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"INTANGIBLE ASSETS: THE MAIN TAX CHALLENGE OF THE DIGITAL ECONOMY"

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1 INTRODUCTION

The following thesis deals with one of the most challenging issues which has arisen in the world economy over the recent years, namely: how to properly address the tax issues arising from the advent of the digital economy, with particular emphasis on Transfer Pricing involving the transfer of intangible assets. The Transfer Price is "a price, adopted for book-keeping purposes, which is used to value transactions between affiliated enterprises integrated under the same management at artificially high or low levels in order to effect an unspecified income payment or capital transfer between those enterprises". The Transfer Pricing allows MNEs to move the most taxable income into tax jurisdictions with the lowest tax rates, in order to minimize the overall tax burden of the company. Whether, on one hand, this phenomenon is well known by tax administrations and governments and it has been addressed by international institutions such as the OECD²; on the other hand the ongoing trend of digitalization and de-materialization of goods and value creation drivers has led to the emersion of a relatively new issue of the TP, regarding the intangibles. Indeed, whether the instruments introduced by OECD have shown a good degree of efficiency in contrasting this practice when related to transfers of tangible assets, the increasing trend in creation and transfer of intangibles has shown that new tax mechanism and rules are needed to keep up with the transforming global economy. The first part of the elaborate introduces the Digital Economy, its main features, how it is characterizing the society, how could it spread out so fast and change our life throughout a few decades, and the very recent enhancement of this phenomenon due to the Covid-19 pandemic. Its most important implications on two fields will be then analyzed: the economic and the fiscal one; particularly focusing on concepts like Place of Effective Management (POEM), Permanent Establishment (PE) and Arm's Length Principle (ALP). Within the second part I will expose the main countermeasures put in place by the OECD, which are made up of a new interpretation of the issues and definitions set out in the first part of the elaborate. The main publications analyzed in this part will be the Chapter VI of the OECD Transfer Pricing Guidelines released in 2017; and the 2018 BEPS action plan regarding Action 8, entirely dedicated to the treatment of the so-called Hard-To-Value Intangibles (HTVI). The following chapter of the thesis will be

¹ See also OECD (2001), Glossary of Statistical terms, Transfer Price, accessed 28 June, 2020. https://stats.oecd.org/glossary/detail.asp?ID=2757. The practice of transferring assets among related companies is of course fully compliant with the law, however the use of those prices to artificially move away income is considered illicit, according to the majority of the national legislations and tax treaties. The Transfer Pricing is a form of tax avoidance contrasted by international organizations, like OECD.

² The OECD (Organization for Economic Cooperation and Development) is an international institution founded in 1948, which has the main goal of establishing evidence-based international standards and finding solutions to a range of social, economic and environmental challenges.

focused on a critical review of the scientific literature about this subject, with reference to the legitimacy of the new formulation of the Arm's Length Principle (hereinafter ALP); to the comparison between accounting and taxation principles; to some surveys concerning the implementation of OECD measures by countries and companies. Within the last part of the thesis, it will be provided a judgement on the effectiveness of the BEPS project, trying to figure out the possible future scenarios in the global taxation scenario.

2 THE DIGITAL ECONOMY AND ITS IMPACT ON TAXATION

2.1 ORIGIN AND DEVELOPMENT

Over the last 30 years, the human society has experienced probably the highest rate of technological innovation ever. The introduction of mobile phones in the 90s, as well as the commercialization of Portable Computers, seemed to be disruptive and breakthrough, however those were only the first steps towards the digitalized word that we are living in today. Our lives nowadays depend on the digital devices, such as PCs, smartphones, tablets, and many others. Internet is the center of the digital economy, around which all the technological devices are turning, and without the which the system would collapse. The number of devices connected to Internet are constantly increasing, as we can see from the picture below:

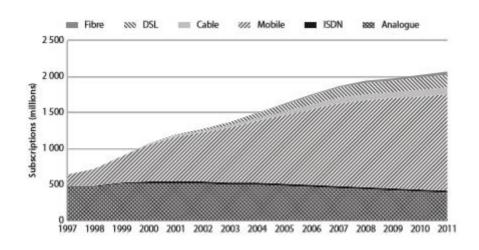


Figure 1. Total fixed, mobile and broadband access paths subscriptions (millions)

Source: OECD (2013), OECD Communications Outlook 2013, OECD Publishing, Paris, http://dx.doi.org/10.178/comms_outlook-2013-en.

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³ See the BEPS project, in particular OECD/G20 (2015), Base Erosion and Profit Shifting Project, Addressing the Tax Challenges of the Digital Economy, Action 1 Final Report, Chapter 3. The BEPS projects, promoted by more than 135 countries, aims at contrasting the tax avoidance arising by tax planning strategies of MNEs. It is made up of 15 Actions, each of them addressing one issue related to the tax avoidance.

From this graph, the exponential growth of interconnection of devices and digitalization seems evident. This process has been boosted by the commoditization of the Information and Communication Technology (ICT) goods and services.⁴ The development of the technology experienced by the human society over the last decades, has let the consumers see a considerable number of innovative products/services launched on the market. However, notwithstanding the high degree of R&D, marketing expenses, licenses and intellectual properties needed to develop these instruments or services, their prices have normally been very low, or at least affordable for a medium class consumer of an average advanced country's economy. This happened because every time a new product/service was launched on the market by a company, all the competitors could easily replicate it, at least in its main features. The process of standardization of the ICT market has allowed the customers to enjoy low/affordable prices, because the competition was often based on price and very rarely on differentiation. The commoditization was a positive process for the society, as it allowed a vast majority of people to have electronic devices, to connect with each other, and to take advantage of opportunities that the previous generations have never seen and could not even imagine. Nevertheless, this process has shown a trend of change lately and the following major tendencies can be spotted:

- 1. Diversification of devices (PC, smartphones, tablets, smartwatches, smart TVs...);
- 2. Growing specialization in devices development of business previously specialized in software or other parts of the digital value chain;
- 3. The high value added recognized to the brand;
- 4. The emergence of new business models.⁵

Therefore, unlike in the first period of digitalization, the next stage shows an increasing degree of sophistication of the products offered to the costumers, more and more often coupled with an exclusive service and a recognizable and highly valuable brand. Thus, the new products commercialized are nearly impossible to replicate and they give the clients the perception of a higher quality experience. This makes the prices increase, and let the high-tech companies gain new and profitable market positions, thanks to the degree of differentiation. Therefore, the brands of the high-tech companies are among the most valuable of the world. It is not by chance that 5 of the 10 largest companies by market capitalization, as of May 2020, are high-tech companies providing software (Microsoft), electronic devices and services (Apple) or social

⁴ OECD/G20, supra n.3, at paragraph 3.1.

⁵ OECD, supra n.3, chapter 3 at paragraph 3.1.1

networks and interconnection facilities (Facebook). Since the financial investors recognize value according to the expected earnings of a public company, it appears fairly straightforward that the business is perceived as highly profitable and with growth perspectives in the future. Indeed, the potentiality of future developments of high-tech devices and services seems huge and yet unexplored. The main sectors that promise to change our life habits and to disrupt the society are currently:

- <u>Internet of things</u>;
- Virtual currencies;
- Portfolio management;
- Advanced robotics;
- 3-D printing;
- Reinforced protection of personal data;
- Access to government data;
- Sharing economy.⁷

2.1.1 THE COVID-19 PANDEMIC: A DIGITALIZATION ENHANCER?

The outbreak of the Covid-19 pandemic occurred in the first months of 2020 and still ongoing, can be a breakthrough event that will radically change our society. The first aspect that has been violently affected by the pandemic is the Health System, especially of the advanced economies. Nevertheless, this is not related to the subject of this elaborate, although being very crucial for the future. One amongst the other relevant aspects impacted by the spread of the pandemic and the subsequent measures of social distancing is the necessity to implement alternative ways not to let the economic and social system totally collapse. This is where the digitalization of the economy has revealed to be crucial and has avoided much worse damages for the human society. The Smart Working⁸, even if not strictly mandatory, had been massively used during the lockdown. For instance, in Italy about 8 million people have smart-worked throughout the

⁶ See also PwC (2020), *Global Top 100 companies by market capitalization, Complete ranking*. Endless discussions are made on the overvaluation of such companies, which have extremely high market capitalization over their book value of equity. Indubitably, the IT companies have a cash flow generation which has no rival in the market, and this is rewarded by investors.

⁷ OECD, supra n.3, chapter 3 at paragraph 3.2

⁸ The Smart working is defined by the Italian law 81/2017 as: "a mode of execution of the employment relationship established by agreement between the parties, including forms of organization by phases, cycles and objectives and without precise constraints of time or place of work, with the possible use of technological tools for the performance of the work activity".

pandemic acute phase.⁹ On the educational side, every school of every grade, from primary to university, has attempted to provide on-line classes to their students. The possibility to perform jobs and classes by online platforms like Zoom and Skype¹⁰, has allowed a consistent part of the society to transfer their usual routine from a physical to an online format. Moreover, as the social life has been suspended because of the lockdown, video-conference platforms have allowed millions of people around the globe to talk, chill and spend time together as they could not do it physically. Despite this software was available even before the outbreak of Covid-19, the chart below shows how impressively its volume search on Google has grown in the lockdown:

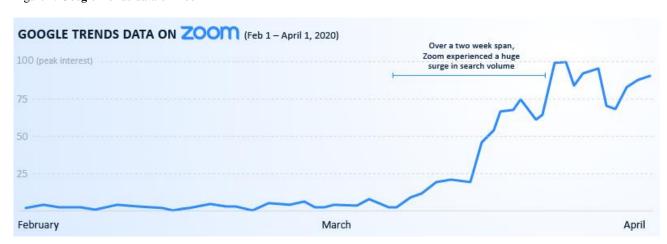


Figure 2. Google trends data on Zoom

Source: I. Ghosh, "Zoom is Now Worth More Than the World's 7 Biggest Airlines", *Visual Capitalist*, accessed July 13, 2020, https://www.visualcapitalist.com/zoom-boom-biggest-airlines/.

Another consequence of the phenomena described hereinabove, is the explosion of Zoom's market capitalization in the last months, whilst the major Airlines companies have dropped their value dramatically. Although the massive increase in daily users and the consequent problem of sensible data management, investors still rely on Zoom's future results, while they are really skeptical on companies whose business models are heavily based on economies of scale, cost savings and volumes, such as the airlines companies. This is very well exposed by the figure hereinbelow, which draws the stock's performances of either Zoom and the major airline companies, throughout 2020:

⁹ Il Sole 24 Ore (2020), *Lavoro, Cgil: 8 milioni di italiani in smart working con epidemia Covid-19*, accessed July 15,2020, https://www.ilsole24ore.com/art/lavoro-cgil-8-milioni-italiani-smart-working-epidemia-covid-19-AD7aAMR.

¹⁰ Zoom and Skype are famous applications which allow the users to have video-conference sessions. Skype was launched in 2003, and targets a market share made of youngsters, teenagers and friends who want to keep in touch without the necessity of a physical meeting. Zoom instead is relatively a recent platform since it was launched by Eric Yuan, a former Cisco Webex engineer, in 2011. Unlike Skype, it is way more utilized in formal meetings, such as online classes, jobs interview and meetings. Whether Skype was already well known before the lockdown, Zoom has been discovered because of the Covid-19 pandemic.

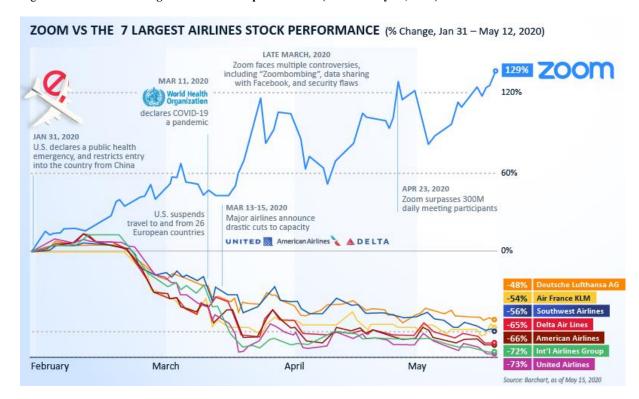


Figure 3. Zoom vs the 7 largest Airlines stock performance (Jan 31- May 12, 2020)

Source: I. Ghosh, "Zoom is Now Worth More Than the World's 7 Biggest Airlines", *Visual Capitalist*, accessed July 13, 2020, https://www.visualcapitalist.com/zoom-boggest-airlines/.

Although these trends have been obviously influenced and "polluted" by a huge and unpredictable crisis, this remains impressive; especially because until there will be a largely distributed vaccine, the rules about social distancing will be enforced, even if in a more eased up fashion. Besides, the threat of new pandemics incoming in the future seems not relieved, since the dangerous human practices which have led to the Covid-19 outbreak have been restarted exactly as before, without learning anything from the mistake. A very key element that is important to be stressed out, which is crucial to the understanding of this elaborate, is how companies with digital business, mainly based on intangible assets, are overperforming if compared to hard-based assets companies, such as the Airlines. The Figure 3 is a wonderful example of how the value creation, in the recent years, has evidently shifted from the tangibles to the intangibles. The easiest and most immediate way to spot this phenomenon is to investigate how the financial markets are moving, and how they are rewarding intangibles-based companies with high innovation potential, such as Zoom. The Covid-19 pandemic has made this process more evident, and the climate of uncertainty and fear which is characterizing our present will probably not change this trend but reinforce it.

2.2 THE KEY FEATURES OF THE DIGITAL ECONOMY

"All sectors of the economy have adopted ICT to enhance productivity, to enlarge market reach, and to reduce operational costs." This has had a notable impact on the business models of the MNEs, which have been able to design and build their operating models around technological capabilities, in order to improve flexibility and efficiency and extend their reach into global markets. To make it more straightforward, here it is a brief summary of how the ICT has impacted on the following sectors:

- Retail: online orders, data analysis, logistic management;
- <u>Logistics</u>: tracking of trucks, information to customers, Just in Time delivery;
- Financial Services: personal expenses analysis, online portfolio management;
- Manufacturing: enhancement of knowledge intensity, use of software components;
- Education: possibility to provide courses remotely;
- Healthcare: enabling remote diagnosis, tracking health records;
- Broadcasting/Media: social networks, streaming, data collection. 12

Besides of these sectors, the ICT has permitted the creation of totally new business models, which have completely changed our habits. The reference is to Cloud Computing, ¹³Mobile Payment solutions, App stores, just to name a few of them. All of these pieces of innovation, along with the great liberalization of trade and the reduction of operational costs, have allowed the worldwide businesses to take advantage of the new global value chains and therefore, to move single activities or subsidiaries to local markets which can be favorable, for instance, in terms of labor cost, raw materials availability or taxation. The following part of this chapter will provide an overview of the most important features of the Digital Economy, according to the Action 1 of OECD BEPS Action Plan Final Report, published in 2015, at paragraph 4.3.

¹¹ See also OECD, supra n.3, chapter 4 at paragraph 4.1. The ICT disrupting innovation has allowed the companies to increase volume of production and productivity, furthermore it permitted to reach customers located in the rest of the world with a much lower effort than before. Whether, on the business side, this has brought up many advantages, it has created new challenges on the taxation side.

¹² OECD, supra n.11.

¹³ Cloud computing is the delivery of different services through the Internet. These resources include tools and applications like data storage, servers, databases, networking, and software. This service allows users to save and store data on remote databases, instead of on their personal devices. Through this innovation, users may accede to their data/documents wherever they are, with whatever device. See also J. Frankenfield (2020), Cloud Computing, Investopedia, accessed 29 August, 2020, https://www.investopedia.com/terms/c/cloudcomputing.asp for further information.

2.2.1 MOBILITY

This is key for the understanding of the digital economy. Mobility of the resources, in particular the ones which lack a physical substance, characterizes the current economic period and creates both challenges and opportunities. This is the key feature of the digital economy. The mobility can be conjugated to 3 core assets/functions: intangibles, users/customer, business function and decision-making process. Intangibles are the key assets featured with the digitalization of the economy. Without them, this process could not have ever built up. They include, for instance, "workforce skills and know-how, effective management and marketing, business models, relations with suppliers and customers, software, databases as well as traditional intellectual property". ¹⁴ Their mobility is particularly interesting, from an economic and fiscal standpoint, as they are not always easily separable and identifiable, thus objectively valuable from the perspective of an economic transaction between non independent enterprises 15. Nevertheless, also the increasing difficulty in locating the final user/customer, especially for apps or purely online businesses, is characterizing the digital economy. Indeed, users may voluntarily "disguise the location at which the ultimate sale took place" thus changing the economic and fiscal features of a transaction. Ultimately, the mobility of functions and decision-making processes has made the economic and fiscal concept of "Place of Effective Management" as a Tie-Breaker Rule ¹⁷ loose of their traditional value and needing of a new and suitable interpretation.

2.2.2 RELIANCE ON DATA

Data are one of the key assets in the digital society, and they are acquiring more and more importance. In economics, but also in politics and social sciences, information is what often makes the difference, for instance in concluding a particular transaction with a new supplier or in an important general election, in a context of high uncertainty. The phenomenon of "asymmetric information" is one of the main drivers of economic and social distortions, such as the global financial crisis or the more recent Covid-19 pandemic. One very recurring concept

¹⁴ K.P. Jarboe (2015), *Intangible Assets as Framework for Sustainable Value Creation*, Working Paper #13, Information Innovation Intangible Economy, Athena Alliance.

¹⁵ This deals with the Transfer Pricing issue, which will be deeply analyzed in the elaborate.

¹⁶ See OECD, supra n.3, chapter 4 at paragraph 4.3.1.2

¹⁷ This tax issue deals with the situation in which an individual or company is resident in more than one country. The Article 4 of the OECD 2017 Model Convention sets out a list of criteria in order to allocate the residence to only one country. These criteria are the so-called "Tie-Breaker Rules", and the Place of Effective Management is one of them, of course it is applied to companies only.

¹⁸ The "asymmetric information" is a situation in which one economic agent possesses more information than his/her counterparty. One of the drivers of the 2008 Financial Crisis was the asymmetry of information about the creditworthiness of the American households in the financial environment.

nowadays in the evolution of data collection process, which is Big Data, meaning "datasets large enough that they cannot be managed or analyzed using typical database management tools"¹⁹. Therefore, statistical and mathematical tools are needed, in order to analyze these data and to take advantage of them in the context of making strategic, operational or financial decisions. The more data you collect and analyze, the less uncertainty and risk you will bear.

2.2.3 NETWORK EFFECTS

This concept applies to business which are valuable only if the number of users is high enough. For the high-tech companies is crucial, but classical examples can be found out even in the past, for instance think about the telephone: if only a few individuals had had it, then it would have been completely useless. Even if the level of addiction to interconnection of devices is less crucial, the same concept can be conjugated to Apple and its products, which are highly connectable among them and conversely toughly connectable to other brands' devices.

2.2.4 USE OF MULTI-SIDED BUSINESS MODELS

The multi-sided business model is "one that is based on a market in which multiple distinct groups of persons interact through an intermediary or platform, and the decisions of each group of persons affects the outcome for the other groups of persons through a positive or negative externality"²⁰. One example could be the use of operating system: it is more valuable to users if many software developers code it and it is more valuable to software developers if many users utilize it. Many business models of the digital economy are based on this concept.

2.2.5 VOLATILITY

The uncertainty on revenues and net income is the key financial feature of the digital players. Being the high-tech sectors highly unstable and given the incredible speed at which newer and newer products/services are developed and commercialized, a company which is seemingly profitable and with a rose future can lose a relevant piece of its market share in an incredibly short time. One very nice and straightforward example is Nokia, which was the absolute leader of the mobile phones market before the launch of smartphones by the former followers, such as Apple and Samsung²¹. The MNEs operating mainly with intangibles, with high mobility of assets and functions and with volatility of outcomes are the key subjects of this elaborate. Their

¹⁹ OECD, supra n.3, chapter 4 at paragraph 4.3.2

²⁰ OECD, supra n.3, chapter 4 at paragraph 4.3.4

²¹ Nokia completely misevaluate the impact of new devices in the mobile phones market. Before the introduction of the iPhone by Apple, it was the absolute leader of mobile devices market. After, it almost completely disappeared. To read more on this argument: T. Worstall, *The Fall of Nokia: Apple, Google's Android and Samsung to Blame,* Forbes, accessed 23 June, 2020,

https://www.forbes.com/sites/timworstall/2011/07/29/the-fall-of-nokia-apple-googles-android-and-samsung-to-blame/#357bd3eb549f.

increasing ability to manage business centrally, while maintaining substantial flexibility over the location of business functions and assets, has led to both great advantages and disadvantages. It is not the scope of this thesis to discuss the great and sensitive improvement that this kind of companies has brought to the society. The technological innovation over the last decades has improved the day-by-day life of an impressive number of persons, even though the impact on the socialization capabilities can be the downside. Nonetheless, the scope of this elaborate is to discuss about the disrupting impact of the ICT on the economy (thus focusing on the shift of the paradigm of value creation); on the direct consequences on taxation, highlighting the needs for new approaches to taxation more consistent with the change in the society and illustrating the latest guidelines issued by the OECD on this matter.

2.3 THE ECONOMIC CONSEQUENCES

2.3.1 THE PARADIGM SHIFT

The ICT has disrupted the traditional paradigm of value creation, by switching down the composition of assets that companies present. Since the first industrial revolution onward, the creation of value took form by the exploitation of hard assets. The most valuable companies were the ones which were able to take advantage by their assets, often natural-based (such as coal, oil or gas), to enhance the production capacity of highly standardized products and to sell them at a lower price, with respect to the competitors. Thus, often the competition was based on price only, and the value arising from intangible assets, although present, was not considered crucial to the firm to succeed. After the 2nd World War, the technological breakthrough led to the rapid change of the western economies' societies, but on the other hand it did not change the way the value was created. First technological devices that entered into the market, such as telephones, televisions and computers, were easily standardized and the competitive advantage that the leader initially had in the development and commercialization of a product, was easily bridged down by followers, which could, in a relatively short time, replicate the product and compete on price only. Nevertheless, a third era can be identified, in which we are still embedded. Starting from the last decade of the 20th century, the ICT era has completely shifted the paradigm, from an economic standpoint. The diversification of products and the associated services has changed the features of the competitive arena, switching its main driver from price to differentiation. The key aspect is that intangibles have become "the key value creating assets that need to be developed and utilized in order to achieve growth and to successfully implement

a strategy of sustainable value creation". ²²According to a survey made by the Chartered Global Management Accountant (CGMA) association and sponsored by Oracle, based on a sample of 744 senior executives of companies based in 34 different countries, the five most important drivers of value creation are the following:

- 1. Customer satisfaction;
- 2. The quality of business processes;
- 3. Customer relations:
- 4. Human capital;
- 5. Brand reputation.

This phenomenon is confirmed by examples like Airbnb, which doesn't own a single square meter of real estate and its estimated value is \$30 billion, which is more than the combined value of the Hyatt and Marriott hotel chains, and two and a half times that of the Accor Hotels Group. Alternatively, think about Uber, which while not possessing a single vehicle, is the largest taxi company in the world, and is valued at \$62 billion, two and a half times the market capitalization of Renault. ²³ Besides, nowadays also property-intensive sectors such as real estate and oil & gas have high level of intangible assets, sign that the paradigm shift has initially regarded the ICT companies but it has spread out to more traditional company soon. The management teams across all sectors have understood that it is essential to have a clear focus on what is the so-called "intangible capital" within the company, in order to develop a sustainable and innovative value creation strategy. There are four broad categories of intangible capital:

- 1. <u>Human capital</u>: competencies of both management team and employees;
- 2. Structural capital: marketing/sales capabilities, knowledge/IP assets;
- 3. Relationship capital: quality of relationships with customers and partners;
- 4. <u>Strategic capital</u>: capability of having an adequate understanding of external factors.²⁴

A performing and capable management team should be able to ask itself about the presence within the company of these four types of capital, eventually spotting lacks or areas to be

²²The competitive environment of the future will be characterized by ICT companies, and even the companies operating in business models will be obliged to own digital infrastructures and be intangible based. Therefore, although tangibles will always be necessary in business, the key competition will be on the ownership and development of intangibles, such as digital platforms, R&D activities, know-how. See also K.P. Jarboe, *supra* n.14, at Introduction.

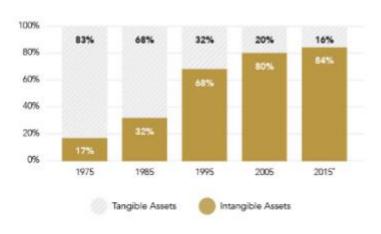
²³ M. Bertonèche, *Creation of value and intangible assets: the paradigm shift*, Cross Knowledge Blog, accessed July 15,2020, https://blog.crossknowledge.com/intangible-assets/.

