'n, 2015

- STIMSON, *Jurisdiction & Power to Tax,* 1933
- SULLIVAN, *Economic Analysis: Should Tech and Drug Firms Pay More Tax?*, Tax. Notes International, 2012
- SWEET, *Formulating International Tax Laws in the Age of Electronic Commerce: The possible Ascendancy of Residence-Based Taxation in an Era of Eroding Traditional Income Tax Principles*, University of Pennsylvania Law Review, 1998
- T'NG, *The Modern Marketplace, the Rise of Intangibles and Transfer Pricing*, Intertax, 2016
- TALBOT, *Knowledge is power: how does government know what it owns – and how does it affect policy?*, 24 December 2018, https://www.civilserviceworld.com/articles/feature/knowledge-power-how-does-government-know-what-it-owns%E2%80%93-and-how-does-it-affect
- TÄUSCHER, *Business Models in the Digital Economy: an Empirical Study of Digital Marketplaces*, Fraunhofer
- TAVARES, *Human Capital in Value Creation and Post-BEPS Tax Policy: An* Outlook, Bull. Intl. Taxn., 2015
- TAVARES, *Multinational firm theory and international tax law: seeking coherence*, World Tax Journal, 2016
- TEECE – LINDEN, *Business models, value capture and the digital enterprise*, Journal of Organization Design, 2017
- THEUNIS, *Profit-allocation based on value creation in the digital economy*, Lund University, 2018
- THOMAS, *Customary International Law and State Taxation of Corporate Income: The Case for the Separate Accounting Method*, Berkeley Journal of International Law, 1996
- TILLINGHAST, *A Matter of Definition: Foreign and Domestic Taxpayers,* in International Tax & Business, 1984
- TIMMERS, *Elctronic commerce – strategies and models for business-to-business trading*, London, 2000
- TING, *iTax: Apple's International Tax Structure and the Double Non-Taxation Issue*, British Tax Review, 2014
- TING, *Old Wine in a New Bottle: Ireland's Revised Definition of Corporate Residence and the War on BEPS'*, British Tax Review, 2014

· TURLEY – CHAMBERLAIN - PETRICCIONE, *A New Dawn for the International Tax System: Evolution from past to future and what role will China play?*, Online Books IBFD, 2016

· VAN RAAD, *Non-Discrimination in International Tax Law,* Deventer, 1986

· VAN SCHANZ, *Zur Frage der Steuerpflicht*, in *Finanzarchiv: Zeitschrift für das gesamte Finanzwesen*, Stuttgart: Mohr, 1892,

· VANISTENDAEL, *An Octogenarian on Value Creation*, Tax Notes International, 2018

· VANN, *Reflections on business profits and the arm's length principle,* in ARNOLD – SASSEVILLE – ZOLT, *The taxation of business profits under tax treaties,* Toronto, 2003

· VERDROSS, *Derecho Internacional Publico*, Madrid, 1975

· VERHOEVEN, *Remarques critiques sur les loi (belges) du 16 juin 1993 et du 10 février 1999*, in Wouters - Panken, *De Genocidewet in internationaal perspectief*, Brussel, 2002

· VERLINDEN – MARKEY, *From Compliance to the C-Suite: Value Creation Analaysed Through the Transfer Pricing* Lens, Intertax, 2016

· VERLOREN VAN THEMAAT, *Internationaal Belastingrecht,* 1946

· VERSIGLIONI, *Il reddito liquido: lineamenti argomenti ed esperimenti*, Riv. dir. Trib., 2014

· VETTEL, *Die normative Bedeutung der OECD – Verrechnungpreisrichtlinien*, in Lang, M. (ed.), *Die neuen Verrechnungspreisrichtlinien der OECD,* Vienna, 1996

· VILLIGER, *Customary International Law and Treaties: A manual on the Theory and Practice of the Interrelation of Sources*, The Hague/Boston/London, 1997

· VIRALLY, *La valeur juridique des recommandations des organisations intenationales*, Annuaire Français de Droit International, 1956

· VOGEL, *Double Tax Treaties and Their Interpretation*, Berkeley Journal Intl. L., 1986

· VOGEL, *Double Taxation Conventions*, 3rd edition, The Netherlands, 1997

· VOGEL, *Klaus Vogel on Double Taxation Convention*, 1997

· VOGEL, *Worldwide vs. Source Taxation of Income – A Review and Re-Evaluation of Arguments (Part I)*, Intertax, 1988

· VOGELAAR, *The OECD Guidelines: their philosophy, history, negotiation, from, legal nature, follow up procedures and review*, in *Legal problems of Codes of Conduct for MNEs*, Frankfurt, 1980

· WAGH, *The Taxation of Digital Transactions in India: The New Equalization Levy*, Bull. Int'l Tax'n, 2016

· WESTBERG, *Taxation of the digital Economy – An EU Perspective*, Eur. Taxn., 2014

· WILLIAMSON, *The Economic Institutions of Capitalism*, New York, 1985

· WIRTZ - PISTOIA - ULLRICH - GÖTTEL, *Business models: Origin, development and future research perspectives*, Long Range Planning, 2016

· WITTENDORFF, *BEPS action 8-10: birth of a new arm's length principle*, Tax Notes International, 2016

· WORLD ECONOMIC FORUM, *The Human Capital Report,* 2013

· WORLD ECONOMIC FORUM, *Unlocking the Value of Personal Data: Form Collection to Usage*, 2013

· WUSTER, *Die ausländische Basisgesellschaft, stuerrechtliche Qualifikation und finanzielle Vorteilhaftigkeit,* Frankfurt, 1984

· XING-ZHOU ZHANG – ZHI-WEI XU, *Tencent and Facebook Validate Metcalfe's Law*, Journal of Computer Science and Technology, 2015

· YNTEMA, *The Comity Doctrine*, Michigan Law Review, 1966

· ZHU, *Proposed changes to the UN Model Tax Convention Dealing with the Cyber-based Services*

· ZINN - RIEDEL - SPENGEL, *The Increasing Importance of Transfer Pricing Regulations: A Worldwide Overview*, Intertax, 2014

· ZITTELMAN, *Geltungsbereich und Anwendungsbereich der gesetze*, in A. MARCUS – E. WEBERS VERLAG, *Festgabe der Bonner Juristischen Fakultät für Karl Bergbohm zum 70*, 1919

· ZUBOFF, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, New York, 2019