²⁴ K. P. Jarboe, *supra* n.14, at "Using the Frameworks in sustainable value creation".

improved. On the other hand, also financial investors have radically changed the way they look at the market, committing more capital on knowledge-based companies and lesser to the hard-assets based ones. The following figure illustrates very well the ongoing trend:

Figure 4. Components of S&P 500 Market Value²⁵

COMPONENTS of S&P 500 MARKET VALUE



Source: Ocean Tomo, "Annual Study of Intangible Asset Market Value," 2015, http://www.oceantomo.com/2015/03/04/2015-intangible-asset-market-value-study/

From the figure 4 it is straightforward to remark how the source of market value, recognized by the investors, has swapped. The trend has not reversed in the last years, but it strengthened. This tendency is confirmed also by the fact that many sovereign states are switching their economy, from a "classical" industrialized economy to a more information and knowledge-based one. This is clearly reflected by the growing contribution by the service sector to the gross national product of countries. ²⁶ Intangibles create value by a large variety of ways, and the way they do it is crucial from the taxation standpoint, about the problem of profit allocation. Understanding the origin of value creation may be extremely challenging in the context of intangible assets. They may create value by self-development and sale to the third party, or alternatively by self-exploitation, or also by purchasing it by third parties and exploiting their cash-flow generation capabilities. For instance, a very controversial debate going on in Italy is about the concession of the management of the Italian highways to a private company, called Aspi ("Autostrade per l'Italia"), controlled by Atlantia SpA, which is publicly listed on the stock exchange. After the collapse of the Morandi bridge in Genova, occurred 2 years ago, the

²⁵ The "S&P 500" is a stock market index made up of the 500 most capitalized US companies. The 10 largest companies, in order of weighting, are: Apple Inc., Microsoft, Amazon.com, Alphabet Inc., Facebook, Johnson & Johnson, Berkshire Hathaway, Visa Inc., Procter & Gamble and JPMorgan Chase. Altogether, they account for 26% of the market capitalization of the index.

²⁶ See M. Lagarden (2014), *Intangibles in a Transfer Pricing context: where does the road lead?*, International Transfer Pricing Journal, September/October 2014, pp.331-346, IBFD.

Italian government has been discussing about the possibility of revoking this concession to Atlantia, because of severe non-compliance on the maintenance of the managed infrastructures. It is interesting to observe how the stock price has changed: on the 4th of May 2018, before the bridge collapsed, the price reached a maximum of $28,26 \in$; whilst, on the 13^{th} of March 2020, the price has touched a minimum of $10,88 \in$, with a drop of 62%. The ongoing discussion about the concession, which is the core intangible of the company assuring all the cash flow generation, has more than halved the market capitalization of the company. This example is useful to point out how intangibles can create value and how crucial they can be in a company's outlook.

2.3.2 THE MANAGEMENT 2.0

As the technology is changing the economy, one of the consequences is that the organizations are changing too. More specifically, this paragraph deals with the change of the decisionmaking processes, which has practical taxation implications. The new business models introduced by the digital economy have affected the way and the speed at which the decisions are made. Decision-making processes have progressively been deterritorialized, "i.e. even collective decisions no longer require the physical presence of all decision-makers in one place". ²⁸ The introduction of Cloud Computing technology within the companies has dematerialized the documentary and administrative dimension of management, thus making it more liquid and less linked to a physical bound. At the same time, from a purely organizational side, a process of de-hierarchization has occurred, meaning that the employees' participation to the decision-making processes has increased, although some hierarchy is still needed for running the company. Of course, this comes along with the ongoing process of digitalization: thanks to the Cloud, information is shared at all levels of the firm, thus every person within it can ideally participate to the decision-making process. This concept well fits with the "holacratic" organizational structure: it consists of "self-organizing teams that are called circles or holons in this system; a holon is a separate entity but, at the same time, it is an element of a larger entity". ²⁹ According to this innovative view, the classical top managers who make the most critical decisions are no longer necessary. An even more disruptive view of decision-

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²⁷ Source of data: https://www.borsaitaliana.it/borsa/azioni/scheda/IT0003506190.html?lang=it, accessed 19 July, 2020.

²⁸ R. Lipniewicz (2020), *Place of Effective Management in the Digital Economy*, INTERTAX, Volume 48, Issue 6&7, Kluwer Law International BV.

²⁹ This is a quite revolutionary organizational structure, which emphasizes the autonomy of every person, no longer dependent on a rigid hierarchical structure. Although not being common, more and more companies have understood the importance of this paradigm change. See R. Lipniewicz, *supra* n.28, at paragraph 1.2. and the website http://structureprocess.com/holacracy-cases/, accessed 29 August, 2020, for a list of companies utilizing the holacractic organization.

making process is the one, for instance, adopted by Hedge Funds. This refers to decisions made by algorithms, thus Artificial Intelligence. ³⁰ These organizations allow AI "to steer the organization to new levels of risk, profitability and innovation". ³¹ The AI is fully recognized as an autonomous part of the organization. Moreover, lately more and more fully automated apps for portfolio management have been developed. These applications offer a low cost (in some cases free) service of portfolio management to their investors, with allocation of funds among the financial assets pursued by algorithms, based on the Modern Portfolio Theory. In this case, no human intervention is needed: decisions are made only by machines, allowing the almost complete abatement of costs. The financial world seems to be the sector more prone to be turned out by ICT revolution, but the strong impression is that all the industries will sooner or later follow up.

2.3.3 THE FINANCING CAPACITY

As it is already been written out in the previous paragraphs, from an accounting point the view, the portfolios of assets held by companies have changed their composition over the last decades. This swap has consequences on the mechanism by which the firm gets the necessary funds to fulfill the costs and to invest, seeking for growth. To make it simple, the assumptions of this analysis consist in having two main ways for obtaining funds: increasing leverage with financial institutions (i.e. banks) or going public and get listed on the stock exchange, raising money by financial investors.

2.3.3.1 INCREASING LEVERAGE

The world of private lending, with a face-to-face relationship between a bank and a company, is characterized by the uncertainty. The financial institution undergoes a situation in which there is an asymmetric information, as only the company eventually receiving the funds knows how the money will be spent. Moreover, if the borrowed money is invested in theoretically high value-added projects, obviously there is no certainty that the actual outcome of the investment will be equivalent to the expected one. In other words, lending money is obviously a risk for the bank. Neglecting the situations in which the banks are risk-lovers because they are looking for a higher yield, ³² in normal situations the lender tries to minimize the risk of not being

³⁰ Artificial Intelligence (AI) refers to the development of machines, programmed such that they think and act like humans, as far as possible. See B.J.Copeland (2020), *Artificial Intelligence*, Encyclopædia Britannica, accessed August 29,2020, https://www.britannica.com/technology/artificial-intelligence, for digging into details.

³¹See R. Lipniewicz, supra n.28.

³² In Finance, under normal circumstances, there is a direct proportionality between the risk and the return of an investment. This is the Modern Portfolio Theory (MPT), and it has been developed mainly by Harry Markowitz in the second half of the 20th century.

reimbursed, by requiring a collateral to the borrower. In most situations, this collateral is a tangible asset, with an estimated value that covers most of the loan nominal amount. Thus, companies having low or negligible presence of tangibles, with a business based on knowledge and Intellectual Property, are penalized by the lack of potential collaterals in the debt capacity. This could be an explanation of why the high-tech companies have an extremely low leverage ratio. 3334 However, intangibles are usually positively correlated with the cash flow generation, as they are a marker of a higher innovation rate within a company. Therefore, this is paradoxical: on one side a heavily intangibles based company has a greater cash flow capability and thus a greater debt reimbursement capacity; on the other side the lack of collateralizable assets makes it unlikely to receive funds by the bank. This paradox can be overcome if banks switch from a "asset-based approach to a cash-flow based approach" thus evaluating a company's creditworthiness basing on the cash flow generation potential of business more than on the quantity of assets booked.

2.3.3.2 RAISING CAPITAL ON THE STOCK EXCHANGE

Whether the knowledge-based companies see their debt capacity penalized, the opposite is true for what regards the capability of raising funds on the stock exchange. The high-tech companies have an impressive ability to attract financial investors, who differently from the banks care a lot more about the future cash flow generation, rather than about the assets owned. Knowledge-based companies have, according to the financial investors, much higher growth potential due to their innovation skills. This can be easily tested using the Price to Book ratio, which give a measure of how the real value of the company is different from the book value. ³⁷ ICT companies have an average value of 9.09 (at the 30th of June 2020³⁸), meaning that their real value based on future expectations is 9 times higher than the value recorded on the book. This

Leverage ratio is obtained by the following formula: $\frac{LONG\ TERM\ DEBT\ LIABILITIES}{SHAREHOLDERS'\ COMMON\ EQUITY}$ or, alternatively:

SHAREHOLDERS' COMMON EQUITY. It is a very commonly used ratio to provide an indication on the financial capability of a company to meet its long-term obligations. It varies industry by industry and country by country, it usually higher for mature sectors requiring heavy PPE investments, while it is lower for ICT sector relying on intellectual properties and know-how.

³⁴ ICT companies rely on equity financing more than on debt. This is one of the reasons why they are between the least leveraged industries. See, for example: https://marketrealist.com/2015/03/relatively-low-leverage-gives-tech-companies-flexibility for a comparative outlook of industries indebtedness.

³⁵ See R. Moro Visconti (2015), *Leveraging Value with intangibles: more guarantees with less collaterals?*, Corporate ownership & control, Volume 13, Issue 1.

³⁶ R. Moro Visconti, *supra* n.35 at paragraph 4.

³⁷ The Price to Book ratio is obtained by the following formula:

MARKET CAPITALIZATION
BOOK VALUE OF EQUITY

Lt provides a measure of how the stocks are overvalued with respect to their accounting value. Shares with high PtB ratios are defined as "growth stocks", while the ones with lower PtB ratios are defined as "mature stocks".

³⁸ Source of data: https://siblisresearch.com/data/price-to-book-sector/, accessed 23 July 2020.

can be explained by the misrepresentation of the accounting measures: intangible assets are often not booked, since an asset must be identifiable, separable and controllable to be recognized in the Balance Sheet. Most of the intangibles which are seen as key to the future growth of a company by the financial market, therefore, are not existent according to the accounting rules. This is the reason why the stock prices of ICT companies are so different from the accounting measure, and this confirms once again how the exploitation of intangibles is the main key value driver according to the financial agents, as the figure 4 has already set out.

2.4 THE NEW TAXATION CHALLENGES

The evolution of the economy has direct consequences on the institutions, corporates and individuals. The economic agents have different ways to react to change, and different speed to eventually do it. Individuals and corporates are usually more flexible, they are often the promoters of a change in the society, under normal circumstances they have low difficulty to change and to get used to a new way of "doing things". On the other side, institutions are way more reluctant to change, as they have long time consolidated rules and usually, they cannot be easily reformed. The authors, while referring to the general term "institution", is writing about States and their political branches, but also about, for instance, educational system, healthcare system or tax administration. The scope of this chapter is to focus on how the digital economy has raised new challenges in the taxation field. Taxation law is strictly related to the economy and it is based more on economic assumptions than on juridical ones. This is just a direct implication of the role the taxation: withdrawing a part of wealth, whether and where the wealth manifests itself. Thus, understanding how the value creation is made as well as where it occurs is crucial in taxation. An overview of the three main challenges that the digitalization has raised will be provided. Those are the increasingly difficulties to apply the well-known concepts of Place of Effective Management (POEM) and Permanent Establishment (PE); and the Transfer Pricing issue, which will receive a particular attention. The abovementioned terms are taken from the "OECD Model Tax Convention" released in 2017, which is a model for countries to develop bilateral treaties in order to avoid taxation issues regarding, for instance, international double taxation, international tax avoidance or transfer pricing manipulation.³⁹

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³⁹ The document was thought as a model for all the treaties on international taxation signed by countries. The last version was released in 2017. Although not being central in the context of this thesis, it is a key reference point for international taxation issues.

2.4.1 PLACE OF EFFECTIVE MANAGEMENT

The Place of Effective Management (hereinafter POEM), is a definition which is quoted in the Article 4 of the OECD Model Tax Convention of 2017. The framework in which it is introduced is the issue of the criteria to attribute the residence⁴⁰ of a person to a State. The Article, in the second chapter, sets out a list of criteria in order to attribute the residence to an individual who is resident in both contracting states. In the third chapter, moreover, the same issue is addressed for what regards a "person other than an individual" 41, and the OECD states that, in order to attribute the residence status to one of the Contracting States, "the competent authorities of the Contracting States shall endeavor to determine by mutual agreement the Contracting State of which such person deemed to be a resident for the purposes of the convention, with regard to its Place of Effective Management...". 42 In order to have a better understanding of what the POEM is, the OECD Commentary of the Model Convention defines it as follows: "the place of effective management is the place where key management and commercial decision, that are necessary for the conduct of the entity's business as a whole, are in substance made". 43 The POEM, in simple words, is the place where key strategic decisions are made. In identifying the POEM, the OECD states that several factors must be considered, such as:

- 1. The place where meetings of the governing board or any other equivalent body generally take place;
- 2. The place where the CEO and other executives perform their activities;
- 3. The place where key people who are responsible for day-to-day management perform their tasks;
- 4. The country where the corporate head office is located and whose legislation governs the corporate status;
- 5. The place where its accounting is handled.⁴⁴

It is straightforward to notice how the digital economy has impacted on this concept. The previously mentioned "Management 2.0" has deterritorialized the decision-making process,

⁴⁰ In taxation, according to the Article 4 of the OECD Model Convention of 2017, is resident of a Contracting State "any person who, under the laws of that State, is liable to tax therein by reason of his domicile, residence, place of management or any other criterion of a similar nature...". The duality between the concepts of residence and source has always been the major cause of double taxation issues. The double taxation comes up either when the same item of income is taxed twice, in the hands of different persons (economic double taxation) or when the same juridical person is taxed twice on the same income (juridical double taxation). ⁴¹See also OECD (2017), Model Tax Convention on Income and Capital: Condensed Version 2017, OECD Publishing, Article 4 at chapter 3.

⁴² The attribution of the residence status to one of the involved tax jurisdictions is basic to comprehend where the taxation should arise and how to relieve the eventual double taxation. See OECD, supra n.41, Article 4 at chapter 3.

⁴³ OECD Model Convention (2017), Commentary on Article 4, at paragraph 24.

⁴⁴ All those definitions are set out by the OECD within its Model Tax Convention of 2017. See OECD, supra n.42.

making it much harder to identify the POEM in the precise way that the tax administrations need. Thanks to the possibility of communication given by the ICT, managers and executives can make decisions everywhere and in every time. Moreover, and most importantly, the decisions and responsibilities, according to the Management 2.0 model, are no longer following the hierarchy criterion. Employees, junior managers and all the company's worker can participate to the decision-making process, and the intelligence will be distributed among all the subjects involved. The digitalization will lead to "limiting the role of hierarchical and bureaucratic systems for the benefits of networking, decentralization, flattening of structures, and the involvement of all of the employees of the organization". ⁴⁵ Therefore the POEM, as conceived, may be misleading and an old-fashioned concept, no longer adequate as a tax standard. The attempt to link decisions and places, as clearly set out in the OECD Commentary, is hardly achievable if we consider how the technological innovation has dramatically changed the organizations, and consequently the way the decisions are made. The creation and development of the so-called "virtual organizations" are an emblematic signal that the POEM needs to be revised or even substituted. The virtual organizations are a form of organizing business cooperation that has a low level of formalization and is undertaken to reach a common goal. The partners can be selected dynamically regardless of their location. 46 Even though this is a far advanced way of organizing a business, the perspective of having more and more companies being run this way is not unrealistic. The OECD and all the institutions involved in international taxation issues should address this challenge.

2.4.2 PERMANENT ESTABLISHMENT

The term "Permanent Establishment" is presented in the Article 5 of the OECD Model Convention of 2017 and it holds much consideration. To make it short and simple, although the definition is much broader and more articulated,⁴⁷ the Permanent Establishment is either the physical place where the main business activities are carried out or the place where a dependent agent is concluding deals and signing contracts on behalf of the company. Nevertheless, it is

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⁴⁵ This view is shared by a numerous community of experts in business organization. The development of the new technologies is assumed to decentralize decision making processes, increasing the level of participation and commitment to the goal. An analogous process is identifiable in politics, where thanks to the internet and social media, more and more citizens are increasing their interest in political life. On the other side, such processes can lead to downsides: in companies, the slowness of making decisions, in politics and society, the risk of spreading of dangerous fake news. See R. Lipniewicz, *supra* n.28, at paragraph 3.3 and also OECD, *supra* n.3.

⁴⁶ R. Lipniewicz, *supra* n.28 at paragraph 1.2

⁴⁷ The concept of Permanent Establishment is crucial to provide a physical link of a person to a tax jurisdiction. Being basic, the OECD in its Model Tax Convention sets out a very detailed definition of such issue, which for conciseness the author will not fully report. For the whole definition, see OECD, *supra* n.41, Article 5.

currently possible to heavily conduct businesses in countries without a "physical" Permanent Establishment or a dependent agent, again thanks to (or because of) the technological development. In some business models, the relationships between the customers and the providers of products/services go beyond the merely sale. For instance, in the case of a retail business operated via a website that provides a platform for customers to review and tag products, the interactions of those customers with the website can increase the value of the website to other customers, by enabling them to make more informed choices about products and to find products more relevant to their interests.⁴⁸ In general, the business models involving a network in which users interact, give opinions and reviews, generally add value to the business itself, by for instance an higher price recognized by customers or by online advertising. Obviously, the nexus provided by the Permanent Establishment concept is no longer utilizable in this context, and the kind of business model based on network and interaction amongst users is spreading out fast. The digital economy, as already seen, is more and more reliant on data collection, gathering and elaboration and per definition, data are hard to be given a physical origin. This is a tough issue to address, as data are nowadays one of the most important source of value creation, especially for digital-focused businesses. Finally, the progressive loss of significance of the concept of Permanent Establishment requires the OECD to step up towards the direction of a newer concept, capable to catch up with the disruptive innovation of the modern businesses.

2.4.3 TRANSFER PRICING

The tax challenges arisen by the Transfer Pricing manipulation are not new for the society, as the first Transfer pricing legislation was first introduced in UK in 1915, which was followed by the United States in 1917.⁴⁹ First, the Transfer Price is "the amount charged by one segment of an organization for a product or service that it supplies to another segment of the same organization". ⁵⁰ Therefore, the Transfer Pricing is the practice, between two affiliated companies, of artificially manipulating the Transfer Prices in order to minimize the overall tax burden that the MNE will bear. This is possible thanks to the different average tax rates of the

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⁴⁸ See OECD, *supra* n.3, at paragraph 7.3

⁴⁹ As the first globalized firms arose, a little time was requested before spotting tax planning opportunities, exploiting a physical presence in different tax jurisdictions. Obviously, at that time the practice was much easier identifiable and much less diffused. See this source, found on the web, for reading more about the Transfer Pricing history: E. Morris (2013), *Transfer Pricing: History and Application of Regulations*, CliftonLarsenAllen LLP.

⁵⁰ See C. T. Horngren & G. L. Sundem, "Introduction to Management Accounting", Prentice Hall international inc. (2004), 9th Ed, p. 336, and also OECD, supra n.1 for a comparison of different definitions. On one hand, Horngren and Sundem focus on a pure accounting definition, hence with no negative accent; on the other hand, the OECD defines Transfer Prices as illicit, observing this phenomenon from a regulatory point of view.

countries in which the MNE operates. A brief example will be presented, in order to have a better understanding of this phenomenon. As assumptions, an MNE operating in two countries is considered, one is Italy and the second one is Ireland. As of 2018, the average corporate income tax rate in Italy is 27,8% and it is 12,5% in Ireland. ⁵¹It is also assumed that the parent entity's seat is settled in Italy, and the Irish company is its subsidiary. As the subsidiary has commercial relationships with the parent company, suppose there is a transaction of a good, of whatever nature, between the related parties. How should the Transfer Price be determined, according to the preferences of the MNE? The market price is not the optimal choice in this case, as if the MNE adjusts it, the tax burden will be lowered down. Indeed, in this case and without any external interference, the MNE will adjust the price upward, as by doing so the revenues booked in the Irish subsidiary will be higher and the costs booked in the parent's income statement will be higher. Therefore, by doing Transfer Pricing, the taxable income will be higher in Ireland, where the corporate income tax rate is lower with respect to Italy. As already pointed out the problem is not new, and the worldwide governments have already issued laws to contrast this phenomenon. Moreover, thanks to the OECD Tax Model Conventions, the Transfer Pricing has already been addressed in a relevant number of bilateral treaties between States. The Article 9 of the OECD Model Convention published in 2017, addresses the Transfer Pricing issue by defining what Associated Enterprises are and by introducing the Arm's Length Principle. First, there is an association between two enterprises, located in two Contracting States when:

- a) An enterprise of a Contracting State participates directly or indirectly in the management, control or capital of the other Contracting State, or
- b) The same persons participate directly or indirectly in the management, control or capital of an enterprise of a Contracting State and an enterprise of the other Contracting State,

and in either case conditions are made or imposed between the two enterprises in their commercial and financial relations which differ from those which would be made between independent enterprises.⁵²

⁵¹ Differences in average corporate income tax rates are one of the most impacting differences, when dealing with tax avoidance. Nevertheless, also other elements, such as transfer pricing regulations, double taxation provisions and others, have an impact on companies' tax planning. Data are taken from OECD, Table II.1. Statutory corporate income tax rate, http://stats.oecd.org/index.aspx?DataSetCode=TABLE_II1.

⁵² The Article 9 of the OECD Model Tax Convention is focused on Transfer Pricing. The identification of the actual connections between two companies is crucial, in contrasting this practice. See OECD, *supra* n.41, Article 9, chapter 1.

If this is the case (i.e. two enterprises are associated), then the conclusion of the first part of Article 9 introduces a fundamental concept, which is the so-called Arm's length principle. Indeed, if the conditions at which the transaction occurs different from the market ones, the profits consequently shifted away from the taxable income of a Contracting State "may be included in the profits of that enterprise and taxed accordingly". 53 The Arm's Length Principle (hereinafter, ALP) is therefore the possibility accorded to the tax administrations to adjust back the Transfer Prices at the prices that would have charged in similar transactions between independent enterprises. The methods used in practice to determine the Arm's Length will be set out in the second chapter of the elaborate. Nevertheless, the question remains unsolved: if the problem is old and already addressed, why is it considered as a new tax challenge of the digital economy? Whether, on one side, it is true that the problem is old and the economic mechanism by which it occurs has not changed over the decades; on the other side one key feature has changed: the assets transferred. Until the 1990s, the main assets transferred were tangibles, or even intangibles but in a somewhat standardized form, such as financial services or licenses for the sale of a product within a new market. The radical change regarding Transfer Pricing is the transactions of highly innovative and self-developed intangibles. It is common within the ICT multinational companies to observe the transfer of self-developed intangibles, result of intense and long R&D activities, with a degree of uniqueness so high that makes it almost impossible to apply the ALP by looking for comparable transaction in the market. The digital economy is based on this kind of assets. In order to address this challenge, a new design of the ALP, which can better catch up with the current evolutions put in place by the digital economy, is necessary.

3 HOW TO ADDRESS THE NEW TAX CHALLENGES

The following chapter deals with the problems arisen in the international taxation field due to the digitalization of the economy, namely:

1. the need for the introduction of new and more consistent tie-breaker rules for companies, instead of the POEM;

⁵³ The second part of Article 9, chapter 1 of the OECD Model Tax Convention specifies that in case of Transfer Pricing assessment by tax authorities, the same are authorized to move profits from a tax jurisdiction to another, following normal market circumstances which would have occurred between independent enterprises. It is important to remark that this process do not modify any item in the financial statements, which remain unchanged in any case. Only tax burden is modified. See OECD, *supra* n.52.

- 2. the need to consider new nexuses in order to determine where the Permanent Establishment of a company is located;
- 3. the need to properly determine the Arm's length of transactions involving the transfer of intangibles between associated enterprises.

The OECD has addressed the second and the third problem with two parallel projects, i.e. the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations of 2017 and the BEPS Action Plan of 2018. The Transfer Pricing Guidelines are a key document for practically implement the theoretical provisions, concerning Transfer Pricing, set out in the OECD Model Tax Convention. The publication better exposes, for instance, the different methods to determine the arm's length in transaction occurred between associated enterprises at different conditions with respect to the market ones. However, in the context of this thesis, the Chapter VI, named "Special Consideration for Intangibles", will receive a special consideration.⁵⁴ The other source taken into consideration, i.e. the BEPS Action Plan, is "a package of 15 Actions that equip governments with the domestic and international instruments needed to tackle tax avoidance"55, while on the other side it provides businesses with a more delineated tax framework within the which they can operate. The program is developed by the OECD and the G20 countries either, with the collaboration of the developing countries which decided to participate. Over 135 countries collaborated on the implementation of the BEPS package. ⁵⁶For what regards the revision of the tie-breaker rules of corporates, this issue has not been addressed yet by any OECD publication or project, hence some insights, coming from international taxation experts and even some practical rules applied by national legislations on this matter, will be provided.

3.1 TIE-BREAKER RULE FOR CORPORATES: A NEW PROPOSAL

The Place of Effective Management, used as a tie-breaker rule in the context of the OECD Model Tax Convention of 2017, may have lost significance within the digital economy. The determination of the POEM has become more and more difficult because "managers make decisions and manage enterprises both during their stay in the country of the company's registered office and abroad"⁵⁷ and the organizational structure of the companies is changing

⁵⁴ A full chapter (chapter VI) of the OECD Transfer Pricing Guidelines is dedicated to the treatment of intangibles, as they represent the most challenging issue brought up by the digitalization of the economy.

⁵⁵ See OECD website, About BEPS, at paragraph "What are we doing to solve it?", accessed 24 July,2020, https://www.oecd.org/tax/beps/about/ and also OECD, supra n.3 for having a framework of the BEPS project. ⁵⁶ See OECD website, *supra* n.55.

⁵⁷ See also R. Lipniewicz, *supra* n.28, at paragraph 3.2.

towards a flatter and more "democratic" model. Physical management meetings are no longer needed in the digital era: executives can make decisions from wherever they are, by simply having a videoconference on Zoom. The digital economy "breaks the close relationship between the location of the premises (offices) of companies and the place of making decisions, resulting in geographical independence" of the place of where management seems to be. ⁵⁸ Moreover, the decision-making process is switching from a vertical and more hierarchical model to a flat and decentralized one, the so-called Management 2.0. Despite the need for a more consistent tie-breaker rule in the context of the modern companies, the OECD has not addressed this problem yet. Neither the OECD Model Tax Convention, in its commentary, nor the BEPS Action Plan refer to the interpretation of POEM or to the introduction of a new tie-breaker rule. Hence, in order to look for potential re-definitions of the tie-breaker rule for companies, it is necessary to look up to some examples taken from national legislations and scientific articles. For instance, two interesting examples of re-definition (or re-interpretation) of the tie-breaker rule come from the Indian and Polish taxation rules.

3.1.1 INDIAN TAX GUIDELINES

According to the tax guidelines published by the Indian tax authorities, "physical location of board meetings, executive committee meetings or meetings of senior management may not be where the key decisions are essentially being made. In such cases, the place where the directors or the persons taking the decisions (or the majority of them) usually reside may also be a relevant factor. In the case of circular resolutions or round-robin voting, the factors like the frequency of usage, type of decisions made in that manner and location of parties involved in decision-making would be considered and not merely the location of the proposer of the decision". ⁵⁹ The Indian guidelines provide a broader concept of the POEM, without radically change it. Hence, if the place where key decisions are made is not identifiable with the location where the board meetings take place, the POEM has to be enlarged to the residence of the physical persons who are assumed to make the decisions. In the case the company has applied, for tax avoidance purposes or not, a decision-making process highly dispersed across the managers involved, the location of each of them will be considered in the attribution of the POEM. Thus, the Indian guidelines acknowledge that, due to Internet, it has become much more

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⁵⁸ A. Schafer (2006), *International Company Taxation in the Era of Information and Communication Technologies*, Deutscher Universitats-Verlag.

⁵⁹ As most of the sources regarding the international taxation come from the OECD publications, it may be useful to look into how national legislations transpose and interpret these rules, which are not legally binding per se. Some examples of national provisions can enlarge the perimeter of the analysis. See Indian Income Tax Act 1961, https://www.incometaxindia.gov.in/pages/acts/income-tax-act.aspx, accessed 28 July,2020.

difficult to spot the POEM using the standard definition provided by the OECD Model Tax Convention, ⁶⁰ and introduce the usual residence of managers taking the decisions as a new criterion. Although enforcing a broader definition of POEM, the Indian guidelines still use it as a tie-breaker rule.

3.1.2 POLISH MINISTRY OF FINANCE

According to the guidelines of the Polish Ministry of Finance, as it is possible to make economic decisions by means of electronic communication, the place of management may not necessarily be permanent. To determine where these decisions are made, therefore, it is necessary to analyze where they were actually prepared by professional staff, where data were collected, and where analysis necessary to make these decisions were performed. ⁶¹ With respect to the Indian guidelines, the abovementioned definition seems further from the classical view of the POEM. Indeed, it moves toward a newer definition of tie-breaker rule, no longer dependent on the place where final decisions are made but relying on the preparation behind the decision-making process. Hence, the data collection and analysis here take up the role of protagonist. This definition is particularly interesting because it is more digitally oriented, and it seems to recognize that most of decisions are the outcome of a data collection, gathering and analysis, in the ICT era. Data are one of most important assets for companies, and their collection is crucial. The Polish guidelines recognize this trend and acts consequently.

3.1.3 A NEW APPROACH

In the light of the above analysis, it is legit to claim that the international taxation rules need to find out a new way to assign the residence, in case of controversy or double resident companies. Although, as already seen in the previous paragraph, some national guidelines have extended the classical concept of POEM given by the OECD Model Tax Convention, it seems still not enough to face off the challenge arising by the digitization of companies. Therefore, new paradigms of residence need to be introduced, either complementing or substituting the POEM. As aforementioned, the OECD does not provide the tax administrations with new guidelines about the tie-breaker rules, even in the BEPS Action Plan published in 2018. However, some authors have given their opinion about this issue. For instance, Robert Couzin considers that a test based on the location of operational management as part of the day-to-day decision-making processes in the enterprise or, alternatively, the place of the main business operations performed

⁶⁰ See OECD. *supra* n.41.

⁶¹ The reference to the Polish tax rules can be found in R. Lipniewicz, *supra* n. 28, at paragraph 3.2

by the company, is potentially more effective and less sensitive to manipulation. ⁶² Hence, the proposal is to focus on the place where operations occur rather than trying to spot the location where key decisions are taken. By doing this, some degree of manipulation is avoided, as the operations are much harder to be dispersed away, unlike the management meetings. Nevertheless, this approach presents deficiencies too. As another important author like Brian Arnold claims, the test based on the operational management may be as susceptible to manipulation as the one based on strategic central management. 63 Indeed, measuring the scale and the actual significance of the operations, for a high digitized business model, may be controversial. For instance, it can be the case for companies which traditional production factors such as real estate, machinery, equipment, are contributing only in a small and negligible part to the total value created. Conversely, the real assets which are creating value are, as usual, the intangibles: for instance, "autonomous algorithms analyzing consumer (user) behavior which is then monetized". 64 Therefore, the switch of paradigm could be the following: identifying the place were processes are coordinated, instead of the place were processes are actually carried out. Thus, in the context of the previous example, the "residence test should take into account the place where data monetization processes are coordinated" since the single operations made on the process are extremely dispersed around the world, also thanks to the Cloud Computing technologies. The "place of coordination" criterion can be very useful to the OECD and the national tax administrations, in order to settle down the residence of highly digitized businesses with flat organization and a highly dispersed decision-making process, either on the strategic and on the operational side. This new proposal of tie-breaker rule is useful both in the case of the POEM replacement and in the case of complementation of the POEM with a new and supplementary criterion, more capable to catch the distinctive features of the digital economy.

3.2 PERMANENT ESTABLISHMENT: THE SEARCH FOR NEW NEXUSES

The Permanent Establishment is once again connected with the issue of physical presence of companies, and according to the Article 4 of the OECD Model Tax Convention it is defined as

⁶² This proposal is indubitably characterized by a lower possibility of manipulation. However, it is not resolving as it still relies on activities which nowadays are not so crucial in value creation. This interesting point of discussion can be seen in R. Couzin (2002), *Corporate Residence and International Taxation*, pp. 255-265, IBFD. ⁶³. See B.J. Arnold (2003), *A Tax Policy Perspective on Corporate Residence*, Can. Tax J., at 1562.

⁶⁴ With respect to the Couzin's one, this proposal for a new tie-breaker rule is more focused on the key value creation processes in the digital economy. The center of coordination of data gathering and analysis may be, however, extremely hard to spot. As usual, in taxation and economics, a trade-off between theory and practice is the best solution in many cases. See R. Lipniewicz, *supra* n.28, at paragraph 3.3.

⁶⁵ Rafal Lipniewicz, *supra* n.64.

either the place where a company has a physical presence or where a company has a dependent agent who has the power of concluding contracts on behalf of the company itself.⁶⁶ In the context of the digital economy, the need to have a physical presence in order to create value is heavily questioned. Indeed, more and more business models are able to create value even not relying on the proximity with customers/users. For example, nowadays it is possible to conclude contracts electronically, by simply using an algorithm or a software.⁶⁷ Hence, even the need to have a physical person, i.e. the dependent agent, able to conclude contract in a determined country/market, can be refused. Additional issues come up about the exemptions provided by the Article 5 of the OECD Model Tax Convention of 2017. 68 Whether, for traditional businesses, those activities were understandably considered as merely preparatory or auxiliary, for digitized businesses they can even be the core ones. For instance, the point a) of the abovementioned list, mentioning "the use of facilities solely for the purpose of storage, display or delivery of goods or merchandise belonging to the enterprise", can be a crucial value creating activity for e-commerce companies which rely on cutting down the time for delivering. Moreover, also point d), which sets out "the maintenance of a fixed place of business solely for the purpose of purchasing goods or merchandise or of collecting information, for the enterprise", seems to undervalue the role of data collection in current digitized businesses. Thus, the concept of "Permanent Establishment" may need to be re-styled, because (like the POEM) it has an important weakness: it relies on the physical presence, when the physical presence is losing more and more importance as the technological innovation proceeds. The international taxation rules need for a new nexus, able to link a business to a country for fiscal purposes but considering new criteria to do it. The BEPS Action Plan, in its Action 1, provides some suggestions in order to introduce a new definition of nexus in national legislations and international treaties.

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⁶⁶ See note n.47 for the detailed definition.

⁶⁷ OECD, *supra* n.3, at chapter 7.

⁶⁸ The exemptions of being defined as Permanent Establishment are:

a)the use of facilities solely for the purpose of storage, display or delivery of goods or merchandise belonging to the enterprise; b) the maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of storage, display or delivery; c) the maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of processing by another enterprise; d) the maintenance of a fixed place of business solely for the purpose of purchasing goods or merchandise or of collecting information, for the enterprise; e) the maintenance of a fixed place of business solely for the purpose of carrying on, for the enterprise, any other activity; f) the maintenance of a fixed place of business solely for any combination of activities mentioned in subparagraphs a) to e). See also OECD, supra n.47, at paragraph 4.

3.2.1 THE ECONOMIC PRESENCE AS A NEW TERRITORIAL NEXUS

The shift from the "physical presence" criterion to a "economic presence" one can be more capable of catching up with the ongoing trend of digitalization of the economy. The goal is to create a taxable presence in a country "on the basis of factors that evidence a purposeful and sustained interaction with the economy of that country via technology and other automated tools".⁶⁹ In order to do it, a new nexus is needed, to link a company with a determined territory on which it economically operates. In the following paragraphs the new nexuses proposed by the Action 1 of the BEPS Action Plan will be presented, which was the result of the cooperation between the OECD and the G20. The new nexus relies on three factors: the revenue-based factors, the digital factors and the user-based factors.

3.2.1.1 THE REVENUE-BASED FACTORS

Where the revenues come from is one important indicator of an economic presence of a company in a country. Revenues can be obtained even without any physical establishment in a country, thanks to the technologies and to the economic phenomena such as the network effects and multi-sided businesses. For instance, whether the online community of users is particularly strong in a country, the value enhancement is likely to be higher, as the network is larger and the sales volume, therefore, will be higher too. Whether, on one side, revenues are correlated with the economic presence in a country, on the other side they are not enough if isolated. The factors presented within the Action 1 mean to be complementary within a holistic analysis, hence they are not a strong indicator of an economic presence if taken one isolated from the others. In developing a revenue factor, the following technical issue should be considered:

- Transactions covered: one possible approach could be to "include only revenues generated from digital transactions concluded with in-country customers through an enterprise's digital platform". ⁷⁰ Thus, it considers as one country's revenues the outcome of sales concluded with digital platforms, based in the country of residence of the customers. Nevertheless, this approach could lead the digital players move to other sales mechanisms, such as selling by call centers or by emails, in order to get away from the previous classification. Thus, in order to provide all the mechanisms with a similar level of taxation, it may be useful to include in the factor perimeter also the transactions concluded remotely with in-country customers.
- Level of the threshold: another key aspect to take into account is the minimum amount of revenues to be collected in order to create a taxable income in a country. Such

⁶⁹ OECD, supra n.3, at paragraph 7.6.1.

⁷⁰ See OECD, supra n.3, at paragraph 7.6.1.1.

threshold should be set up in such a way to minimize the administrative burden to the national tax administrations as well as to give certainty on the tax compliance to the company involved. For example, it can vary depending on the size of the country involved. Attention should be paid to the possibility that companies may fragment the business across different tax jurisdictions, in order to stay below the threshold and avoid higher tax burdens. One possible solution can be applying the factor on a related-group basis instead of standalone subsidiaries, in order to catch the full value created through the utilization of digital platforms.

• Administration of the threshold: looking at the practical implementation of the measures abovementioned, it could be tough to the single tax administrations to identify the sales occurred through digital platforms, with no further presence within a country. Moreover, the recognition of the volume of sales, hence of the significance of revenues if compared to the threshold, is even more complicated. Even the insurance that compliance is performed may raise difficulties. Therefore, the integration with the remaining factors may be extremely useful to spot out the economic presence in a country.

3.2.1.2 THE DIGITAL FACTORS

In the digital economy, in order to develop a successful business without a physical presence, it is needed to have efficient online platforms, which can be capable to play out as an intermediary between the seller and the customers. The features of the digital infrastructure built up by a digitized company take up an increasing relevance, in order to identify the factors which can witness a significant economic presence. Being businesses digitized and not physical, as it used to be before the ICT revolution, these features will be tougher to be spotted, but on the other side they are certainly highly relevant to indicate a significant economic presence, and thus a nexus which creates a taxable income in the country considered. The following digital factors may be useful indicators for the analysis:

• A local domain name: although it is not compulsory for an international business to use one local domain name for every country in which it operates, it may be very convenient for a company to do so. First, by using a local domain name, it will be much more likely for a country's customer to find the website of the company. Second, by using one local domain for each country, the company will minimize the risk of infringement due to not protecting the enterprise's trademark. Indeed, if the company uses only one domain globally, it will bear the risk of local infringements of the use of trademark, since it is not protected by a certain number of local domain names. Hence,

the local domain name can be a useful feature, able to indicate a significant economic presence of a company in a country.

- A local digital platform: settling down a digital platform in a country can be very useful to increase sales and commitment, in a determined market. By creating a digital platform serving one country, it can be characterized in order to follow the customers' culture, preference and behavior. This characterization includes, for instance "language, local marketing such as targeted discounts and promotions, and local terms of service for users and customers that reflect the commercial and legal context of the local environment". Often, establishing a customized digital platform gives a competitive advantage, with respect to have a standard international online base.
- Local payment options: many countries worldwide have strict regulation on banking services, currency control and payment devices. Therefore, to gain a relevant market share in a country, it may be crucial to develop peculiar local payment options, able to reflect the customers' habits. Integration of "local forms of payment into a site's commercial features is a complicated technical, commercial, and legal exercise requiring substantial resources" thus if a company decides to undertake such an effort it is very likely that it is due to a significant economic presence within the country under consideration.

3.2.1.3 USER-BASED FACTORS

Whether in the previous chapter the focus was on the supply platform, in the following criterion the demand side will be given attention. As already mentioned, the user side is getting more and more crucial for a high-tech business, in order to achieve a competitive advantage and to sustain it over time. A company which is willing to expand into a country, without having a physical presence, is probably engaged in creating the so-called network effect, i.e. the creation of value coming up from the increasing interaction among users. A range of factors based on users could be used, to reflect the level of participation in the economic life of a country. They can be identified with:

• Monthly active users (MAU): one very important factor is the number of "monthly active users" on a digital platform, who are resident in a determined country in a taxable year. The term MAU "refers to registered user who logged in and visited a company's

⁷¹ The belief that customers are only interested in price and quality has been largely debunked. Customers are paying more and more attention to values as social responsibility, quality of services, customization, environmental impact and cultural proximity. See OECD, *supra* n.3, at paragraph 7.6.1.2.

⁷² OECD, *supra* n.71.

digital platform in the 30-day period ending on the date of measurement". The substitution one side, this metric allows to measure the activity in one country both in terms of size and level of engagement, on the other side it can be really volatile to be objectively measured. Indeed, some degree of consultation with IT experts will be needed, as it is not so straightforward to identify a unique user or to measure the level of engagement throughout the month. Moreover, there is the non-negligible risk of frauds, such as the usage of multiple accounts, false information or bots.

- Online contract conclusion: the number of contracts concluded through a digital platform, with customers or users that are habitually resident in the country in any taxable year, are an important factor. This is even more important, if the second part of the definition of Permanent Establishment is recalled. The physical presence of a dependent agent is no longer needed to conclude contracts on behalf of a company based abroad. The digital platforms can get the same job done with much less effort and without relying on a physical person or establishment. For instance, every web-users will have certainly met the "Terms of services", and when the user clicks and agrees on these terms, he signs a legally binding agreement. Thus, the contracts virtually concluded by using a digital platform can be a crucial factor to identify a significant economic presence in a country.
- **Data collected**: the most important intangibles in the digital economy, i.e. data, can give an important indication of a significant economic presence in a country. In particular, the focus is on "the volume of digital content collected through a digital platform from users and customers habitually resident in that country in a taxable year"⁷⁵. The analysis will concentrate on the place of origin of data, and not on the countries where data are stored and analyzed. These data are not only confined to personal ones, but also refers to, for instance, search histories or other matters. Notwithstanding the information on data is normally available and up-to date, companies are not obliged to keep track

⁷³ For instance, different countries have different preferences concerning payment means. In Luxembourg, credit cards are used, on average, 10 times a day by every person. Vice versa, Italians utilize them barely 39 in a year. Exploiting these differences may help building up a competitive advantage. See Truenumb3rs, *Carte di Credito: gli italiani non le amano*, accessed 30 August, 2020, https://www.truenumbers.it/uso-carte-di-credito/ and see also OECD, supra n.3, at paragraph 7.6.1.3.

⁷⁴ This refers to the enlargement of the concept of Permanent Establishment to the presence of an independent agent who "habitually concludes contracts, or habitually plays the principal role leading to the conclusion of contracts that are routinely concluded without material modification by the enterprise, and these contracts are a) in the name of the enterprise, or b) for the transfer of the ownership of, or for the granting of the right to use, property owned by that enterprise or that the enterprise has the right to use, or c) for the provision of services by that enterprise, that enterprise shall be deemed to have a permanent establishment in that State". See OECD, *supra* n.47, at paragraph 5, for reading the complete definition and the related exceptions.

⁷⁵ OECD, supra n.3, at paragraph 7.6.1.3.

records of volumes of data collected and stored on a country-to-country basis. Moreover, data collection is not mathematically proportional to the share of profits originated by the country analyzed, hence this factor can be misleading. The value of raw data is uncertain and volatile. Therefore, as for the previously mentioned factors, the analysis must be performed in a holistic way, focusing on the general framework rather than on the single isolated factors.

3.2.1.4 THE COMBINATION OF FACTORS

Considering the list set out above, in real economic life those factors do not show up separately; conversely, they are often combined and sometimes hardly distinguishable. Regarding this issue, this is a positive feature more than a downside. Indeed, the OECD points it out very clearly with an example.⁷⁶ The factors listed above are more easily identifiable as a label of a significant economic presence if, for example:

- 1) the company considered is getting an amount of revenues above the threshold (revenue-based factor);
- 2) the sales are performed through a digital platform, on which the user must create an account and to pay using the local payment options to conclude the purchase (digital and user-based factors).

Therefore, the combination of these factors shows a clear insight of a significant economic presence, and the company is liable to tax in the tax jurisdiction of the country considered in the analysis. On the other side, whether the company had got over the revenues threshold, but instead of using a digital platform thought and realized to sell, it had got it done through inperson negotiation taking place out of the country where the purchases occur, and the website operating in the country where sales are performed is only giving out information about the products offered; then the revenue factor alone would not have been sufficient to prove the link and to make the company liable to tax within the tax jurisdiction of the country considered.

3.3 INTANGIBLE ASSETS IN THE CONTEXT OF TRANSFER PRICING

The following part of the elaborate deals with the issue of figuring out the Arm's length of a transaction involving the transfer of intangible assets. As aforementioned in chapter 2 of this elaborate, the Transfer Pricing is an old problem, come up as the first MNEs were born. The issue has been addressed many times by international organizations, such as the OECD, and especially by national legislations and bilateral or multilateral treaties among sovereign States.

⁷⁶ OECD, *supra* n.3, at paragraph 7.6.1.4, n.282.

Nevertheless, the digital economy has changed the paradigm: from an industrialized economic system, heavily based on hard and tangible assets, to the digitized business models, which are essentially knowledge-based and rely on assets like licenses, know-how and intellectual property. Hence, whether once the intra-companies' transactions mainly regarded the transfer of tangible assets, which were usually easy to be valued at Arm's length, nowadays the intangibles are the core subjects of the Transfer Pricing. The consequence is the relative ease for companies to move taxable income towards the countries with low corporate tax rates, and a symmetric increasing difficulty for the tax administrations of determining the Arm's length of transactions involving the transfer of such assets, often associated with an elevate degree of uniqueness and usually extremely hard to be evaluated. This part of the elaborate will be split into three sub-paragraphs. In the first part, there will be a brief recall of what Transfer Pricing is, how it works, and what is the Arm's Length Principle. Moreover, the five methods to determine the Arm's length will be briefly presented. Within the second part, the main countermeasures coming from the chapter VI of the 2017 OECD Transfer Pricing Guidelines will be exposed, with particular emphasis on the identification, the ownership and the valuation of intangible assets. Lastly, the final part will be dedicated to the Hard-to-Value Intangibles, which are intangibles with features that make them even harder to evaluate, and the guidelines on this matter provided by the Action 8 of the 2018 BEPS Action Plan will be set out.

3.3.1 THE ARM'S LENGTH PRINCIPLE

As already mentioned in chapter 2, the Transfer Pricing is the practice, within a group of related companies operating across different countries, of artificially lowering down the taxable income in the tax jurisdictions with the highest corporate tax rate, by moving the profits out to the tax jurisdictions with the lowest corporate tax rates. This can be done by manipulating the prices at which the transactions among companies belonging to the same MNE occur, the so-called Transfer Prices. The 2017 OECD Model Tax Convention, within the Article 9, sets out the definition of the "associated enterprises" and allows the tax jurisdictions of the Contracting States to change the proportion by which the profits are allocated, reinstating the Transfer Prices to the amount which would have been paid between two independent enterprises. This is, in other terms, the Arm's Length Principle (ALP). The OECD states that the ALP "valuation principle is commonly applied to commercial and financial transactions between related companies. It says that transactions should be valued as if they had been carried out between

⁷⁷ See *supra* n.50, for a broader definition.

⁷⁸ OECD, *supra* n.41, Article 9 at chapter 1.

unrelated parties, each acting in his own best interest". Theoretically, the ALP works good, however this principle must be practiced by real subjects, such as the tax administrations and the companies. The OECD Transfer Pricing Guidelines provide these subjects with 5 methods to determine the ALP. The first three methods are the "traditional transaction methods", while the last two are called "transactional profit methods". In the following part of the elaborate, they will be rapidly set out.

3.3.1.1 THE COMPARABLE UNCONTROLLED PRICE METHOD

This method "compares the price charged for property or services transferred in a controlled transaction to the price charged for property or services transferred in a comparable uncontrolled transaction in comparable circumstances". ⁸⁰If some difference comes up, then it could be a signal that the transaction considered was not carried out at the arm's length, and the price of the transaction between related parties should be adjusted to that of the comparable transaction occurred between independent enterprises. In the practical implementation of this method, it is usually difficult to find comparable transactions which are totally suitable with the deal under consideration. It is up to the tax administrations to pick the best comparable available and to take into account the differences, in order to make a fair valuation.

3.3.1.2 THE RESALE PRICE METHOD

This method is based on the price at which an associated enterprise resells a product/service, that has been purchased from a related company, to a third independent subject. The resale price is then reduced by an appropriate gross margin and eventually other items of cost, such as the custom duties, to get an approximation of the price that should be paid, under market circumstances, to the associated enterprise to purchase the product/service. The gross margin to be deducted may be taken by either comparable transactions that the company has carried

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⁷⁹ The arm's length determination represents the adjustment of a manipulated transaction, made for tax avoidance purposes between associated enterprises. The process can be summed up in three steps, which are logically subsequent: 1)the identification of enterprises which are associated 2)the identification of transactions which are not carried out under normal market circumstances and 3) the use of one of the Transfer Pricing methods to determine the arm's length. See OECD (2007), *Arm's Length Principle*, Glossary of Statistical terms, accessed 30 July,2020, https://stats.oecd.org/glossary/detail.asp?ID=7245 for the definition of the ALP.

⁸⁰ The detailed exposition of the Transfer Pricing methods and their peculiarities, including the parameters needed for each of them and the situations when they work best, is contained in OECD (2017), *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*, OECD publishing, at chapter II. The use of the most appropriate method is up to the companies and tax administrations, and this valuation depends on the economic acknowledgement of the framework of the transaction. It often happens that companies and tax authorities disagree on the method to be used in determining the arm's length, even before discussing on the final outcome.

out with independent enterprises, or by comparable transactions occurred between two external companies.

3.3.1.3 THE COST PLUS METHOD

The Cost-Plus method starts with the recognition of the price at which a product/service has been transferred, from an independent supplier to a company belonging to an MNE. The product/service, after some degree of transformation, is sold to an associated enterprise. The price paid to the supplier is adjusted with an appropriate mark-up, to "make an appropriate profit in light of the functions performed and the market conditions". The mark-up can be set up either by reference to the usual mark-up that the company itself charges, in comparable transactions, or by considering the same circumstances occurred between two external enterprises. If the price obtained after the computation differs from the actual one, at which the product/service has been resold to an associated enterprise, then an appropriate adjustment shall be made for tax purposes.

3.3.1.4 THE TRANSACTIONAL NET MARGIN METHOD

The Transactional Net Margin Method (TNMM) "examines the net profit relative to an appropriate base (e.g. costs, sales, assets) that a taxpayer realizes from a controlled transaction", 82 thus the net profitability of the company examined is compared to the rate of profitability established by the tax authorities. The rate of profitability is usually measured among unrelated enterprises of the same sector. In case the net profitability of the company considered falls out of this range, then the profits of the enterprise may be adjusted to let them fall into the acceptable interval, according to the tax administrations.

3.3.1.5 THE PROFIT SPLIT METHOD

By using the Profit Split Method, the tax authorities first compute the worldwide taxable income of an MNE, and afterwards they allocate the previously computed metric to the different related companies, belonging to the group under examination. The allocation of the total profit is made accordingly to the estimated contribution that each party has made to produce the income. The PSM is interesting for two main reasons: the first, about methodology, is that it looks at the aggregate profits instead of analyzing each transaction occurred; the second is that it is usually applied when all the other methods cannot be used to determine the arm's length.

⁸¹ OECD, supra n.80, at chapter III, part II.

⁸² See OECD, supra n.81.

3.3.1.6 IS THIS ENOUGH?

Although these methods generally work well, in real economic life situations are usually much more difficult to be objectively evaluated. As it is sustained within this thesis, the rapid evolution of the economy is making things much more difficult to be standardized and rationally measured. For instance, only the Profit Split Method does not rely on the search for comparable transactions. The comparability is, on one side, a preferential way, because it assures more objectivity to the analysis and it is more predictable, even for the companies which are undergoing the examination by the tax authorities. On the other side, however, the economic system is getting so complex that the comparability is increasingly harder to get. Therefore, most of the methods introduced by the OECD may lose significance. The digital economy heavily relies on intangible assets, often self-developed thanks to R&D activities. The degree of repetition, and therefore of comparability, of these goods is usually low. Moreover, to make things even more complicate, the intangibles (more specifically, the Intellectual Properties) are subject to transactions "quite often in combination with other IP items, (in)tangibles or services". 83 The tools presented so far, i.e. the Article 9 of the OECD Model Tax Convention of 2017 and the 5 methods for the arm's length determination, are designed for all transactions involving the transfer of any asset, either tangible or intangible. Thus, no particular emphasis is attributed to the problem of manipulation of transfer prices related to intangibles. Nevertheless, the value creation in the digital economy is mostly attributed to the intangibles, and the Transfer Pricing reflects this trend. 84The principles and methods set out by the OECD Model Tax Convention are likely not to be enough to address the specificity and increasing difficulty arising by the transfer of intangibles, between associated enterprises. The intangible assets present some peculiarities, which make the analysis required by the OECD Model Tax Convention very hard to perform, without supplementary tools. Indeed, these assets usually lead to issues in terms of identification, recognition of ownership and valuation. Intangibles often are even hard to identify, because the accounting criteria for the recognition on the Balance sheet may not be relevant for Transfer Pricing purposes. According to the accounting point of view, an intangible asset is identified, when it:

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⁸³ The synergies which may arise from combination of intangibles with other assets, either tangibles or intangibles, is an element to be taken into account by tax authorities in their assessment. This economic effect contributes to create differences between the balance sheet's values and the Transfer Pricing values, as the value arising from synergies is not recognized in the financial statements. Furthermore, this is an additional explanation of the huge difference between market capitalization and book value of equity of the ICT companies. See M. Lagarden, *supra* n.26, at paragraph 3 and paragraph 4.2 of this thesis, which will address this issue in detail.

⁸⁴ See figure n.4, at section 2, for see how financial investors reward companies based on intangibles.

- is separable (capable of being separated and sold, transferred, licensed, rented, or exchanged, either individually or together with a related contract) or
- arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

However, for instance, "costs associated with developing intangibles internally through expenditures such as research and development 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". 86 Hence, Transfer Pricing issues may come up with intangibles which are not event booked. Secondly, it is usually very difficult to clearly identify the ownership of an intangible, and the concept of ownership itself is multisided. Indeed, the ownership can be viewed from a legal or economic standpoint. The legal ownership is "based on a set of obligations between the transaction parties which is established upon and documented by the conclusion of a contract". 87The economic ownership instead relates to whom contributes to the creation or development of a determined intangible, and therefore to whom actually benefits from the value creation coming up from the asset use/disposal. Although the contributor and the beneficial owner is usually the same economic subject, it may occur that they are separate, making the analysis more difficult to the tax administrations. Lastly, intangible assets are generally hard to evaluate, and in most cases the 5 methods for determining the arm's length are not suitable in the context of a Transfer Pricing valuation. Financial frameworks for assets valuations are useful with regard to this, in particular the so-called "Income based" models. 88 In the next part of this chapter, each of the three aspects aforementioned will be set out in details, with emphasis on practical examples and on possible solutions. The Transfer Pricing Guidelines of 2017 and the BEPS Action Plan of 2018 will

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⁸⁵ The GAAP (Generally Accepted Accounting Standards) refers to a common set of international accounting principles, standards, procedures issued by the Financial Accounting Standard Board (FASB). Internationally, the equivalent of GAAP in USA and European Union is referred to as International Financial Reporting Standards (IFRS). See IAS 38, Intangible assets, accessed 2 August, 2020, https://www.ifrs.org/issued-standards/list-of-standards/ias-38-intangible-assets/ for the recognition of intangibles in the BS and A. Tuovila (2020), Generally Accepted Accounting Principles (GAAP), Investopedia, accessed 31 August, 2020, https://www.investopedia.com/terms/g/gaap.asp.

⁸⁶ OECD (2017), *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*, at chapter VI. ⁸⁷ See M. Lagarden, *supra* n.26, at paragraph 4.1.

⁸⁸ The Income-based models are financial tools which derive the value of an asset/company from the future economic benefits it is expected to generate. These benefits may be either earnings or cash flows, depending on the type of valuation technique. These future benefits are estimated through projections, and are discounted with a discount rate, which can catch the risk of these estimates. The most common income-based valuation is the Discounted Cash Flows (DCF). For further information, access the link https://corporatefinanceinstitute.com/resources/knowledge/valuation/ and the section 3.3.4. of this thesis, which address the issues of valuation on detail.

provide the most relevant policies about the treatment of the intangibles, in the Transfer Pricing context.

3.3.2 THE IDENTIFICATION OF INTANGIBLES

The definition of "intangible asset" is subject to many different interpretations, and it is crucial to find the balance between a too broad and a too narrow concept. A too broad definition of intangibles may excessively enlarge the perimeter of the ALP, letting the tax administrations intervene in situations which would normally occur under market circumstances. At the opposite, an overly narrow definition would enable taxpayers to argue that the actual transaction falls outside the definition given by the tax authorities. Therefore, the OECD defines the intangibles as "something which is not a 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". ⁸⁹ The definition abovementioned is different from the accounting one, and it is relevant only for Transfer Pricing purposes. Therefore, the key features of intangibles are:

- Lack of physical substance;
- Non-monetary character;
- Identifiability;
- Separability;
- Controllability;
- Future economic relevance/utility;
- Different conceivable forms of ownership. 90

Each of these features is not intended to be decisive to identify an intangible asset in a Transfer Pricing context. For example, intangibles may be transferred both separately and in combination with other goods or services. Even if the latter intangible is not separable, it can be relevant for tax authorities. Moreover, "not all research and development expenditures produce or enhance an intangible"⁹¹, thus the future economic relevance may be misleading. Therefore, the analysis must be performed at a company level and at a market level. The company level analysis should take care of how the intangible in question contributes to the overall value creation of the

⁸⁹ See OECD, *supra* n.86, at paragraph A.1. and compare with IAS 38, *supra* n.85. The difference in defining intangibles is evident. While the accounting definition is focused on clear criteria such as the separability and the origin from contractual obligations, the OECD's one is very vague, with a generic notion of control on assets which are not physical. The matter of how these views differ will be addressed in detail in section 4.2. of this thesis.

⁹⁰ See M. Lagarden, supra n.26, at paragraph 3.

⁹¹ OECD, supra n.86, at paragraph 6.11.

business. The sole presence of an intangible does not guarantee a premium return, if the asset considered is not unique and valuable. A unique and valuable intangible is an asset "which is not comparable to intangibles used or available for comparable transactions and whose use in business is expected to yield greater future economic benefits than in its absence". 92 The market level analysis consists in a thorough acknowledgment of the key features of the market in which the companies operate. The way the intangibles create value according to the business model is relying on the industry characteristics and on the level of competition that the companies face. Moreover, the intangibles must be identified with specificity. The analysis must be aimed to understand the important functions performed and specific risks assumed in connection with the development, enhancement, maintenance, protection and exploitation of the intangibles and the manner in which they interact with other intangibles, with tangible assets and with business operations to create value. Thus, although the intangibles often have similar characteristics and a certain degree of standardization across different companies, their identification within the Transfer Pricing framework depends on the economic context. Nevertheless, hereinbelow a brief list of the main kinds of intangibles is exposed, in order to have a better understanding of the more common assets involved in the issue:

- 1. Patents: they are legal instruments that grant an exclusive right to its owner, i.e. to use a given invention for a limited period of time within a specific territory. They are commonly the outcome of a multi-year R&D activity, and the way they lead to value creation may be different. Usually, patents are used to cover the commercialization of innovative products; in this case the premium return comes out of the sale of the good/service. Another case may be licensing other companies to use the patent, in exchange of fixed payments. Lastly, also the outright sale of the patent may give the company an excess return. As for all the other intangibles, the patent is not directly implying the increase in the overall profits a company. A deep analysis of the business and competitors must be performed.
- 2. Know-How: this asset is made up of knowledge that assists or improves a commercial activity. Its key feature is the lack of protection given by any legal instrument, such as patents. It often gives a competitive advantage to the owner, but it is probably the most exposed asset to loss risk. This asset is held by human capital in the companies: employees, managers, executives. Even only a manager resigning for working with another company may led to the loss of a consistent part of the organization's know-how, and to the spread of the knowledge across the competitive environment.

⁹² OECD, supra n.86, at paragraph 6.17.

Notwithstanding the volatility of the competitive advantage given by know-how, confidentiality can be protected by either unfair competition, employment contracts and economic/technological barriers. 93

- 3. Trademarks, trade names, brands: A trademark is a "unique name, symbol, logo or picture that the owner may use to distinguish its products and services from those of other entities". 94 It is usually protected by a registration system, in order to be distinguishable from the other products/services. A trade name is the name with the which a company is doing business, it is often (but not always) the legal name of the company itself. A brand is a more complicated intangible, in the sense that it is usually nominated with the same meaning of trademarks and trade names, but it is actually a "a combination of intangibles and/or other items, including among others, trademarks, trade names, customer relationships, reputational characteristics, and goodwill". 95 The intrinsic nature of this asset makes it nearly impossible to be separated from the other abovementioned intangibles. It is considered to be one of the most interesting value-creating intangibles, as "creating and delivering a trustworthy branded value proposition is the source of sustainable value creation". 96
- 4. <u>Government licenses</u>: some particular businesses may be dependent on a concession released by governments. For instance, within chapter 2 an example of an Italian company, Aspi, is set out. This company almost went bankrupt, under the threat of revoking the concession of management of the Italian highways. ⁹⁷
- 5. <u>Goodwill</u>: this asset raises different definitions, according to the standpoint from which it is observed. From an accounting point of view, it is "the difference between the aggregate value of an operating business and the sum of the values of all separately identifiable tangible and intangible assets". From a financial perspective, it is defined as the future expected benefit coming up from business assets which are not individually identified and separated. Lastly, from a pure business point of view, it is considered as the expectation of value creation arising by future trades of existing customers.

⁹³ OECD, supra n.86, at paragraph A.4.2.

⁹⁴ OECD, *supra* n.86, at paragraph A.4.3.

⁹⁵ See OECD, supra n.94.

⁹⁶ Brand is one of the most important sources of value creation. The recognition of value in a brand may make the difference in terms of competitive advantage and create a constant cash flow generation. See L. Light (2019), *The Economics of Brand Value*, Forbes, accessed 3 August, 2020,

https://www.forbes.com/sites/larrylight/2019/03/06/the-economics-of-brand-value-creation/#32572a194491.

⁹⁷ A relevant number of firms are born thanks to concessions released by public authorities, usually for managing natural resources or key infrastructures. The perspective of losing the concession, or even to face competition in renewing it, may lead to a huge loss of value for those firms. An emblematic example is set out in paragraph 2.3.1. of this elaborate, with reference to the Italian case of highways management.

⁹⁸ OECD, supra n.86, at paragraph A.4.6.

Although goodwill cannot be separately recognized, its value affects the price of many transactions occurred between either associated or independent enterprises. The case of transactions of some of all business assets, between associated enterprises, is relevant in a Transfer Pricing analysis. The tax administrations, in order to determine the arm's length of a transaction of assets between associated enterprises, should consider the impact that goodwill may have on the transfer price. An overpaid transfer of assets between associated enterprises may include the value of a part of goodwill, which may be intended as an additional compensation for reputation or brand value. This is especially true for transactions involving intangibles: they are more sensitive to the combination with non-separately identifiable assets, constituting the goodwill. Therefore, although a transaction between associated enterprise might not respect the ALP, and thus it must be adjusted by the tax authorities; the MNE's executives may argue that the goodwill justifies the difference with respect to normal market prices. This additional element makes the valuation of arm's length of intangibles in a Transfer Pricing context even more complicate and requires even more economic sensitivity to the tax administrations.

Other features, such as synergies and market characteristics, although being relevant in the context of a Transfer Pricing analysis, cannot be identified as intangibles, because they cannot be controlled and owned. Nevertheless, they must be taken into account by the tax authorities, in order to have a full understanding of the role of intangibles within the company and the market of reference.

3.3.3 THE OWNERSHIP OF INTANGIBLES

The issue of ownership, in the intangible world, is key. Notwithstanding, in normal situations, the ownership is conceived only as the legal one, it can actually take various forms. In the context of a Transfer Pricing analysis involving intangibles, 2 perspectives of ownership can be identified. The legal perspective looks at the form more than at the substance. It depends on documents which formally link an asset to a company. Within this category, a further distinction is needed: the legal ownership slightly differs from the contractual ownership. The legal ownership "is conveyed by application, enrolment or registration at, and/or issuance by the relevant national public body". ⁹⁹Thus, this concept is more focused on the legal protection provided by patents, trademark registrations and others. The subject issuing a patent for a new product or registering a trademark, is the legal owner of these assets. The contractual ownership, instead, is "based on a set of obligations between the transaction parties which is established

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⁹⁹ M. Lagarden, supra n.26, at paragraph 4.1.

upon, and documented by the conclusion of a contract". ¹⁰⁰Hence, this concept is linked to private agreements between parties on the exploitation of an intangible and the right to receive the eventual return. Changing perspective, the economic ownership points out the value of contributions to the use or development of an intangible asset. The party giving "valuable contributions to a transaction-relevant intangible" ¹⁰¹ becomes the economic owner, usually entitled to receive the income eventually earned by the commercialization of the asset itself. Lastly, a 4th category is left, which is very similar to the economic ownership. It is the so-called beneficial ownership. The beneficial owner is relevant in situation when a legal owner, formally entitled to bear risks and receive compensations from the use of an intangible, is actually receiving instructions from the true owner, the beneficial owner, which has the "unrestricted right to use, enjoy the benefits or dispose of the intangible asset". ¹⁰² It is a hid owner. Hereinbelow, a graph summing up the relevant categories of ownership:

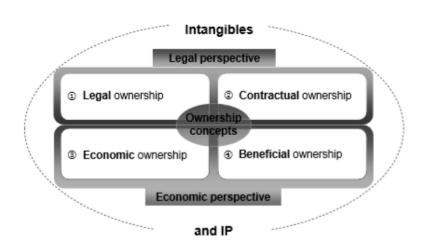


Figure 5. Ownership concepts related to intangibles and IP in a transfer pricing context.

Source: M. Lagarden, *Intangibles in a Transfer Pricing context: where does the road lead?*, International Transfer Pricing Journal, September/October 2014, pp.331-346, IBFD.

3.3.3.1 LEGAL OWNERSHIP AND ARM'S LENGTH REMUNERATION

The clear identification of the legal owner of an intangible is the starting point to carry out a proper Transfer Pricing analysis. This information is usually found in "written contracts, public records such as patent or trademark registrations, or in correspondence and/or other

¹⁰² See M. Lagarden, *supra* n.99.

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¹⁰⁰ The difference between the legal and the contractual ownership may be thin sometimes. However, the first one is based on legal arrangements provided by public bodies, while the contractual ownership is based on agreements between privates. See M. Lagarden, *supra* n.99.

¹⁰¹ The possible divergence arising between the legal and the economic owner is one of the main causes of Transfer Pricing. Indeed, often the party controlling the asset is different from the one owning it. The DEMPE approach introduced by the OECD, is aimed at addressing this issue. See M. Lagarden, *supra* n.99.

communications among the parties". ¹⁰³The contracts can specify how rights, responsibilities and roles are distributed among the companies. However, the presence of such features within a contract does not guarantee the respect of the ALP. The prices may be manipulated, in order not to reflect the normal market conditions. Moreover, although the written contracts contain some provision, they may not be fully respected in practice. Therefore, tax authorities, have to perform a double leveled analysis: at the superficial level, they have to understand if the contract respects the ALP; and furthermore, although it is fully compliant, they have to deeply analyze the common practices among the parties. The legal owner, as already mentioned, may be spotted also by public registrations of assets such as patents, trademarks or brands. For Transfer Pricing purposes, the legal owner will be considered the owner of the intangible in question. There may be cases in which no legal owner can be identified, because of lacking acts and documentation. In this particular situation, the tax authorities should perform an additional analysis in order to determine which party is actually exercising the control of decisions regarding the "exploitation of the intangible" and "the practical capacity to restrict others from using the intangible". 104 The eventual subject able to exercise the control over these decisions is considered to be the owner of the intangible. Another important specification concerns the ownership of intangibles, related to other intangibles: for instance, the license to use a certain brand to commercialize a product in a certain market for a limited period of time. The license and the brand are both intangibles, and although the license "lives" in function of the brand, in the context of Transfer Pricing they must be considered separately, and so must the ownership. Following the previous example, the brand may be owned by a different company from the one owning the license and using it to commercialize products, thanks to the brand itself. Although identifying the legal owner is a good starting point, it is not enough in order to have a full understanding of the situation. What really matters in the framework, is the identification of the party which is the economic owner. In other words, being the legal owner is not enough to justify the obtainment of the full compensation coming up from the exploitation of the intangible. The parties entitled to receive compensation from the exploitation of the asset are the ones performing functions, using assets and assuming risks, in connection with the development, enhancement, maintenance, protection, and exploitation of intangibles. ¹⁰⁵ In

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¹⁰³ The first step of every assessment regarding Transfer Pricing, especially when dealing with intangibles, is a thorough analysis of the written arrangements between the parties. The tax authorities must know the conditions related to the development, the exploitation, the split of economic benefits of the intangible. Only after this operation, they can assess the compliance to the contracts and eventually set the transaction at arm's length. See OECD, *supra* n.86, at chapter VI, paragraph B.1.

¹⁰⁴ OECD, *supra* n.86, at paragraph 6.40.

¹⁰⁵ This approach is the key innovation standing out from the OECD Transfer Pricing Guidelines and BEPS project. It states that the party controlling functions and assuming risks, related to the intangible, is entitled to

many cases, the legal owner and the economic owner differ, and an eventual contract, which addresses all the compensation to the legal owner, does not respect the ALP. An entity which simply holds an internally developed intangible is not entitled to receive any economic return, whether another entity of the same MNE performs the functions, use the assets and assumes the risks related to that asset. However, in the vast majority of cases, a part of the compensation is recognized to the economic owner of the asset, and the tax authorities focus on a more complicated challenge, i.e. whether the remuneration is at arm's length or not. Indeed, the remuneration provided to the entities performing functions, using assets and assuming risks in connection with the development, enhancement, maintenance, protection, and exploitation of intangibles, is usually distributed on an ex-ante basis. This means, in other words, that the compensation provided to the entity exercising the abovementioned functions, is computed using ex-ante assumptions on the expected profitability that the intangible will produce. As it is widely known, however, it is not rare that the actual profitability significantly differs from the expected one. It is duty of the tax administrations to understand whether the eventual difference is due to human mistake, made in good faith, or to voluntary manipulation. This issue joins the other nominated so far, namely:

- a) The identification of the party performing functions;
- b) The identification of the party using assets;
- c) The identification of the party assuming risks,

in connection with the development, enhancement, maintenance, protection, and exploitation of intangibles. In the following paragraphs, each of these aspects will be addressed in detail.

3.3.3.2 THE PERFORMANCE OF FUNCTIONS

The principles established in the OECD Transfer Pricing Guidelines state that each member of an MNE should receive an appropriate compensation for the functions it performs, related to the development, maintenance, protection and exploitation of intangibles. ¹⁰⁶ The legal owner, notwithstanding the specific terms provided by a contract or public registration, is entitled to retain all the return coming from an intangible, if and only if it performs the functions abovementioned. Nevertheless, it is not necessary that all functions related to the intangibles are to be performed by the legal owner. Indeed, if market relationships among independent parties are considered, it is usual that some functions related to the development, maintenance, protection and exploitation of intangibles, might be outsourced. What is really important is that

receive extra profits arising from the asset. It is called, in international taxation literature, DEMPE approach, and it was thought to contrast the practice of allocating extra returns to companies located in low tax jurisdictions. See OECD, *supra* n.86, at paragraph 6.42.

each of the functions eventually outsourced to associated enterprises, should be remunerated according to the ALP. The arm's length determination "should consider the availability of comparable uncontrolled transactions, the importance of the functions performed to the creation of the intangible, and the options available to the partners". 107 Moreover, the identification of the party exercising the control is an important part of the analysis. In the outsourcing of functions occurred between unrelated enterprises, the party conceding the functions connected to an intangible is usually maintaining the control over the company which operates on the asset. Nonetheless, a specular operation which occurs between associated enterprises, have different characteristics. In this latter case, the legal owner often gives in the control besides some or all the functions connected to the intangible, and usually the controlling entity is different to the one exercising the functions. Therefore, the legal owner should adequately remunerate the controlling entity too, of course at arm's length. Any economic benefit coming from the outsourced functions should not be attributed to the legal owner, but to the entity exercising them. As for all the parts of a Transfer Pricing analysis involving intangibles, the clear identification of the parties exercising functions and control may be extremely complicate. The analysis of the business, the market and the circumstances are key, beyond any recommendation and definition. In this specific case, it is fundamental to recognize that, depending on the circumstances, some functions are more important than others. For instance, concerning the self-developed intangibles, these more important functions may include "design and control of research and marketing programs, direction of and establishing priorities for creative undertakings including determining the course of "blue-sky" research, control over strategic decisions regarding intangible development programs, and management and control of budgets". 108 For a general intangible instead, the defense and protection, the ongoing quality control over functions performed by independent or associated enterprises may be important too. The functions abovementioned, are usually amongst the ones contributing with the most relevant amounts to the final value of the intangible. In order to evaluate the outsourced functions at the arm's length, it is usually difficult to find out comparable transactions, therefore the Profit Split Method as well as the utilization of financial valuation techniques may be very useful, in order to estimate what should be the appropriate remuneration to the associated

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¹⁰⁷ This sentence is likely to create issues, regarding the subjectivity of such assessment. Indeed, the recognition of "important functions" by tax authorities, may lead to never ending discussions. This argument, sustained by important authors, will be addressed in detail in paragraph 4.1.5 of this thesis. See also OECD, *supra* n.86, at paragraph 6.52.

¹⁰⁸ OECD, supra n.86, at paragraph 6.56.

enterprises exercising the functions connected to the development, maintenance, protection and exploitation of intangibles.

3.3.3.3 THE USE OF ASSETS

The OECD, in its Transfer Pricing Guidelines, states that associated enterprises "that use assets in the development, enhancement, maintenance, protection, and exploitation of an intangible should receive appropriate compensation for doing so". 109 The assets can be, without limitations, intangibles, tangibles and funding. The treatment of funding, in exercising the functions abovementioned is particularly interesting. The OECD has indeed introduced a new formulation of the ALP, pointing out the importance of compensating the parties actually involved in the "life" of the intangible. As a consequence, the party providing funds, in order to develop, maintain, enhance, protect and exploit the intangible, may not considered to be the residual claimant anymore. 110 The OECD, by doing so, shows its concern about the so-called "cash boxes" without economic substance, which "are highly capitalized, low-taxed companies that become the owners of intangibles, and therefore substantial return claimants". ¹¹¹ Thus, the financer of the exercise of the functions related to an intangible, is entitled to receive only "an appropriate risk-adjusted return". 112 The economic argument underlying the change in ALP policy, is the discrimination between the financial risk and the operational risk. Indeed, as the financial risk is certainly present and recognized by the OECD, the key point is the operational risk. The new formulation of ALP concerning funding activities, implies that whether the funder is not involved in the development, enhancement, maintenance, protection, and exploitation of an intangible, then it does not face off the operational risk related to this asset, and therefore it is not entitled to any profit exceeding the risk-adjusted return of the financing. Nevertheless, this is not fully reflected by the empirics, as Andrea and Alberto Musselli state in their paper, because "in market economies [...] the funding of intangibles development against property ownership before knowing whether the result will be successful or not, is the most important and pure source of a company's residual profits (or losses)". 113 The possibility of convergence

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¹⁰⁹ OECD, supra n.86, at paragraph B.2.2.

¹¹⁰ The "residual claimant" is the party which is entitled to receive any extra-return arising from the exploitation/commercialization of the intangible. In other words, it is the company entitled to any net profit coming from the intangible, after the remuneration of the parties sustaining activities for its creation, development and protection. This concept is key to understand the problems related to Transfer Pricing.

¹¹¹ See A. Musselli & A. Musselli (2017), *Rise of a New Standard: Profit Location in Countries of Important Intangible Functions Managers*, International Transfer Pricing Journal, published September/October 2017, pp.331-341, IBFD.

¹¹² See OECD, supra n.86, at paragraph 6.62.

¹¹³ The risk allocation between the purchaser of an intangible (thus, the owner) and the company performing activities for its development/ maintenance... is subject of controversies. On one side, the OECD states that the risk is borne by the parties performing the activities. Some authors, see A. Musselli & A. Musselli, *supra* n.111,

between these two kinds of risk may be represented by a contingent funding, for example by linking the assessment of key decisions regarding the development of the intangible to the tranches of funds. In real economy, the "higher the development risk and the closer the financial risk is related to the development risk, the more the funder will need to have the capability to assess the progress of the development of the intangible"¹¹⁴. Hence, since the risks usually related to the economic success of an intangible are high, the funder will likely be willing to worry about the key strategic decisions related to the development, exploitation or commercialization of the asset, and the control will be shared more than totally delegated to a third party, as theoretically assumed. Once again, tax authorities are asked to perform a holistic analysis of the contractual term of the funding, but they also must assess the actual conduct undertaken by the parties involved. The economic principle underlying the new formulation of the ALP, concerning the use of funds within MNEs, has put into discussion in its basis, although the OECD's concerns about the cash-boxes activities seem totally justified. In the chapter 4 of this elaborate, this interesting issue will be addressed in detail.

3.3.3.4 THE ASSUMPTION OF RISKS

The main risks which can be borne in relation to the intangibles are:

- 1. <u>Development risk</u>: risk that R&D and marketing expenses do not produce the desired outcome, risk of operating investments not concerning the financing, risk of mistakes in timing of the step-by-step process of development;
- 2. <u>Obsolescence risk</u>: risk that competitors' technological innovation renders the product obsolete before the commercialization;
- 3. <u>Infringement risk</u>: risk that protection related to the intangibles gets violated, including the risk that the defense provided might be useless, costly and time consuming;
- 4. Product risk: risk related to products and services based on the intangible;
- 5. <u>Exploitation risk</u>: risk related to the volatility on the magnitude and timing of returns expected from the intangible. ¹¹⁵

Whether the legal owner outsources the assumption of this risks to an associated enterprise, then the latter should receive an appropriate compensation. The assumption of the above listed risks implies the recognition of the consequences which may come up if something goes wrong. Concerning this point, it is especially relevant to ensure that the party asserting to be facing the risks is actually bearing the responsibilities, and it is hence able to sustain the costs incurring if

at Abstract, instead sustain the opposite thesis: in economics, the purchaser (owner) is the one bearing all the risk. See section 4.1. of this elaborate, which sets out this issue in detail.

¹¹⁴ OECD, supra n.86, at paragraph 6.64.

¹¹⁵ This set of risks is exposed by the Transfer Pricing Guidelines, see OECD, *supra* n.86, at paragraph B.2.3.

some or even all of the risks occur. If the subject bearing the risk is different from the subject responsible for the eventual consequences, then an adjustment according to the ALP shall be made, in order to transfer the costs to the party which asserts to be facing the risks and to remunerate the associated enterprise actually sustaining the economic costs.

3.3.3.5 DIFFERENCE BETWEEN EX-ANTE AND EX-POST RETURNS

In finance, it is extremely rare that the ex-ante valuation reveals to be close to the actual occurrence of things. Between the estimates and the reality, an uncountable number of variables play a role: the happening of unforeseen events, regarding the evolution of the market, the society, the regulations, or for instance the outbreak of a pandemic, a natural disaster, a terrorist attack and so on and so forth, can radically change the framework of the valuation. Moreover, as valuation is not a science, but it is a subject based on human assumptions, the key drivers of value may be wrong. For instance, risk has been misrepresented in the cost of capital, the sales growth has been overestimated, or the average tax rate has been wrongly computed. All these elements combined, make the difference between the ex-ante (estimated) and the ex-post (actual) returns arise. In the next section of this chapter, a detailed analysis of the valuation techniques will be carried out. Nevertheless, the aim of this paragraph is to provide guidelines in determining which party should be compensated (or penalized) for the positive (negative) difference coming up. The answer provided by the OECD is always the same: the party effectively bearing the economic risks should be entitled to the over or under-return. The company bearing the economic risk may not necessarily be the legal owner, and the funder of activities related to the intangible neither. The identification of the roles and responsibilities must be once again obtained through the analysis of the contracts and the actual conducts of the parties involved. Besides of this analysis, care should be taken by the tax authorities, concerning the amount of contributions paid to associated enterprises, based on the ex-ante valuations, to compensate the functions performed, assets used and risks assumed in the development, enhancement, maintenance, protection, and exploitation of an intangible. These contributions are paid in advance and are based on the expected profitability that the intangible will bring. However, as the ex-ante valuation are normally wrong, these contributions are wrong too. It is important to point out that even the OECD "allows a corridor of 20% above or below the calculated transfer price as a deviation corridor" 116, for the treatment of the Hard-to-Value Intangibles. 117 The 20 % corridor, although not grounded by any economic/fiscal reason, is

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¹¹⁶ S. Hoffmann (2020), *Hard-to-Value Intangibles and the Pricing of Uncertainty*, International Transfer Pricing Journal, published May/June 2020, pp.160-167, IBFD.

¹¹⁷ The Hard-to-Value Intangibles are assets which have no reliable comparable and whose future economic benefits generation is highly uncertain. Their valuation is therefore subject to extreme volatility, in both the

considered by the OECD as a sensitive threshold, above the which it is presumptively evident that the transaction was not at arm's length. Besides this threshold, other exemptions are provided by the OECD, which will be set out in the following paragraphs. It is up to the tax administration, in any case, to determine whether the mistake was voluntarily made, in order to reach a lower taxable income thanks to Transfer Pricing policies, or alternatively it was a human mistake made in good faith.

3.3.3.6 SOME PLAUSIBLE SCENARIOS

- Research and development: in many cases it may occur that a member of an MNE is performing R&D activities on behalf of an associated enterprise, which is the legal owner of the (eventually) resulting intangible. According to the ALP, a compensation must be recognized to the party carrying out the R&D activities. If a remuneration is provided, under contractual arrangements signed by the parties, then this must be appropriate. The appropriateness must be assessed by the tax authorities, according to the facts and circumstances, such as "whether the research team possesses unique skills and experience relevant to the research, assumes risks (e.g. where "blue sky" research is undertaken), uses its own intangibles, or is controlled and managed by another party."¹¹⁸A standard compensation based on the reimbursement of costs plus a markup, may not be at arm's length in all circumstances.
- Payment for use of the company name: generally speaking, no compensation should accrue due to the simple feature of being member of a group or using the group's name to do business. Troubles begin when the legal owner of a trademark, tradename or brand, provides, with the use of these logos, a financial benefit to another member of group, which does not recognize any compensation to the owner. In this case, an appropriate remuneration to the legal owner should be made, and the amount of this compensation should comply with the ALP. In determining the arm's length for such transaction, attention should be paid to the "amount of the financial benefit to the user of the name attributable to use of that name, the costs and benefits associated with other alternatives, and the relative contributions to the value of the name made by the legal owner, and the entity using the name in the form of functions performed, assets used and risks assumed." An additional common circumstance is when, within the same MNE, a member of the group owning goodwill connected to the use of an unregistered

assumptions and the outcome. See paragraph 3.3.4.4.and 3.3.5. of this thesis for further information and also S. Hoffmann, *supra* n.116, at paragraph 3 for a more detailed definition of HTVIs.

¹¹⁸ OECD, supra n.86, at paragraph B.4.2.

¹¹⁹ OECD, *supra* n.86, at paragraph B.4.3.

trademark, is letting another associated enterprise use the already mentioned intangible. In this case, since this situation would lead to economic and accounting misrepresentation, an appropriate payment should be made, compliant to the ALP. Lastly, in the case of M&As occurring between two existing and independent businesses, the anticipated benefits coming from the exploitation of the trademark, trade name and brand of the acquiree is already incorporated in prices, as the transactions occur between unrelated enterprises, and thus they comply with ALP. These anticipated benefits will be conveyed into the goodwill, coming up from the difference between the price paid and the book value of equity (and an eventual control premium). 120

3.3.4 THE VALUATION OF INTANGIBLES

How to determine the arm's length, for transactions involving the transfer of intangible assets, is one of the most challenging issue of current international taxation law. The problem has acquired an increasing relevance over the last years, as with the advent of the digital economy, it has become "widely acknowledged that an increasing portion of the value of a firm depends on its ability to develop and exploit intangible assets". ¹²¹Nevertheless, the practical utilization of the various methods applicable to determine the arm's length has not solved this issue yet. Addressing this question is often highly challenging, because of the following factors:

- a) Lack of comparability with transactions occurred between independent enterprises.
- b) Lack of comparability between the intangibles in question.
- c) Ownership/use of different intangibles by different associated enterprises within the same MNE.
- d) Difficulty to isolate the impact of any intangible.
- e) Level of integration is so high that allocation is not possible.
- f) Contributions of various members to of MNE may take place in many years.
- g) The fact that taxpayer structures may be based on contractual terms between associated enterprises that separate ownership from performance of important functions, control

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¹²⁰ The "control premium" is a price paid in excess to the fair market value, in case the acquirer is obtaining the control of the acquiree (i.e. 50% +1 of the shares). A buyer obtaining the control, is getting access to the firm's cash flows, day-to-day management and strategic plan. The major reasons for getting the majority stake are: select management and set their compensation; register stock for a public offering; liquidate-sell-merge the company; buy-sell-pledge assets; declare dividends; make capital distributions; enter and control contracts. See also Corporate Finance Institute, Control Premium, accessed 3 September 2020, https://corporatefinanceinstitute.com/resources/knowledge/deals/control-premium/

¹²¹ G. Petronella (2019), Valuations for Transfer Pricing of Intangibles: A Comparative Analysis of the Excess Earning Method and Residual Profit Split, International Transfer Pricing Journal, published November/December 2019, pp.375-380, IBFD.

over risk, and decisions related to investment in ways that are not observed in transactions between independent enterprises. 122

As the degree of complexity, essentially due to the abovementioned factors, may get extremely high, the subjects seeking to determine the arm's length of a transaction involving intangibles should, first of all, look for a suitable comparable. If the tax authorities can find adequate comparable transactions, occurred between independent parties, then the determination of the arm's length is just a direct consequence. However, whether after a long and complicate research, the tax administrations are not able to find suitable comparable transactions, then they are forced to use either Transfer Pricing methods not relying on comparables or financial valuation techniques. The following paragraphs will set out the method for the research of comparable transactions, with a focus on the comparability factors that must be spotted, and on the Transfer Pricing methods which are most useful in dealing with intangibles. Afterward, the alternative methods for determining the arm's length of intangibles-related transactions will be set out, with a focus on the financial valuation techniques.

3.3.4.1 THE RESEARCH FOR COMPARABLE TRANSACTIONS

The research for comparable transactions occurred between independent enterprises is the shortest and most efficient way that the tax administration can dispose of, in the context of arm's length determination. This is especially true for Transfer Pricing connected to intangibles, where the valuation of the asset's price may be very subjective and uncertain. In order to perform a deep research of comparable transactions, a set of features are especially important to be taken into account. The OECD lists them, within its Transfer Pricing Guidelines of 2017:

- Exclusivity: the power of an intangible, or right in intangible, to be exclusive must be considered within the analysis. A transaction involving the transfer of a determined asset, covered by a multi-year patent, will result in transferring an asset which is able to potentially create a competitive advantage. This cannot be compared to the transfer of assets not protected by any patent, which are unlikely to give a sustainable competitive advantage to the receiver, over the years. The presence of legal or economic protection may be considered, in the research for comparable transactions.
- Extent and duration of the legal protection: strictly related to the exclusivity, also the extent and duration of a legal protection are important in the context of the research. Transfers of intangibles with low-negligible legal protection, such as know-how, cannot be compared to the transfer of a self-developed patent which is legally protected for 5-

¹²² OECD, *supra* n.86, at section B, paragraph 6.33.

- 10 years. Moreover, assets with a legal protection of 1 year cannot be compared to analogue assets with a 10-years protection.
- Geographic scope: the extent of the geographic scope is relevant and affects the value of the intangibles. For instance, a license allowing a company to operate within one country will be surely less valuable in respect of another license, which allows operations within 10 countries.
- <u>Useful life</u>: the remaining useful life of an intangible asset may be affected by various factors. For instance, by the duration of the legal protection connected to it, by the rate of technological change, or again by the development and commercialization of new and more efficient products. The length of the useful life is obviously positively correlated with the value of the intangible asset, therefore transactions involving intangibles with different useful life may not be comparable, for Transfer Pricing purposes.
- <u>Stage of development</u>: the point in time at which intangibles are transferred can change the value of the transaction. Indeed, whether an intangible is transferred in combination with a product/service, which is ready to be commercialized or which needs an additional level of development, changes the "right" value of the transaction, according to the ALP. In general, transfers of intangibles in relation to final products/services, ready to be launched in the market, are more valuable than similar intangibles related to semi-finished goods/services. In evaluating partially developed intangibles, care should be taken to the likelihood that "further development will lead to commercially significant future benefits". ¹²³
- Rights to enhancements, revisions and updates: as the digital economy is producing more and more technological innovation, the possibility for a product to become uncompetitive in a short-term horizon, is non negligible. The option to have intangibles, which can permit the access to a product enhancement, revision and update, can make the difference between building up a short-term or a long-term and sustainable competitive advantage. A similar reasoning fits to the transfer of intangibles in connection with research that can lead to the creation of another intangible asset, enhanced and more innovative. The comparability analysis should consider, therefore,

¹²³ The uncertainty about future profitability of the intangible under development is key matter in Transfer pricing assessments. Indeed, companies often value a developing intangible according to the projection of its future economic benefits. Those models may be easily manipulated and lead to tax avoidance. Tax authorities can oppose the actual economic profits against those forecasts, but with care. This issue will be broken down in detail in section 3.3.5 of this thesis and see also OECD, *supra* n.86, at section D.2.1.5, paragraph 6.1.2.4.

- the feature of permitting the access to an enhanced and revised version of the intangible itself or of another intangible, developed with further R&D activities.
- Exploitation of future benefits: the expected future economic benefits arising from the use or commercialization of the intangible can differ a lot, depending on the assumptions. The tax authorities, in order to perform a reliable comparability analysis, should take into account the different perspectives of profitability of the intangibles. Indeed, no suitable comparability can exist, whether the intangibles are expected to give a totally different return from their exploitation. The ex-ante valuation of future benefits is inevitably affected by subjective assumptions. In order to perform a reliable valuation, tax authorities should use the same theoretical assumptions in evaluating the benefits of different intangibles, without neglecting the differences which may be related to each of the abovementioned features.

The use of databases, such as "commercial databases or proprietary compilations of publicly available license or similar agreements", 124 may be very useful to the tax authorities in the assessment of comparability. Hence, by using such sources, tax authorities can draw an immediate framework of the eventual comparability among different intangible assets. Moreover, the eventual adjustment that may be made, can be more reliable if grounded by numerical evidence. Indeed, notwithstanding the fact that abovementioned comparability factors are essential, some space of movement is left to the tax administrations. These adjustments shall be made, only if the deviation from the original intangible value is marginal. Whether, conversely, the adjustments made by the tax authorities completely reverse the original framework, then the final determination of the arm's length will not be reliably grounded, and the counterparty may easily initiate an arbitration dispute.

3.3.4.2 THE TRANSFER PRICING METHODS WHEN COMPARABILITY EXISTS

If the factors of comparability, previously mentioned, are present and grounded in practice, then any of the 5 Transfer Pricing methods can be utilized in order to determine the arm's length of the transaction under exam. Indeed, 4 out of the 5 methods are relying on a sort of comparability, in respect of similar transactions occurred in similar circumstances. ¹²⁵ Nevertheless, in the particular context of Transfer Pricing connected with intangibles, additional care should be taken in regard of some methods. One sided methods, such as the

¹²⁴ OECD, supra n.86, at section D.2.4.

¹²⁵Indeed: the CUP method is totally reliant on comparable prices; the Cost-plus and Resale Price methods rely on average percentual margins to be added or subtracted, the TNMM relies on comparable margins taken out by similar companies. The PSM is the only method not based on comparable, along with the use of valuation techniques. See paragraph 3.3.1. of this thesis for more details.

TNMM and the resale price method, "are generally not reliable methods for directly valuing intangibles". 126The complexity of the mechanisms which generally occur, in the development, enhancement, maintenance, protection and exploitation of intangibles, do not allow the use of mechanisms which dramatically simplify the events. The situations are generally difficult to standardize, and one different from another, hence the use of pre-determined assumptions on margins can completely misevaluate the transaction. Moreover, also the use of the cost-plus method is not reliable, when it comes to intangibles. There is low or negligible correlation between "the cost of developing intangibles and their value or transfer price once developed". 127 Notwithstanding the use of the methods set out so far is discouraged, no provision forbids their use in rare situation, such as for transactions involving the transfer of non-unique and standardized intangibles, for instance with a well-known margin percentage. In such situations, although very rarely occurring, the use of one-sided methods may render the job of the tax authorities easier and faster. As usual, an elevate degree of judgement is left to the subjects involved in the analysis. The preferential Transfer Pricing method to be used, in case the comparability exists, is anyway the CUP (Comparable Uncontrolled Price) method. This method, after having identified the comparable transaction occurred between independent enterprises, simply replaces the price under exam with the one decided by the market forces. Of course, this method requires a thorough analysis of the comparability factors set out in the paragraph 3.3.4.1 of this elaborate, in order to establish the connection between the controlled and the uncontrolled price. In some situations a company, part of an MNE, purchases an intangible from a third independent party and immediately transfers it to another associated enterprise, belonging to the same group. In this case, if no further operation is made related to development, enhancement, maintenance, protection and exploitation of the intangible in question, then no presumption of an eventual difference arising between the two prices considered can be justified. Thus, the tax authorities can apply the price occurred in the uncontrolled transaction to the one accorded between the associated enterprises. Nonetheless, despite in a certain number of situations it is yet possible to find transactions with a good degree of comparability, the digital economy is making the economic environment more and more complex. The degree of uniqueness of the intangibles by now leaves an always smaller room of maneuver to the tax administrations. In the next part of this chapter, the methods to be utilized in case no comparability is present will be set out, emphasizing the relevance that the valuation techniques may have in such a context.

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¹²⁶ OECD, *supra* n.86, at section D.2.6., at paragraph 6.1.4.1.

¹²⁷ OECD, supra n.86, at paragraph 6.1.4.2.

3.3.4.3 THE TRANSFER PRICING METHODS WHEN COMPARABILITY DOES NOT EXIST

In case of unsuccessful research of reliable comparable transactions, the only Transfer Pricing method which can be utilized is the PSM (Profit Split Method). In particular, this method can be very useful when unique and valuable contributions are made in the development, enhancement, maintenance, protection and exploitation of the intangible. Contributions are "unique and valuable" where:

- 1. they are not comparable to contributions made by uncontrolled parties in comparable circumstances, and
- 2. they represent a key source of actual or potential economic benefits in the business operations. 128

In order to use efficiently the PSM, however, the availability of "reliable and adequate data regarding combined profits, appropriately allocable expenses, and the reliability of factors used to divide combined income" 129 is crucial. The tax authorities should pay attention to the thin distinction between the data and the assumptions. A classic situation in which data and assumptions may not get along is the application of the PSM to estimate the contribution of the parties to the profit created by an intangible, years after the occurrence of the transfer. In this case, the data, intended as the contributions of value before the transfer, may have low or negligible relationship with the future contributions and the future profits coming up from the intangible, which are assumed at the moment of the transfer. Several factors may contribute to complicate the estimation of the profits, and of the future contributions either. For instance, "the relative riskiness and value of research contributions before and after the transfer, the relative risk and its effect on value, for other development activities carried out before and after the transfer, the appropriate amortization rate for various contributions to the intangible value". 130 The more the factors coming into play, the more will be the subjectivity required to the tax authorities and the higher will be the likelihood to face disputes off with companies. A situation when the PSM is often used, is the transfer of limited rights of fully developed intangibles, especially when no reliable comparable transactions can be found. In this case, the assessment of the contributions to profit by the transferor, are only a part of the valuation that should be made by the tax authorities. Indeed, as usual, a thorough analysis of the functions performed, the assets used and the risks assumed by the transferee/licensee in the development, enhancement, maintenance, protection and exploitation of the intangible shall be made.

¹²⁸OECD/G20 (2018), Base Erosion and Profit Shifting Project, *Revised Guidance on the Application of the Transactional Profit Split Method*, Action 10 Final Report, at paragraph C.2.2.1.

¹²⁹ OECD, *supra* n.86, at section D.2.6.2, at paragraph 6.1.4.8.

¹³⁰ OECD, *supra* n.128, at paragraph 6.1.5.1.

Moreover, a careful analysis of the limitations that the rights transferred concede to the licensee is crucial, as well as "assessing contributions of the licensee to enhancements in the value of licensed intangibles". ¹³¹The licensing arrangements must be combined with the functional analysis, in order to determine the profit share to be allocated to the licensor and to the licensee.

3.3.4.4 THE HARD-TO-VALUE INTANGIBLES AND THE VALUATION PROCESS

As the Transfer Pricing methods cannot be reliably utilized in order to determine the arm's length, or if they are weakly grounded, the only way tax administrations can assess a transaction involving an intangible asset, is by using financial valuation techniques. This issue is particularly relevant when the Transfer Pricing analysis deals with the so-called Hard-to-Value Intangibles (hereinafter HTVI). This kind of intangibles represent one of the hardest challenges for tax administrations. More specifically, they are defined as intangibles for which:

- a) no reliable comparables exist, and
- b) at the time the transaction was entered into, the projections of future cash flows or income expected to be derived from the transferred intangible, or the assumptions used in valuing the intangible are highly uncertain, making it difficult to predict the level of ultimate success of the intangible at the time of transfer. ¹³²

Some examples of HTVI are set out by the OECD, in its Transfer Pricing Guidelines:

- The intangible is only partially developed at the time of the transfer.
- The intangible is not expected to be exploited commercially until several years following the transaction.
- The intangible is expected to be exploited in a manner that is novel at the time of the transfer and the absence of a track record of development or exploitation of similar intangibles makes projections highly uncertain.
- The intangible is either used in connection with or developed under a CCA or similar arrangements. 133 134

¹³¹ OECD, *supra* n.128, at paragraph 6.1.5.2.

¹³² U. Schreiber & L.M. Fell (2017), *International Profit Allocation, Intangibles and Sales-Based Transactional Profit Split*, 9 World Tax J.1, sec 1, Journal Articles & Papers IBFD.

¹³³ OECD, supra n.86, at section D.4., at paragraph 6.190.

¹³⁴ The term CCA stands for "Cost Contribution Agreements", it is a contractual arrangement among business enterprises to share the contributions and risks involved in the joint development, production or the obtaining of intangibles, tangible assets or services with the understanding that such intangibles, tangible assets or services are expected to create benefits for the individual businesses of each of the participants.

See OECD Transfer Pricing Guidelines of 2017, at chapter VII, section B for further information.

In assessing the "real" value of such assets, in most cases the only possibility is to use valuation techniques based on accounting and financial metrics. By using those financial models, tax administrations can directly derive the "fair value" of the intangibles in question, without recurring to other indirect methods. According to the International Valuation Standards (IVS), 3 macro-groups of valuation techniques can be listed:

- 1. The "cost-based" ones, which assume that "a rational agent would not be willing to pay a price higher than the cost of self-reproduction"; 136
- 2. The "<u>market based</u>" ones, which assume that "value can be derived by reference to market transactions pertaining to identical or similar assets";¹³⁷
- 3. The "<u>income based</u>" ones, which assume that "value depends on the expected benefits generated by the asset, appropriately adjusted for risk". ¹³⁸

The OECD allows the use of valuation techniques, and specifically the ones which are "income based". The valuation techniques used, as they are connected to Transfer Pricing purposes, must fulfill the provision originated by the ALP, i.e. they should consider issues related to ownership, riskiness and eventual aggregation of transactions. The purpose of the valuation is important to ground the underlying assumptions of the model. Indeed, a different perspective should be given to a valuation made for solely accounting purposes or for tax purposes. The valuations of intangibles made for accounting purposes, for instance in the context of a PPA ¹³⁹, are usually grounded on conservative assumptions, as they are estimates of the value of assets reflected in a company's balance sheet. Conversely, the valuations carried out in a Transfer Pricing context can be grounded on different assumptions and more forward looking, hence less conservative. Therefore, the valuations of intangibles made for accounting purposes shall not affect the

of PPAs.

¹³⁵ The "Fair Value" of an asset is the actual value of an asset – a product, stock, or security – that is agreed upon by both the seller and the buyer. This value is often in contrast with the carrying amount of an asset in the Balance Sheet: indeed, some assets are registered at the historic cost and amortized each year, therefore the divergence between the Fair Value and the book value may get very large. See Corporate Finance Institute, *Fair Value*, accessed 3 September 2020,

https://corporatefinanceinstitute.com/resources/knowledge/finance/fair-value/ for a wider overview.

¹³⁶See G. Petronella, *supra* n. 121, at paragraph 2.

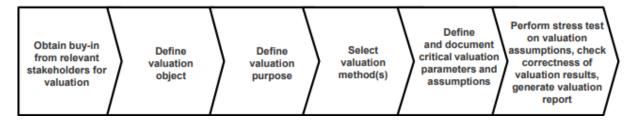
¹³⁷ See G. Petronella, *supra* n. 136.

¹³⁸ G. Petronella, *supra* n. 136.

¹³⁹ PPA stands for "Purchase Price Allocation", it is a practice in which an acquirer allocates the purchase price into the assets and liabilities of the target company acquired in the transaction. The revaluation of the existing assets must be at Fair Value, as well as the measurement of new assets and the determination of any goodwill. The valuation of assets in the context of a PPA is explicitly quoted by the OECD as not binding for Transfer Pricing purposes. This issue will be faced in detail in 4.2.2. of this elaborate. See also Corporate Finance Institute, *What is Purchase Price Allocation*, accessed 3 September 2020, https://corporatefinanceinstitute.com/resources/knowledge/deals/purchase-price-allocation/ for an overview

independent analysis performed by the tax authorities, for Transfer Pricing purposes. In order to perform a sound valuation process, it may be useful to use a framework divided into six steps.

Figure 6. Valuation process



Source: Martin Lagarden, *Intangibles in a Transfer Pricing context: where does the road lead?*, International Transfer Pricing Journal, September/October 2014, pp.331-346, IBFD.

As the valuation object and the purpose have already been defined, the focus will be moved onto the selection of the valuation method, the key parameters and the stress test on the result.

3.3.4.5 THE FINANCIAL VALUATION METHODS

The OECD allows the use of the income-based valuation methods, i.e. the value of the intangible in question must be estimated through the forecast of the expected future benefits connected with the exploitation/commercialization of the asset. The most used income-based financial valuation model is undoubtedly the Discounted Cash Flows (hereinafter, DCF). This method has some advantages. The first one consists in being logically and mathematically consistent, as it is based on theoretical models and assumptions and not merely on empirics. Other valuation methods are instead more focused on the empirics and lacks in logical coherence. The second advantage of the DCF method is that the final outcome relies on some parameters, which are the key value drivers. This lets the analyst focus on the forecast of these drivers, basing the analysis on a sound and forward looking strategic and economic analysis, instead of just looking at the present/past performances. The DCF model's outcome is the Present Value of the intangible at the time of the valuation, and this value is obtained by summing up all the discounted cash flows that the asset is expected to generate throughout its useful life. In case the intangible useful life is estimated to be infinite, from a determined year onward (usually after the 5th year of forecast), the cash flow generated by the intangible are assumed to be constant and perpetual. The perpetual annuity is called Terminal Value, in the context of the income-based models. The key formula and related variables of the DCF are set out below:

Figure 7. PV formula and key parameters.

$$PV_0 = \sum_{t=0}^{t-N} \frac{\text{net profit}_t}{(1+i)^t} + \frac{net profit_{N+1}}{i}$$

Legend:	
t	index for fiscal year
net profit _t	value treated as tax base in fiscal year t, i.e. earnings before taxes in the event that the company has no loss carry-forwards
N	last fiscal year for a budgeting phase
N+1	after budgeting phase the formula considers a perpetual annual return.
i	interest rate for discounting the net profit relating to the intercompany transaction involving the relevant intangible asset
i	index
net profit _{N+1}	approximation for a perpetual amount of net profit each year

Source: S. Hoffmann, *Hard-to-Value Intangibles and the Pricing of Uncertainty*, International Transfer Pricing Journal, published May/June 2020, pp. 160-167, IBFD.

The first term represents the sum of the discounted cash flows within the punctual forecast period, or budgeting phase. The second term instead estimates the perpetual amount of profits accruing from the end of punctual forecast to infinite, i.e. it represents the Terminal Value. All the expected cash flows coming from the intangible are actualized by using a discount factor, which relies on the interest rate of the year considered. The major areas of concerns, regarding the soundness of the model, are represented by the accuracy of the financial projections (i.e. the way the net profits are estimated) and by the assumptions about the growth rates, the discount rates and the taxes. The projected net profits are "highly uncertain, as they consist of income and expense projections derived from the exploitation of the HTVI" and the interest rate "applied for a given year within the valuation period is also uncertain." ¹⁴⁰ In the next paragraph these issues will be set out in details.

3.3.4.6 CRITICAL ASSUMPTIONS REGARDING KEY PARAMETERS

The DCF model is based on a set of key value drivers, and the sensitivity of the outcome of the valuation to these parameters is high. For instance, a slight change in the discount rate may completely overturn the present value, although the financial projections may remain the same.

¹⁴⁰ Although usually underrated, the volatility of interest rate is one of the most impacting aspects on the financial models. The discount rates are usually based on risk-free interest rates, as they are computed through the CAPM. The assumption about their stability over time is maybe the most abstract one. See also S.Hoffmann, *Hard-To-Value Intangibles and the Pricing of Uncertainty*, International Transfer Pricing Journal, published May/June 2020, pp. 160-167, IBFD.

It is therefore crucial to perform a scenario analysis, with the assignment of different probabilities of occurrence to each prospect. This aspect will be addressed afterward in this chapter. Because of the volatility of the outcome, the economic assumptions underlying the model take up a particular importance. These assumptions deal with following areas, which represent the core of the DCF model:

- Financial projections: the net profits arising from the exploitation and commercialization of the intangible are the basis of the valuation process. The forecast of future revenues and costs can be very speculative, as the market dynamics are generally unknown and volatile. Even isolating the profits exclusively arising from the intangible may be very subjective. Therefore, "it is essential for taxpayers and tax administrations to examine carefully the assumptions underlying the projections of both future revenue and future expense". 141 The purposes for which the taxpayers evaluate the intangibles may be relevant for the ex-post analysis of the tax authorities. Indeed, whether the valuation was made for business planning purposes, it could be more reliable than a second valuation made exclusively for tax purposes (and thus, for minimizing the overall tax burden of the group). The financial projections are more reliable when the forecast period is shorter, whilst the longer it is the time of the projections and the larger space of maneuver is given to speculation. Moreover, the availability of "track records of financial performance" 142 of the intangible may be important in the assessment. They can be useful as a reference point; however, the future performances may have no correlation with the past ones. In assessing the reliability of the valuations made by taxpayers, or in building up an own DCF model, the tax authorities must have a further acknowledgment of the market, and a sensitivity to the concept of uncertainty and risk. As for many issues addressed in this thesis, the tax administrations are asked to perform a 360 degrees analysis.
- **Growth rates**: the rate at which revenues grow is a crucial parameter in the DCF model, as it impacts the punctual discounted cash flows and the terminal value either. This value is very hard to predict, especially when there is no reference from the past and the product is very peculiar. Therefore, the possibilities that the companies speculate on it are many. The tax authorities should therefore focus on some key signals of misevaluation, such as the assumptions of linearity of growth rates. Products lifecycles

¹⁴¹ OECD, *supra* n.86, at section D.2.6.4.1., at paragraph 6.163.

¹⁴² OECD, *supra* n.86, at paragraph 6.166.

generally consist of 4 phases: introduction, growth, maturity and decline. ¹⁴³Thus, the growth in sales should have an initial phase of growth, even exponential if the launch on the market is very successful, and a second phase of stagnation and decline. Although the timing at which these phases occur may differ a lot from case to case, assuming a constant growth rate over a long forecast period is usually a marker of a speculative valuation, that the tax authorities should consider.

- **Discount rate**: another key factor of the valuation process is given by the discount rate, which is used to take into account the uncertainty and risks of the net profits arising from the exploitation/commercialization of the intangible, as well as the time value of money. It is key to point out that there is "no single measure for a discount rate that is appropriate for transfer pricing purposes in all instances". ¹⁴⁴The OECD in its 2017 Transfer Pricing Guidelines recognizes the specificity of every business and of every asset. Nevertheless, both taxpayers and tax authorities should consider that the intangibles, especially if yet under development, are probably the riskiest assets. Thus, the discount rate should reflect this feature. Discount factors excessively close to the risk-free interest rate (at the time of the analysis) can be a clear signal of misevaluation, in the specific issue of valuing intangibles in the Transfer Pricing context. ¹⁴⁵
- Terminal Value: this part is probably the most speculative of the model, because of two aspects. The first one is given by the useful life of the intangible. This has to be assessed case to case, and it can be affected by factors which can be easily identified, such as the duration of the legal protection afforded the intangible, but also by hard foreseeable phenomena such as the rate of technological innovation of the market in question, or the macroeconomic context. The assumption of an indefinite useful life of an intangible increase dramatically the present value of the assets under valuation. The second aspect is the sensitivity of the Terminal Value to the growth rates and to the

¹⁴³ The theory according to which products follow a natural lifecycle is grounded by empirics. What actually differs is the length of the 4 different phases. For instance, some products may have such a longer maturity phase than the competitors, that they can seem infinite. This does not mean it will never decline, of course. To dig into details, see C.M. Kopp (2020), *Product Life Cycle*, Investopedia, accessed 10 August, 2020, https://www.investopedia.com/terms/p/product-life-

cycle.asp#:~:text=Key%20Takeaways%201%20A%20product%20life%20cycle%20is,promotion%20to%20expansion%20or%20cost-cutting.%20Pi%C3%B9%20articoli...%20

¹⁴⁴ OECD, *supra* n.86, at section D.2.6.4.3., at paragraph 6.170.

¹⁴⁵ The "risk-free" interest rate is a measure of remuneration for low or zero risk investments. As zero risk does not exist, it is best approximated by 3 months US treasury bills, which have always been considered as the safest country in the world. The risk-free rate impacts on the discount rate, as the latter is usually computed using the CAPM. To read more about the risk-free rate and the CAPM: Corporate Finance Institute, *Risk Free Rate*, accessed 3 September 2020, https://corporatefinanceinstitute.com/resources/knowledge/finance/risk-free-rate/.

discount factor.¹⁴⁶ Since the annuity is perpetual, even a nearly negligible variation of the growth rate and the discount factor may lead to a huge variation of the estimated value of the intangible.

• **Taxes:** as the intangible under examination is expected to create profits, then they should be subject to taxation. The tax effects can modify the amount of the net profits, thus changing the outcome of the valuation. These effects can be synthetized in the tax burden coming from the projected cash flows, from "tax amortization benefits projected to be available to the transferee" ¹⁴⁷ and eventually the taxes to be imposed on the transferor after the carrying out of the transaction.

3.3.4.7 THE SCENARIO ANALYSIS

As neither the Transfer Pricing nor the financial valuations are exact sciences, in order to make the process more realistic, a scenario analysis is useful to be performed by both taxpayers and tax authorities. This is especially advised whether the valuation is very volatile in its key factors. The volatility and the "level of uncertainty due to factors described above can be addressed by applying different scenarios". 148 This analysis can be carried out in many different ways, however it usually consists of developing at least three different scenarios, the worst-case, the base and the best-case ones. In each of the scenarios the assumptions change, either in a more skeptical or in a more optimistic view. The change of the underlying assumptions is put into practice by a change of the key parameters, set out in the previous paragraph. For example, in the worst-case scenario a disruptive technological innovation leads to the early obsolescence of a product protected by a patent, therefore the patent loses most of its value. Vice versa, in the best-case scenario the product gets spread out on the market at an unexpected speed, thanks to the network effect and to the social media advertising. Each of these scenarios, which are usually 3 but they can be more, are assigned with a probability of occurrence. It is advisable, in designing the scenarios, to be pessimistic rather than optimistic. This will let the subject performing the valuation, either the taxpayer or the tax authorities, be prepared to the worst hypothesis rather than laying back on the best-case scenario. The benefits of performing a scenario analysis are the following:

¹⁴⁶ Even negligible variations in those parameters may lead to huge changes in the final outcome, as the annuity goes to the infinite. The general formula of the Terminal Value is: $\frac{FCF_{n+1}}{i-g}$, with g = growth rate, n = last year of punctual forecast, FCF = free cash flows generated, and i = discount rate.

¹⁴⁷ OECD, *supra* n.86, at section D.2.6.4.5., at paragraph 6.178.

¹⁴⁸ See S. Hoffmann, *supra* n. 140, at paragraph 5.2.

- <u>future planning</u>: it gives an idea of the interval of possible outcomes of a financial project;
- <u>proactivity</u>: it allows to be preventive and not only reactive.

On the other side, the scenario analysis "tends to be a demanding and time-consuming process that requires high-level skills and expertise" and despite it, the probability of an outcome falling outside the range forecasted is still relevant. Nevertheless, since the valuation of intangibles is very uncertain, every tool which diminishes the volatility of the analysis is useful.

3.3.5 ADDITIONAL GUIDANCE FOR THE TREATMENT OF THE HARD-TO-VALUE INTANGIBLES

The approach to the HTVIs presents additional issues if compared to the other intangibles. First, as already set out in the previous paragraph, as they have no reliable comparables they require to be evaluated through a proper financial model, in most of the cases the DCF. The use of this technique is more time-spending than the other arm's length determination methods, and it furthermore requires economic and financial expertise, which cannot be so common to be found within the tax authorities' staff. Secondly, the difference between ex-ante valuation and the expost outcome can be very high for HTVIs. An eventual difference between the valuation made before the full exploitation performed by the MNE, in order to settle the transfer price, and the actual profitability generated by the intangible transferred, gives a useful insight to tax administration about the reliability of the assessment. In such situations, "the tax administration can consider ex post outcomes as presumptive evidence about the appropriateness of the exante pricing arrangements". 150 Nonetheless, the simple mechanism of identifying Transfer Pricing practices as a consequence of the difference between the ex-ante valuation and the actual outcome, is likely to give rise to abuses by tax authorities. The reason is fairly straightforward: valuation is not an exact science, it is based on human assumptions, thus it is wrong by definition. The difference between ex-ante valuation and real outcome may of course trip the alarm of the tax administrations, but further analysis is required to identify tax manipulation. Indeed, tax authorities should assess "the reliability of the information on which ex ante pricing has been based". 151In other words, they should assess whether the valuation of

¹⁴⁹ The scenario analysis forces the person performing it to analyze any possible future event and to assign a correspondent probability of occurrence. This process is therefore costly and engaging, but if it is well-carried out, it can give important reliability to the forecast. A very useful insight in performing a scenario analysis is to always be skeptical rather than optimistic, even in the worst-case occurrence. See Corporate Finance Institute, *Scenario Analysis*, accessed 10 August, 2020,

https://corporatefinanceinstitute.com/resources/knowledge/modeling/scenario-analysis/#:~:text=What%20is%20Scenario%20Analysis%3F%20Scenario%20analysis%20is%20a,various%20feasible%20results%20or%20outcomes.%20In%20financial%20modeling. to get more information.

¹⁵⁰ OECD, supra n.86, at section D.4., at paragraph 6.192.

¹⁵¹ OECD, *supra* n.150.

the HTVI made by the company at the time of the transfer was made in good faith, thus it was based on reliable information, or not. Two problems originate from this further assessment to be performed by the tax authorities. The first one consists of an evident information asymmetry between the taxpayers and the tax administrations. The companies which operate in the digital environment and self-develop HTVIs, at the moment of its valuation have "specialized knowledge, expertise and insight into the business environment in which the intangible is developed or exploited". All this information, crucial to evaluate the asset, is internal to the company and tax authorities cannot accede to it. This gives rise to a huge gap of information, since the tax authorities are asked to perform an equivalent analysis to the one carried out by the company. A second problem, connected to the first one, is the lack of skills, expertise and acknowledgement that the tax authorities may suffer of. Indeed, it occurs that "they may not have the specific business insights or access to the information to be able to examine the taxpayer's claim and to demonstrate that the difference between the ex-ante and ex post value of the intangible is due to non-arm's length pricing assumptions made by the taxpayer" ¹⁵²i.e. the tax administrations do not have the appropriate the tools to interpret the company's good faith. In the context of the overall analysis of HTVIs, an additional issue comes from the timing. It often happens that "the elapsed time between the transfer of the HTVI and the emergence of ex post outcomes may not correspond with audit cycles or with administrative and statutory time periods". ¹⁵³The time lag leads to the valuation of the transfer of HTVIs after some years, thus it can make the analysis performed by the tax administrations even harder. The problem gets bigger as the "incubation period" is longer. Nonetheless, in case the incubation period of the intangibles is not extremely long, the time lag in tax audits allows the tax administrations to assess both the ex-ante valuation and the actual outcome. With too short audit cycles, for instance the assessment of a transfer of a partially-developed HTVI between associated enterprises only one year after the transaction, the basis on which the analysis is grounded will likely consists of the only assumptions of the valuation, which are difficultly arguable by the tax authorities for the reasons already mentioned. In order to provide a well-delineated path to tax administrations as well as tax certainty to the taxpayers, the process of assessment of the

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¹⁵² OECD, supra n.86, at paragraph 6.186.

¹⁵³ The action 8 of the BEPS Action plan is entirely dedicated to the treatment of the HTVIs, following the rules provided by the OECD in its Transfer Pricing Guidelines. Particularly interesting is the exposition of some practical cases of HTVIs assessments, with different scenarios occurring. One of the criticisms to the OECD publications indeed, is that its provisions are hardly applicable. See OECD/G20 (2018), Base Erosion and Profit Shifting Project, *Guidance for Tax Administrations on the Application of the Approach to Hard-to-Value Intangibles*, Action 8 Final Report, at paragraph 11 and section 4.3. of this thesis to get to know more about the implementation of OECD provisions, by both companies and tax authorities.

HTVIs should be applied consistently. The 2018 BEPS Action Plan, in its Action 8, provides all the subjects involved in the approach to the HTVIs with a set of principles to be applied:

- The ex-post outcomes can be used as presumptive evidence about the reasonableness of the assumptions of the ex-ante pricing arrangements.
- However, the analysis should focus on whether the company, at the time of the transaction, could and should have known the information related to the probability of achieving such income or cash flows.
- Where a revised valuation shows that the intangible was transferred at an undervalue or overvalue compared to the arm's length price, the revised price of the transferred intangible may be assessed to tax taking into account price adjustment clauses and/or contingent payments, irrespective of the payment profiles asserted by the taxpayer.
- Tax administrations should apply audit practices to ensure that presumptive evidence based on ex post outcomes is identified and acted upon as early as possible. 154

The third point is particularly interesting, as it allows tax administrations to switch the payment form of the transaction, if it is considered not compliant with the arm's length. In other words, if the tax authorities consider a lump sum payment at the time of the transaction not compliant with the normal market circumstances, they can swap the form of payment to make it compliant to the ALP. Indeed, it is normal for independent enterprises to set up a contingent payment, if the object of the transaction is a HTVI. This way, both parties can reduce uncertainty on the future profitability of the asset, connecting the payments to the future actual profits arising. In applying this approach, there is space to some exemptions. The OECD in its 2017 Transfer Pricing Guidelines, lists all of those:

i) the taxpayer provides:

- 1. Details of the ex-ante projections used at the time of the transfer to determine the pricing arrangements, including how risks were accounted for in calculations to determine the price (e.g. probability-weighted), and the appropriateness of its consideration of reasonably foreseeable events and other risks, and the probability of occurrence; and,
- 2. Reliable evidence that any significant difference between the financial projections and actual outcomes is due to: a) unforeseeable developments or events occurring after the determination of the price that could not have been anticipated by the associated enterprises at the time of the transaction; or b) the

¹⁵⁴OECD/G20, supra n.153, at paragraph 17.

playing out of probability of occurrence of foreseeable outcomes, and that these probabilities were not significantly overestimated or underestimated at the time of the transaction;

- ii) the transfer of the HTVI is covered by a bilateral or multilateral advance pricing arrangement in effect for the period in question between the countries of the transferee and the transferor.
- iii) any significant difference between the financial projections and actual outcomes mentioned in i)2 above does not have the effect of reducing or increasing the compensation for the HTVI by more than 20% of the compensation determined at the time of the transaction.
- iv) A commercialization period of five years has passed following the year in which the HTVI first generated unrelated party revenues for the transferee and in which commercialization period any significant difference between the financial projections and actual outcomes mentioned in i)2 above was not greater than 20% of the projections for that period. ¹⁵⁵

These exemptions are important, especially from the taxpayer's point of view, as they give more tax certainties and reduce the risk of economic double taxation. ¹⁵⁶A very important instrument in preventing any possible issue is introduced by the point ii) of the previous list, namely the Advanced Pricing Arrangements (hereinafter, APAs). ¹⁵⁷By using these tools, taxpayers and tax administrations agree in advance on the criteria to be used in the valuation of transactions involving HTVIs. Through this agreement, any dispute is prevented, and the tax certainty is assured to the companies involved, as well as the zeroing of any risk of economic double taxation. In the following paragraph, an example taken by the BEPS Action 8 on HTVI is proposed, in order to give a practical implementation to theoretical principles.

3.3.5.1 THE DEVELOPMENT OF A PHARMACEUTICAL COMPOUND

The company A, resident in the country A, has patented a pharmaceutical compound. The company has successfully taken the product through the phases I and II of the clinical trials. At Year 0, the patent is transferred to an associated enterprise belonging to the same MNE, namely the company S, resident in country S. The company S will be responsible for the phase III of the trials. The transfer price of the transaction has been estimated with the DCF model, and the

¹⁵⁵ OECD, supra n.86, at paragraph 6.193.

¹⁵⁶ The economic double taxation arises when more than one person is taxed on the same item of income, by more than one state. The juridical double taxation instead arises when the same person is taxed twice on the same income by more than one state. See *supra* n.40 to have a wider overview of these issues.

¹⁵⁷ An "Advanced Pricing Arrangements" is a procedural agreement between one or more taxpayers and one or more tax authorities that aims to avoid any transfer pricing disputes, by determining in advance a set of criteria to apply, within a specified period, for specific cross-border controlled transactions, to ensure their compliance with the arm's length principle. See OECD, supra n.86, at paragraph 4.134 for further information.

sum of future discounted benefits has resulted in 700. The form of payment has been lump sum, at year 0. The underlying assumptions of the taxpayer were:

- Revenues from sales would not exceed the amount of 1000 per year;
- The commercialization of the product would not commence until year 6;
- The discount rate is set up using external data, namely the average risk of failure for similar drugs in similar categories.

Two scenarios may occur:

- a) at year 4, the tax administration of country A audits the company A for years 0-2, and they obtain information on the fact that the phase III took less time than what was planned, thus the commercialization started in year 3 instead of year 6. Therefore, years 6-7 of the original valuation are actually years 3-4. The tax administration, relying on the ex-post outcome, applies the HTVI approach. The taxpayer cannot demonstrate that this event was unforeseeable at the time of the valuation. As a consequence, the tax administration of country A revises the valuation model, getting a Present Value of the patent equal to 1000. The arm's length adjustment is 300, and the taxable income of the taxpayer in the year of the transfer is modified.
- b) With the same features regarding the audit and the ex-post outcomes, the tax administration, through the revision of the valuation, gets to a Present Value of 800. The adjustment is therefore of 100. Nevertheless, in this case the adjustment cannot be made, as the variation is lower than the 20% of the value forecasted by the taxpayer. This rule is provided by exemption number 4 to the HTVI approach.¹⁵⁸

4 SOME INSIGHTS

In this chapter, the last of this thesis, some specific issues due to the OECD provisions, coming from the Transfer Pricing Guidelines of 2017 and the BEPS Action Plan of 2018, will be analyzed. Although these publications provided a set of solutions to the tax administrations, especially to fight against the Transfer Pricing, some theoretical and practical issues can be identified. First, some authors sustain that the new formulation of the ALP, thought to contrast

¹⁵⁸ The example is provided by the final report of the BEPS Action 8, along with other interesting instances that will not be set out in this thesis for reasons of conciseness. For reading them and having a better understanding of HTVIs issues, see OECD/G20, *supra* n.153, at paragraph 21-27.

with the "cash boxes", goes far beyond the ALP principle itself. Starting from the Example 17 of the Transfer Pricing Guidelines, Andrea and Alberto Musselli demonstrate that the new ALP is no longer aimed to re-establishing the situations occurring between independent enterprises. The principles set out in the Transfer Pricing Guidelines and in the BEPS project are neither economically nor empirically grounded, according to the authors. This interesting argument will be set out in details in the first paragraph of this chapter. In the second part of this chapter, instead, a comparison between the international accounting standards (IFRS) and the Transfer Pricing standards. In particular, the abovementioned standards differ in two aspects: the identification of the intangibles and their valuation. These divergences will be exposed in detail in the second paragraph of this last part of the thesis. Lastly, the third paragraph will be entirely dedicated to the practical implementation of the OECD provisions by both national tax administrations and companies. Two empirical studies will be presented, with a particular focus on the issue of a trade-off between tax certainty and fiscal justice.

4.1 IS THE DEMPE APPROACH BEYOND THE ALP?

The new ALP formulation, introduced by the OECD in the 2017 Transfer Pricing Guidelines and in the 2018 BEPS Action Plan, has radically modified the previous paradigm. Indeed, under the new ALP, the group members of an MNE must be compensated "for functions performed, assets used, and risks assumed in the development, enhancement, maintenance, protection and exploitation of intangibles", 159the so called DEMPE approach. The economic return should be recognized to the members actually involved in performing the abovementioned functions, while for instance a second company, belonging to the same group and only funding these activities, can receive only a risk-adjusted market return. In other words, the residual claimant, thus the party which has the right to enjoy of any extra-profits arising from the exploitation of the intangible, is the company which performs and controls the activities. This thesis is contrasted by the authors Andrea and Alberto Musselli, who sustain that under normal market circumstances the residual claimant is the provider of funds, unless some conditions occur. The core thesis sustained by these authors is that "the new standard does not comply with economic ALP because too much importance is given to the production factor of labor instead of capital". 160 The starting point of the analysis is the Example 17, annexed to the chapter VI of the Transfer Pricing Guidelines.

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¹⁵⁹ OECD, supra n.86, at section B, at paragraph 6.32.

¹⁶⁰ The authors do not sustain that the new approach set out by the OECD Transfer Pricing Guidelines is illegitimate. They state that since the ALP is based on reinstating transactions to the normal market circumstances, the DEMPE approach is not compliant to what happens according to the market forces and

4.1.1 EXAMPLE 17

Company A is a "fully integrated pharmaceutical company engaged in the discovery, development, production and sale of pharmaceutical preparations" ¹⁶¹. It usually performs R&D activities, but it cannot engage in blue-sky research, useful to identify new pharmaceutical products. Thus, it transfers patents and related intangibles connected to the product M, an early pharmaceutical compound trusted to be a treatment against the Alzheimer disease, to the company S, a subsidiary which operates in another country. As company S has neither skills nor researchers able to go on with the development of the product, hence it asks company A to continue to do research on the compound as it used to do before the transfer. In exchange, company S, which is the legal owner, will provide funds to finance the further R&D activities, entirely performed and controlled by company A. Furthermore, A's services will be remunerated on a cost- plus basis, comparable with the similar margins obtained by the company in similar transactions. According to the DEMPE approach, introduced by the OECD, while "Company S is the legal owner of the intangibles, it should not be entitled to all of the returns derived from the exploitation of the intangibles". 162 Company A, as exercising the functions abovementioned and controlling the development of the products and related intangibles, should be treated as the party bearing the most of the risk, and therefore receiving the most compensation. On the other side, company S should be remunerated only with a riskadjusted return on the funds provided for the R&D activities. To conclude, the OECD with this example shows that the purchase of the research activities by company S is turned into a loan, following the DEMPE approach and the ALP. Indeed, for Transfer Pricing purposes, the owner is actually the company A, which is providing the labor factor and it is therefore entitled to receive the returns arising from the intangible. The company S, formally owning the intangibles, is reinstated as some-kind of bank, which is providing funds. Thus, it is entitled only to receive a risk-free interest rate on the loan. This approach is criticized at his economic roots by the authors abovementioned, and a detailed analysis of their arguments will be presented in the next paragraphs.

4.1.2 WHO IS THE ACTUAL RESIDUAL CLAIMANT?

The authors' thesis is that the provider of funds is always the party entitled to receive the residual profits or losses from the intangible development. The recharacterization of the purchase of the research contract to a loan is not reflected neither by market conditions nor by

conflicts. Hence, they find appropriate to change the name of the principle, from ALP to "Profit Location in Countries of Important Intangible Functions Managers" See A. Musselli & A. Musselli, *supra* n.111, at Abstract. ¹⁶¹ OECD, *supra* n.86, Annex to Chapter VI, at paragraph 59.

¹⁶² OECD, supra n.161, at paragraph 62.

economic theory. The authors assume that, since the project is at early stage, the "significant variability (ex post) of the possible results can be expressed using the research outcomes (+1,000, 1-1,000)", 163 each assigned with a probability of occurrence equal to 50%. Three alternative transactions are set out, to characterize the situation: the research purchase contract, the loan contract and the secured loan. They are all analyzed as if the two companies were independent, in order to understand what would happen under market circumstances. In the first hypothesis, S acquires the research activities from A, and will therefore be the owner of the eventual intangibles created. A only has to pay the labor factor, thus managers and researchers. In this case, after paying A for its services, S will be the party assuming risks on the project, hence it will be the residual claimant of profits/losses eventually arising. In the second case, S "extends a loan of 1000 to A, at a rate that is adjusted for risk", 164 following the example 17 path. A is the formal residual claimant of the intangible profits/losses, after the reimbursement of the capital and related interests. But, what should it be the amount of such interest rate under market circumstances? A has 50% of possibility of going bankruptcy, not paying S back. In order to have a competitive expected profit, in this case S has to set up the interest rate at 100%, in such a way it will gain 1000 with the positive scenario and loose the equivalent amount in case of failure. As it may be easily detected, an "interest rate of 100% is not the norm in actual credit markets". 165 Even in this case, however, S is the actual residual claimant, as it the effective economic agent facing the variability of the outcomes. Nevertheless, the things change if we consider the granting of a secured loan to A, as an extent of the of the example 17 outline. This is the third hypothesis set out. S grants the loan to A, if A pledge its assets as collateral. In this case, not foreseen by the OECD, S will anyway be reimbursed, either with the collection of the assets put up as collateral or with cash. Therefore, A is now formally and actually the residual claimant of the project revenues. The authors hence conclude that, as the example shows, the "actual residual claimant of intangible returns [...] is always the funder of the investment, regardless of whether he is the lender or the purchaser of the research". 166

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free%20rate%20of%20return%2C%20multiplied%20by%20the%20beta.

¹⁶³See A.Musselli (2018), *Anti-Abuse Notion of "Control over Intangible-Related Functions" Is Beyond the Arm's Length Principle*, European Taxation, published May 2018, at pp. 191-205,IBFD, at paragraph 2.4.

¹⁶⁴ A "risk adjusted" interest rate considers the specific risk of the project, which (for instance) can be a loan. It is based on the risk of projected liquidity expected from a project, and obviously on the default risk. In the framework of the CAPM model, the risk adjusted interest rate is computed by multiplying the Beta of the project with the risk premium (the difference between the market and the risk-free return). See also D. Gorton (2016), A Guide on the Risk-Adjusted Discount Rate, Investopedia, accessed 5 September 2020, <a href="https://www.investopedia.com/articles/budgeting-savings/083116/guide-riskadjusted-discount-rate.asp#:~:text=Under%20this%20model%2C%20the%20risk-free%20interest%20rate%20is,risk-

¹⁶⁵ A.Musselli, *supra* n.163, at paragraph 2.4.2.2.

¹⁶⁶ A.Musselli, *supra* n.163, at paragraph 1.

4.1.3 THE CREDIT RATIONING

The well-known phenomenon of credit rationing is an additional motivation of the fact that the DEMPE approach is theoretically ungrounded. ¹⁶⁷ The reason why the switch of type of transaction proposed by the OECD, i.e. the recharacterization of a purchase of R&D activities to a loan, is not possible under normal market circumstances is that "the credit access of an entrepreneur depends mainly on his wealth". ¹⁶⁸In the case of such a risky project, as the one presented in example 17, the lender will not provide any loan to the company undertaking the activities, even at a higher interest rate, if the borrower is not able to provide any collateral. Furthermore, even in the remote case the loan is granted, the interest rate should be set so high that any discussion would be over.

4.1.4 IS THE NEW ALP STILL THE ALP?

The new formulation of the ALP, concerning the ownership and the residual claimant, has radically change the previous economic model, which aimed at assigning:

- anything more than a "normal" economic return, extracted from market comparables, to those affiliates that do not participate in risks and
- any extra profit or loss (that remains from the global result of the whole group after having assigned normal returns as above) must be allocated to location-based costs that share in assuming entrepreneurial risks.

This approach was radically different with respect to the DEMPE one, as it assigned the residual profits/losses to the companies assuming risks. If the company A, which in the example 17 provided only the research activities, is not bearing any risk, then the extra return should be assigned to the funder. Exactly the opposite outcome of the application of the new ALP coming from the OECD Transfer Pricing Guidelines and BEPS Action Plan. The OECD, trying to figure out the problem of "cash boxes" located in low-tax jurisdictions, has radically switched the economic point of view of the ALP. Indeed, according to the OECD, "risk managers have a superior claim to the residual profit versus the investor" and this is effectively not compliant with what actually happens in the capitalistic system. As already stated, the reason why the OECD introduced this new formulation, was due to the common practice of using "cash boxes",

The credit rationing is an action taken by lending institutions to limit or deny credit based on borrowers' creditworthiness and an overload of loan demands. This is usually due to the impossibility of the borrower to provide adequate collateral as counterbalance. It may also be due to financial market failures. The definition is taken by Business Dictionary, *credit rationing*, accessed 5 September 2020, http://www.businessdictionary.com/definition/credit-rationing.html.

¹⁶⁸ A.Musselli, *supra* n.163, at paragraph 4.2.

¹⁶⁹ A. Musselli & A. Musselli, *supra* n.111, at paragraph 1.

¹⁷⁰ A. Musselli & A. Musselli, *supra* n.111, at paragraph 9.

companies with a lot of liquidity and located in low-tax jurisdictions, formally owning the intangibles and thus entitled to receive any extra profit coming from its exploitation. The abuses occurred before the new ALP, were usually "linked to the fact that the projections of future results sourcing from intangibles use were made by group managers [...] and not by parties with conflicting interests". 171 Indeed, although the cash boxes were entitled to receive remuneration, if the price paid for the transfer was adequate to the risk profile of the intangible, then no issue about Transfer Pricing should arise, as the owner is sustaining the risk of development of the asset by paying the right price. The OECD, instead of solving the issue of the misevaluation, has rather changed the entire framework. Nevertheless, uncertainty on valuation methods can exist, if the issue is related to accounting or finance, but "might not exist in the field of tax regulation, in respect of which predictable rules on taxpayer behavior are necessary". 172The OECD Transfer Pricing Guidelines, as seen in the previous chapter, leave space to the taxpayers and tax administrations to use any method, if it adheres to the economic situation. In order to promote certainty on rules, however, the OECD should have uniquely established which method to use, with which parameters and which assumptions. The ALP, after the DEMPE approach, may have denied its own definition. The ALP is essentially, resetting the normal market situation where it is not present. The DEMPE approach, even with the admirable aim to stop abuses, may have radically modified the ALP, as it seems to no longer search for the market circumstances, for all the reasons set out in the previous paragraphs. However, the research of new principles is fully legit from the OECD standpoint, if they provide more justice and prevent abuses on one side; and give more tax certainty to companies on the other side.

4.1.5 A POSSIBLE FUTURE SCENARIO IN THE FRAMEWORK OF THE NEW ALP

The DEMPE approach seems to have introduced more uncertainty than before. The OECD Transfer Pricing Guidelines and BEPS Action Plan have made the "rules even less predictable, since they state that intangible ownership [...] is the result of another subjective assessment aimed at judging the "importance" of intangible-related functions performed by the parties". ¹⁷³Indeed, the analysis of the functions performed may be tricky, and even more problematic can be the assessment of the magnitude of these activities, carried out by different

¹⁷¹ The major problem of Transfer Pricing is indeed the absence of conflicts of interests. Under normal market circumstances, the legitimacy of a transaction is simply due to the fact that each part have opposite interests, as the seller wants to get as much money as he can and the buyer wants to spend as little as possible, The restoring of conflicting interests between independent parties may be the final solution to the issue, but it is nearly impossible to apply in practice. See A. Musselli & A. Musselli, *supra* n.111, at paragraph 4.

¹⁷² See A. Musselli, *supra* n.163, at paragraph 3.2.

¹⁷³ A. Musselli, *supra* n.163, at paragraph 3.3.

parties. The increase in tax justice and contrast against the abuses of the MNEs seems (at least) uncertain; on the other side the tax certainty for the companies is likely to have been lowered down. The degree of subjectivity allowed to tax administrations may favor the strong countries, intended as the biggest countries in terms of GDP and population, and penalize the smallest States, with low political power. It seems not a dystopic scenario, the one according to which "the most efficient [...] fiscal administrations will be able to claim, for the most part, profits resulting from an international business despite the rule of fiscal law"¹⁷⁴, because the tax provisions are weakly based and subordinated to a highly subjective assessment. In this context, the perspective for MNEs is multi-faced. As for the tax administrations of the different States, the power to influence decisions and processes will likely be key. On one side, "small and medium-sized companies that have to bear the consequences of uncertainty and that will probably suffer under double taxation" 175; on the other side the giants, which are able to affect governments and tax authorities and to affect their present and future moves. The companies which have the possibility to do so, in the long run, will relocate the key managers of intangible development to low-tax countries, in order to be fully compliant with the new standards introduced by the OECD. To conclude, the criticisms argued by Andrea and Alberto Musselli seem to be grounded. The new ALP has uncertain economic basis, and it does not seem a relevant step forward to the direction of fairer, more transparent and more efficient international tax system.

4.2 ACCOUNTING STANDARDS VS TRANSFER PRICING PRINCIPLES

In economics oftentimes the standpoint from which you look at the same problem, changes the ways to figure it out. Although the issue presented is the same, depending on the purposes with which you are facing it, the solution may differ. For instance, within an organization, the problem of reducing the personnel costs may have different solutions, depending on whether the perspective is the Human Resources one or the Management Accounting one. The difference is even larger when we enlarge the perimeter of the analysis. The reference is to the contrast between the law/fiscal purposes and the accounting/financial ones. The rules for determining the taxable income are different from the accounting standards, used to calculate the net profits at the end of the period. In the context of the Transfer Pricing provisions,

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¹⁷⁴ One very impacting factor in fact, for all international issues, is the political power of the countries involved in such dispute. The law is subject of interpretation, and the larger is the judgement left, the more will be the space to the use of political power and influence. In the case of OECD guidelines, as the subjectivity is high, it is not hard to imagine the most influencing countries taxing profits not properly taxable in their jurisdictions, because of their power. See A. Musselli & A. Musselli, *supra* n.111, at paragraph 11.

¹⁷⁵ A. Musselli & A. Musselli, *supra* n.174.

contained in the OECD Transfer Pricing Guidelines, the different views, between the tax purposes and the accounting ones, come up once again. The differences are 2, and they both concern the treatment of the intangible assets. The first one regards the identification of the intangibles. The different approach in identify an intangible asset will be set out, stressing out the reason behind the different treatment. The second difference deals with the valuation of the intangibles. Although the valuation techniques set out in chapter 3 of this thesis remain utilizable in each context, the accounting and the tax purposes change the way these techniques are applied, once again because they aim to different goals.

4.2.1 THE IDENTIFICATION OF THE INTANGIBLES

The issues related to the identification of intangible assets, for Transfer Pricing purposes, has already been addressed within this elaborate. ¹⁷⁶The required criteria for the identification of an intangible, however, are different according to the perspective of the analysis. The accounting perspective, regarding the recognition and measurement of the intangible assets, is usually highly conservative in representing the reality. A clear example of this mismatch is given by the difference between the market capitalization and the book value of equity of the listed companies. The financial investors are seeking for future earnings, while the balance sheet is simply a representation of the current situation. The same differences are present when we consider the issue from a Transfer Pricing analysis point of view. Although the similarities between the tax administrations and the financial investors are very few, they are both trying to assess the future benefits that the company will obtain. Hence, the eventual differences are simply due to the standpoint mismatch: tax authorities look at the future, accountants look at the present. The IFRS standards, in its IAS 38, clearly set out the criteria for the recognition of an intangible asset. An intangible asset is "an identifiable non-monetary asset without physical substance. Such an asset is identifiable when it is separable, or when it arises from contractual or other legal rights". ¹⁷⁷The recognition of goodwill is not allowed, when it is developed internally, as it is neither separable nor arisen from contractual rights. When the goodwill is instead generated from an acquisition, the IFRS 3 about business combinations must be considered. Another important point of the IAS 38 regards the perennial problem of the capitalization of the expenses for the development of an intangible, for instance the R&D costs. The capitalization of these costs, rather than the imputation as expense, may change the taxable income and consequently the net profit of a company, with the ultimate consequence of

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¹⁷⁶ The OECD sets out the requirements to be identified in the framework of the Transfer Pricing analysis. The most important one is the relevance and evaluability within a transaction occurred between associated enterprises. See paragraph 3.3.2 of this thesis for further information.

¹⁷⁷ IAS 38, supra n.85.

increasing the stock price. Thus, this is a particularly sensitive argument, from the accounting point of view. The principle states that an expenditure may be capitalized if and only if:

- it is probable that there will be future economic benefits from the asset; and
- the cost of the asset can be reliably measured. 178

The conservative approach to the identification of the intangibles may be convenient for the companies too. Indeed, as it works for the tangible assets, also intangibles with a definite useful life must be amortized. This is a non-monetary cost, and although it does not represent a cash outflow, it impacts on the net profit, and consequently on the stock price. Besides of the amortization, a further cost is usually related to the identification of an intangible asset. The reference is to the annual impairment test. ¹⁷⁹ The IAS 36 states that the impairment test must be performed annually for "intangible assets with indefinite useful lives; intangible assets not yet available for use; and goodwill acquired in a business combination". 180 Hence, a possible annual loss may be recognized for this kind of intangibles, and the misidentification of these assets may bring a high cost to the shareholders, in term of fall in stock prices and dividends payout. This is especially true for goodwill arising from business combinations, as this value is usually extremely high, due to high consideration transferred. On the other side, the approach contained in the OECD Transfer Pricing Guidelines, is obviously divergent, as the scopes are too. In order to better understand the different approaches, an example may be useful. For instance, imagine a company is sustaining costs for the internal development and commercialization of an intangible. The costs are related to the R&D activities, performed during the creation of the product, and to the advertising, which is necessary for the commercialization of the finished good. These costs have a direct connection to the future benefits of the intangible, as the product related to the development of such intangible will be commercialized and will hopefully bring profits. Nevertheless, the R&D and advertising activities are not related only to the development and commercialization of the product and the related intangible. These activities are performed at a company level, for a bundle of products which are strongly interconnected between each other. Thus, although the internally developed

¹⁷⁸ IAS 38, *supra* n.85.

¹⁷⁹ The impairment test is an assessment made for accounting purposes. Whether the recoverable amount is lower than the carrying amount, then the asset must be depreciated, and a correspondent loss in the income statement must be recognized. Some factors indicating that the impairment test is necessary may be either external (drastic change in economic or legal factors affecting the company or its assets, significant fall in the market price of the asset) or internal (asset as a part of a restructuring or held for disposal, obsolescence or physical damage of the asset). Some assets must be impaired annually, such as goodwill. See Corporate Finance Institute, *Impairment*, accessed 5 September 2020,

https://corporatefinanceinstitute.com/resources/knowledge/accounting/impairment/.

¹⁸⁰ IAS 36, *Impairment of Assets*, accessed 25 August, 2020, https://www.ifrs.org/issued-standards/list-of-standards/ias-36-impairment-of-assets/.

intangible is likely to bring future economic benefits, it is not identifiable for accounting purposes, because its cost is not reliably measurable. As a consequence, the costs related to the development and advertising of the asset will be expensed, rather than capitalized. From a Transfer Pricing point of view, however, this asset will create value for the company, and being so they may be considered as intangibles in a possible transfer between associated enterprises, not occurred at arm's length conditions. Furthermore, the financial statements do not take into account the enhancement of value that a bundle of intangible assets, combined together, may create for a company. This is the definition of synergies, which represent the situations when two assets (or companies) put together create more value than the sum of the standalone assets (or companies). It can occur the situation in which, although such value added must not be recognized on the balance sheet, it should be identified in the context of a Transfer Pricing analysis.

4.2.2 THE VALUATION OF THE INTANGIBLES

Similar arguments are true for the valuation of the intangibles. Even in this case, as the aim of the analysis differs, the approaches will be different too. The OECD Transfer Pricing Guidelines stress out that, in the accounting world, the "inherent conservatism can lead to definitions that are too narrow for transfer pricing purposes and valuation approaches that are not necessarily consistent with the arm's length principle". ¹⁸¹In particular, the OECD specifies that the valuation approaches often utilized in the context of the Purchase Price Allocation (hereinafter, PPA) process are not binding, for a Transfer Pricing analysis. In the following paragraphs, the PPA process will be briefly set out, as well as the reasons for a different approach in a Transfer Pricing context.

4.2.2.1 HOW THE PPA WORKS

The PPA is a process which follows up a business combination. When an acquisition occurs, often the consideration transferred is higher than the book value of equity of the acquiree. This difference can be due to one or all these situations:

- the assets are worth more than their carrying amount;
- the liabilities are worth less than their carrying amount;
- some intangible assets are not recognized;
- the goodwill comes up.

The PPA consists in allocating the price paid either to the write up of existing assets (or write down of the existing liabilities), either to the recognition of new intangibles, or to the

¹⁸¹ OECD, supra n.86, at paragraph 6.155.

recognition of goodwill. In order to assess the fair value of the existing assets and of the eventual new intangibles recognized, once again the use of valuation techniques is required. The recognition of goodwill is possible only after the revaluation of existing assets (or write down of liabilities) and the identification of eventual new intangibles, which must be either separable or arisen from contractual rights. The IFRS 3, regarding business combinations, states that "an acquirer measures the cost of the acquisition at the fair value of the consideration paid; allocates that cost to the acquired identifiable assets and liabilities on the basis of their fair values; allocates the rest of the cost to goodwill; and recognizes any excess of acquired assets and liabilities over the consideration paid (a 'bargain purchase') in profit or loss immediately". 182

4.2.2.2 BALANCE SHEET APPROACH VS TRANSFER PRICING APPROACH

The valuation techniques which can be used in a PPA are either income based (such as the DCF) or they follow the so-called "balance sheet approach". The balance sheet approach focuses on a conservatism, which is typical of the accountants. Indeed, instead of using financial models based on expected future profits, with this approach the fair value of subsidiary's assets and liabilities is determined through an appraisal process. This estimate is usually performed by an independent assessor, and it is based on technical/commercial elements other than the future economic benefits. The conservatism or not is given by the different allocation of the purchase price among the assets/liabilities and goodwill. Indeed, whether a PPA is conservative, then most of the price is allocated to the revaluation of assets and just a little part to the goodwill. Such operation will lead to higher liabilities, as assets revaluations will lead to higher deferred taxes, and also higher depreciation charges, because of the increased carrying amount. The goodwill instead is not taxable and will lead small benefits to the company. By doing the opposite, i.e. attributing most of the price to goodwill, the company will have more benefits on the financial statements of the year, as both the deferred taxes and the depreciation charges will be lower, but it will be exposed to higher risk of losses in the future. Indeed, as stated by the IFRS 36, the goodwill is subject to annual impairment test, and the higher will be its carrying amount the higher will be the risk of write downs, which are turned into losses on the income statement. Therefore, the accounting standards, although allowing the use of more speculative financial techniques, encourage the use of the balance sheet approach in such a context. Nevertheless, whether on one side this conservatism is justified from an accounting standpoint, on the other side from a Transfer Pricing standpoint the approach differs. The tax administration shall take into account the future value creation that the asset will be able to generate, in order

¹⁸² See IFRS 3, *Business Combinations*, accessed 25 August, 2020, https://www.ifrs.org/issued-standards/list-of-standards/ifrs-3-business-combinations/ to read the full accounting principle and also supra n.139, for an overview of PPAs.

to assess the intangibles. Although the accounting treatment may represent a useful starting point, the carrying amount must not be binding for a Transfer Pricing analysis. Nevertheless, in case after a business combination, the acquirer uses an approach which is more forward looking, and therefore more speculative, such as by using the DCF model, then it is possible for tax administrations to rely on those values for the arm's length determination. Tax authorities are required to be acknowledged about the accounting policies of the company involved, as well as they should have expertise on the financial valuation techniques.

4.3 PRACTICAL IMPLEMENTATION OF THE OECD PROVISIONS

In this paragraph, the last of this elaborate, an analysis on how the OECD Transfer Pricing Guidelines and BEPS Action Plan are actually implemented, will be made. So far in this thesis, the focus was on the theory, with both the presentation of the OECD principles and some criticism presented by some authors. Nevertheless, what really makes the difference is how the theoretical rules are implemented by the subjects involved, which in this case are the countries and the companies. Indeed, the OECD publications have no binding application for any Sovereign country, neither in their national legislations nor in their bilateral/multilateral treaties. The OECD provisions are just recommendations, which have an indubitable moral strength but very little juridical power. It is up to each country to practically implement these provisions, in case there is the political willingness to do so. Therefore, it is essential to take a look at whether and how countries are practically translating these rules into their national provisions and international treaties. It is likewise important to have a better understanding of the MNE's moves in this context of uncertainty, due to the introduction of newer and newer rules and the unstable political and economic context. The results of two interesting surveys will be set out. The first involved 38 countries around the world; whilst the second was based on German based companies' interviews. The key questions addressed were, as usual, the challenges represented by the Transfer Pricing provisions, in relation to the introduction of the DEMPE approach and to the preferred Transfer Pricing valuation methods.

4.3.1 THE IMPLEMENTATION FROM THE COUNTRIES' POINTS OF VIEW

The following results are taken by the survey performed by the authors Caterina Colling Russo and Susann Karnath. 183 The survey involved 38 countries worldwide, and it aimed at "collecting"

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¹⁸³ The transposition of OECD guidelines into hard law, either national legislations or tax treaties, is key to the fight against tax avoidance. Although the good intention, in fact, the countries participating to the OECD and G20 summits may lack in effectiveness (or political willingness) when enforcing them. See C. Colling Russo & S. Karnath (2019), *Intercompany Licensing of Intangibles - A Comparative Global Outlook*, International Transfer Pricing Journal, published November/December 2019, pp.381-387, IBFD.

and comparing the main tax aspects of 38 countries from 5 continents that should be considered when dealing with intercompany transactions involving the licensing of intangibles in a post-BEPS world". ¹⁸⁴In a transfer of a license, it is crucial for companies to have a thorough acknowledgement of the local tax rules of both the country of the licensor and the country of the licensee. This is essential for both maximizing the tax efficiency, i.e. minimizing the overall tax burden of the MNE without breaking the rules; and for identifying sustainable Transfer Pricing policies, which are not likely to be investigated by the tax authorities. In particular, the fields of particular interest within this analysis are:

- 1. the presence of local rules on intangibles ownership and documentation required;
- 2. the most common accepted and used Transfer Pricing valuation methods;
- 3. the practical implementation of the DEMPE approach.

4.3.1.1 LOCAL DOCUMENTATION REQUIREMENTS AND RULES ON INTANGIBLES OWNERSHIP

From the study, "55% of surveyed countries have recently issued a specific law on how to document intercompany transactions involving intangibles". 185 Most of the countries have simply adopted the provisions of the Action 13 of the BEPS Action Plan, hence MNEs have to disclose "the strategy for the development, ownership and exploitation of intangibles following the DEMPE approach", 186 which sustains the Transfer Pricing policy pursued by the company. In order to have a clear comprehension of these policies, the understanding of the party enjoying the ownership of the intangible involved is crucial. As already widely set out within the chapter 3 of this thesis, the identification of the "actual" owner is key for determining the entitlement of excess returns generated by the intangible. This aspect has gained an even larger importance under the DEMPE approach, which stresses out the relevance of identifying the party exercising functions, using assets and assuming risks related to the intangible. Nevertheless, only 18% of the countries seem to have specific local rules on the ownership of intangibles, and in case they exist, they focus on the concept of control, on the economic ownership. In poor words, the owner is the party which is able to prevent the other company (legal owner) from changing the asset unilaterally.

4.3.1.2 MOST COMMON TRANSFER PRICING METHODS

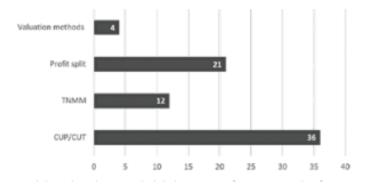
From the picture below, it is evident that the CUP method is the most common Transfer Pricing method for determining the arm's length, with 36 countries out of 38 which allow its use:

¹⁸⁴ C. Colling Russo & S. Karnath, *supra* n.183, at paragraph 1.

¹⁸⁵ C. Colling Russo & S. Karnath, *supra* n.183, at paragraph 4.1.

¹⁸⁶ C. Colling Russo & S. Karnath, supra n.185.

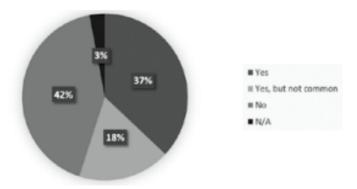
Figure 8. Transfer Pricing methods accepted in each country.



Source: C. Colling Russo & S. Karnath, *Intercompany Licensing of Intangibles - A Comparative Global Outlook*, International Transfer Pricing Journal, published November/December 2019, pp.381-387, IBFD.

Each country could indicate more than one option, as they usually allow the use of more than one method. The massive utilization of the CUP method seems more than justified, as it is the most reliable method when a grounded comparable is spotted. The problems come out when the comparable prices are not available, despite the use of large databases. In this case, as already mentioned in the chapter 3 of this elaborate, two options are available to the tax administrations: either the use of the Profit Split Method or the use of valuation techniques. The countries were asked to say if they have ever applied the PSM. Hereinbelow the answers:

Figure 9. Percentage of countries which have applied the PSM.



Source: C. Colling Russo & S. Karnath, *Intercompany Licensing of Intangibles - A Comparative Global Outlook*, International Transfer Pricing Journal, published November/December 2019, pp.381-387, IBFD.

The 55% of countries declare they used the PSM, although the 18% state that it is not commonly used. Nonetheless, a numerous minority of countries, i.e. the 42%, say that they never applied this method. This sounds particular strange, since the transactions involving intangibles are usually hard to be compared, and theoretically the PSM should be the best option in such cases. Lastly, the 58% of surveyed countries have stated that they have used valuation techniques to determine the arm's length remuneration of the intangibles. This shows a trend of increase of use of such financial models, which can be often the last resort for tax administrations, in evaluating complicated transactions involving intangibles. The indication of a particular

valuation technique to be used is left to each country's legislation, for instance the Chinese tax authority is allowed to use the DCF method in case of "lack of sufficient comparables". 187

4.3.1.3 THE IMPLEMENTATION OF THE DEMPE APPROACH

The DEMPE approach, lately introduced by the OECD in its Transfer Pricing Guidelines, have seen an apparently rapid implementation by the surveyed countries. Approximately the 47% of the countries involved in the study state that they are currently applying the DEMPE approach. Nevertheless, the "DEMPE rules [...] are not explicitly included in the local Transfer Pricing rules" but given the answers provided by the countries surveyed, the tax authorities are applying such rules in the practical audit cases, in the context of their analysis. An interesting case is provided by Spain, which has applied the DEMPE approach even in the audits regarding fiscal years prior to the OECD Transfer Pricing Guidelines publication.

4.3.2 THE COMPANIES' POINT OF VIEW

When dealing with the Transfer Pricing issues, in most cases companies are considered as evil, because it is considered as certain the fact that they just want to shift the taxable income away, in order not to pay the taxes they should. Actually, the reality is always more complicated than what it seems. Indeed, if it is indubitably true that the tax optimization (i.e. the tax minimization) is one of the key targets for most MNEs, it is also true that tax certainty has become more and more relevant over the last years. Companies are willing to pay low taxes but are also willing to avoid any costly dispute and especially the economic double taxation. In the recent years, the increasing number of new provisions aimed at fighting the Transfer Pricing, in many cases confused and contradictory, have enhanced the companies' sensitivity to the necessity of having a reasonable level of tax certainty. ¹⁸⁹Indeed, whether on one side the companies aimed at optimizing their overall tax burden, on the other side they are taking more and more care to both avoiding double taxation and cutting documentation and audit costs. The trade-off is getting unbalanced, as the legal certainty is acquiring importance in the post BEPS taxation environment. The figure hereinbelow clearly shows this ongoing trend:

¹⁸⁷ C. Colling Russo & S. Karnath, *supra* n.183, at paragraph 4.3.

¹⁸⁸ See C. Colling Russo & S. Karnath, *supra* n.183, at paragraph 4.2. The implementation of the DEMPE rules is left to the country's rules, but it may be reflected into the approach that the tax authorities have when auditing the MNEs.

¹⁸⁹ See also S.E. Barsch, X. Ditz & Sven Kluge (2019), *Transfer Pricing in Business Practice in the Light of BEPS and Digital Transformation*, International Transfer Pricing Journal, published May/June 2019, pp.184-188, IBFD. The survey was conducted in German speaking countries and was aimed at investigating the challenges that the companies have to face about taxation, after the digital revolution.

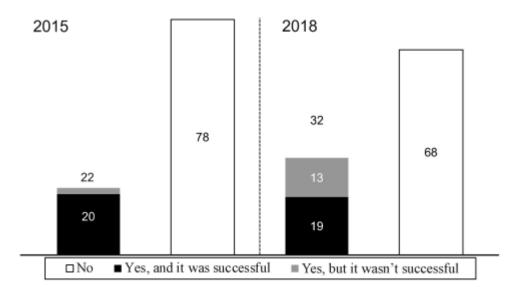


Figure 10. Companies involved in a Mutual Agreement Procedure to avoid double taxation in Transfer Pricing (in %).

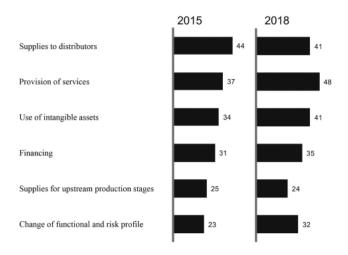
Source: S.E. Barsch, X. Ditz & S. Kluge, *Transfer Pricing in Business Practice in the Light of BEPS and Digital Transformation*, International Transfer Pricing Journal, published May/June 2019, pp.184-188, IBFD.

The survey was conducted among companies based in German speaking countries. The figure clearly sets out the trend of Mutual Agreement Procedures carried out to avoid the risk of double taxation. The "yes" percentage has raised, in only 3 years, by roughly 50%. It is important to consider, moreover, that the companies which have not been involved in MAPs, may have assessed that such procedures are usually unsuccessful in avoiding the double taxation. In poor words, they may have surrendered before engaging in such process. The level of uncertainty regarding Transfer Pricing policies varies according to the type of transaction. The possibility of incurring in tax disputes is, as foreseeable, higher for transaction involving the provision of services and the use of intangibles. In these situations, as widely discussed in this elaborate, much subjectivity is left to tax administrations in the assessment of the arm's length remuneration. The more room of maneuver is left to the countries, the higher will be the likelihood of undergoing income adjustments, concerning these hard-to-value transactions. 190 It is not a direct implication of an income adjustment to flow into a tax dispute, but these data can give useful insights to understand the size of the problem. The picture below shows the percentage of income adjustments undergone by the same sample of companies, which has been surveyed in figure 10:

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¹⁹⁰ These transactions are left to subjectivity because they usually do not rely on comparables, and their arm's length is often assessed by using valuation techniques. These models are heavily grounded on human assumptions. See paragraph 3.3.4.6 and 4.3.1.2. of this thesis for more details.

Figure 11. Income adjustments by type of transactions (in %).



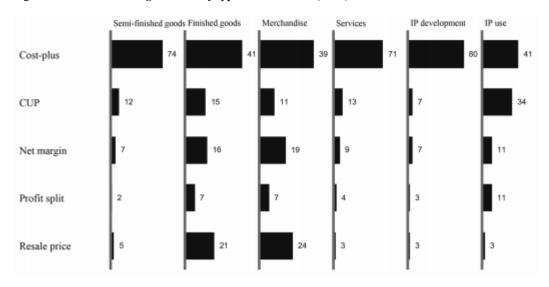
Source: S.E. Barsch, X. Ditz & S. Kluge, *Transfer Pricing in Business Practice in the Light of BEPS and Digital Transformation*, International Transfer Pricing Journal, published May/June 2019, pp.184-188, IBFD.

The increase in the income adjustments of both the provision of services and the use of intangibles, respectively +11% and +7%, clearly spots the challenges that the digital economy has brought to the MNEs. An additional interesting indication of how the OECD provisions have been transposed by the companies, is the analysis of the most used Transfer Pricing valuation methods. Indeed, not only tax administrations utilize such methods, but also companies, at least the ones which are willing to prevent any dispute on Transfer Pricing. Usually, companies use different Transfer Pricing methods, according to the type of transaction. There should be a high volatility of answers, as for instance transactions like the development of Intellectual Properties require different methodology than the sale of finished goods. These transactions have different standardization, different scopes, different complexity. As widely discussed in chapter 3 of this thesis, the OECD discourages the use of "one-sided methods" in determining the arm's length remuneration related to the intangibles. 191 The reason is provided by the mismatch between the simplicity of these methods and the complexity of transactions involving intangibles. More adequate methods, encouraged by the OECD, were the CUP or, in absence of comparables, the PSM and the valuation techniques. Nonetheless, when asked to declare which Transfer Pricing method they use in a set of different transactions, the same sample of German speaking companies has provided these answers, summed up in the picture hereinbelow:

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¹⁹¹ The "one-sided" methods refer to the Transfer Pricing methods which consider the transaction ex-ante/expost with independent parties as the starting point of the analysis. Namely, they are the Cost-plus method and the Resale Price method. See paragraph 3.3.1. of this thesis and also OECD, *supra* n.86, at chapter 2, for further information.

Figure 12. Transfer Pricing methods by type of transaction (in %).



Source: S.E. Barsch, X. Ditz & S. Kluge, *Transfer Pricing in Business Practice in the Light of BEPS and Digital Transformation*, International Transfer Pricing Journal, published May/June 2019, pp.184-188, IBFD.

The results are quite surprising. For every type of transaction, the vast majority of companies declare that they utilize the Cost-plus method. This is even more surprising when it deals with the IP development and use, and the highest share of utilization of the Cost-plus method is the IP development. The method most discouraged by the OECD in such transactions reveals to be the most used by companies in business practice. Especially in the IP development, there is very low correlation between the costs of development and the arm's length of a successive transfer, because a huge number of variables come into play in determining the value of such intangible. The only scope which seems to be adherent to the utilization of the Cost-plus method is the purchase of contracts research. A possible explanation of the massive use of the Costplus method in transactions involving intangibles may be the fact that companies often have to combine different needs at the same time. Companies pursuit the need of tax certainty and tax optimization, along with other purposes. Therefore, "they must choose a method that is appropriate not only for tax functions, but also for managerial accounting and IT purposes" 192 and out of these constraints, the Cost-plus method seems to be the most suitable one. So far, the provisions of the OECD have not been applied by companies, which still prefer the "traditional" methods even for pricing intangibles transactions. The OECD provisions have, on the other side, indubitably increase the tax uncertainty, the documentation requirement and the audit costs for companies, without considering the enhanced risk of international double taxation.

¹⁹² See S.E. Barsch, X. Ditz & S. Kluge, *supra* n.189, at paragraph 2.2.

5 CONCLUDING REMARKS

The forecasts in economics are always object of not being believed, as they often end up being wrong. The clearest example comes from the 2007 global financial crisis, when the majority of economists and financial managers swore, just before the collapse of the US mortgages market, that the system had never been so stable and that worries on its resistance were not grounded. 193 Despite the US real estate market started collapsing since 2007, most of the economic agents did not pay attention to that, as even the rating agencies (Moody's, Standard and Poor's, Fitch) assigned the maximum grade to the financial securities (ABS), relying on the US citizens' ability to reimburse their loans. In the end, the conclusion is well known. Being economics a social science, differently from the hard sciences such as physics, chemistry and so on, the forecasts on what is likely to happen in the future global economy may be similar to guessing the sum of the numbers after throwing two dices. While the way molecules act can be somehow foreseeable, the same cannot be said to the human behavior. A well-aged debate in economics regards the rationality of humans when taking decisions. The models base their outcomes on the assumptions that economic agent act rationally, and that irrationality exists but as exception. 194 However, as other social sciences sustain, human beings are often irrational. That is the main reason why providing forecast in economics may be extremely difficult and lead to big mistakes. It is also true, on the other side, that being completely passive to the things which are occurring in the world is a much worse attitude to the reality. It is due to everyone, especially with a background in economics, to try to understand the reality and to draw the possible scenarios which may occur. In this concluding section, an outlook on the possible future developments will be provided, of course concerning the tax environment in the post BEPS world, with a particular focus on the issues related to the Transfer Pricing practices involving intangible assets. This section may be broadly divided into two macro paragraphs: in the first one, a judgement on the effectiveness of the BEPS project will be presented, focusing on the different pros and cons and trying to suggest possible improvements; in the second part, some considerations on the Transfer Pricing complexity will be set out, with the intention to spot out areas that are interested to tamper with the (long and tiring) path to the reach of a tax

¹⁹³ A very interesting movie about this is *The Big Short*. Directed by Adam McKay. Regency Enterprises, Plan B Entertainment, 2015. It tells how a very few analysts, contrasting the opinions of major economists and financial directors, shorted against the banks exposed to the ABS, which were linked to the US mortgages market. See also J.G. Baldwin (2019), *'The Big Short' explained*, Investopedia, accessed 5 September 2020, https://www.investopedia.com/articles/investing/020115/big-short-explained.asp.

¹⁹⁴ In microeconomics, the rationality assumption is broken down into two axioms: the completeness and transitivity. The completeness axiom states that the consumer is always able to make a choice between two alternatives. The transitivity axiom states that the consumer's choices must be consistent. See also G.A. Jehle & P. J.Reny (2011), *Advanced Microecomic Theory*, Third Edition, Financial Times Prentice Hall, at paragraph 1.2.

fairness, across both states and companies. The draw of possible scenarios, however, remains hard matter even for tax specialists around the world. One reason of uncertainty is inevitably due to the occurrence of unforeseeable events, such as the Covid-19 pandemic, which may characterize the economic environment of the future years. Another key reason of uncertainty on the BEPS project effectiveness, in contrasting international tax avoidance, is the absolute need of a multilateral convergence by all countries involved. For instance, in November 2020 the USA will elect the new president, as it may be possible that the approach to the contrast of international tax avoidance may change. The political willingness to transpose the international provisions into domestic law and treaties is key, as usual. The theoretical discussion on BEPS effectiveness therefore should be accompanied by a constant check of countries implementation. Nevertheless, also the way the provisions are implemented is obviously fundamental, and much harder to be assessed. Indeed, the text of the national provisions, although apparently reproducing the aim of the OECD guidelines, may give space to space of interpretation which can produce undesired (or desired?) side effects. The approach aimed at contrasting tax avoidance must be multilateral, and the countries are most often characterized by conflicting interests. Tax avoidance is not negative for those countries which see their taxable income increase a lot thanks to it. Those countries, although claiming to be against those practices and contributing to the OECD and G20 publications, may be reluctant and ineffective in transposing those rules into law. This way, they may acquire international consensus by leaving things unchanged. In the further paragraphs these issues will be addressed in detail, starting with a deep understanding of the juridical power of the OECD provisions.

5.1 THE EFFECTIVENESS OF THE BEPS PROJECT

To draw the direction of the international taxation environment is crucial, especially after the recent introduction of the BEPS Action Plan and the OECD Transfer Pricing Guidelines. From a purely juridical point of view, it is important to understand the juridical force of the BEPS Action Plan, in order to clarify the duties of the OECD/G20 member states. This point is key within the analysis, because as already mentioned, the practical implementation of rules is what really makes the difference both for tax administrations and taxpayers. In order to assess the effectiveness of the BEPS project, it is first necessary that the OECD/G20 member states, along with all the other developing countries which participated, convert these provisions into national laws and modify their treaties. Hence, first of all, to analyze the effects of the BEPS

projects, it should be known that the OECD provisions are considered as soft law. ¹⁹⁵They have indeed low or negligible juridical power, in the context of member countries' enforcement. Nevertheless, not all the provisions of the BEPS Action Plan are on the same level of juridical power. It is true, on one hand, that "a large proportion of the measures agreed in the BEPS Action Plan are still being considered recommendations or reports" on the other hand it is important to consider the different levels of juridical strength of the provisions, that the countries themselves agree on, in the document. The BEPS Action Plan divides the provisions into 4 levels of commitment:

- 1. the minimum standards: all participating countries recognizes them as mandatory;
- 2. <u>the common approaches</u>: general directions but no precise rules;
- 3. the recommendations: should be followed but with reduced commitment and consensus;
- 4. the general analysis: no effect. ¹⁹⁷

The minimum standards include rules on harmful tax competition, abuse of conventions, transfer pricing documentation and MAP, revision of standards like PE concept and transfer pricing rules, and other provisions considered as basic. Although these specific provisions should be mandatory, when one goes to "the specific implementation of the BEPS measures from country to country, numerous differences that still leave the door open to tax planning opportunities can be seen". 198 Over 135 countries and tax jurisdictions apply these rules and transpose them into national legislations, and of course the laws will not ever be equal. Hence, even for what regards the transposition of globally accepted minimum standards, asymmetries and inconsistencies will inevitably come up, leading to the creation of tax avoidance opportunities. If this is true for minimum standards, it is especially true for the remaining three levels of provisions, which may be almost completely unenforced with little or no consequences. Therefore, it seems that the BEPS provisions have low juridical effect, if countries lack political willingness to fight tax avoidance with national laws. On the other hand, however, the BEPS project has put in place a very innovative instrument to implement the a set

¹⁹⁵ The "soft laws" are rules and provisions, usually produced in international contexts, which do not have any legally binding force but are useful to indicate a path for future hard laws, which are instead enforceable. This terms also refer to European guidelines and most resolutions of the UN General Assembly.

¹⁹⁶ See P.A. Hernàndez Gonzàlez-Barreda (2018), A Historical Analysis of the BEPS Action Plan: Old Acquaintances, New Friends and the Need for a New Approach, INTERTAX, Volume 46, issue 4, pp.278.295, Kluwer Law International.

¹⁹⁷ See also OECD/G20 (2015), Base Erosion and Profit Shifting Project Explanatory Statement 5-9, for the general definitions regarding the BEPS project.

¹⁹⁸ See P.A. Hernàndez Gonzàlez-Barreda, supra n.196, at paragraph 2.2. The implementation of international provisions by countries, even when recognized as mandatory, can be carried out in different ways, either more stringent or less. More vague national translations may drive messages to companies looking for tax planning opportunities.

of provisions into the double taxation treaties: the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (hereinafter MLI, which stands for "Multilateral Instrument"). 199 This instrument allows the subscribers countries to immediately translate the provisions contained in the MLI into all of their double taxation treaties. It is a breakthrough juridical instruments, which has entered into force on the 1st July 2018 and covers 94 jurisdictions. This instrument indubitably goes toward the right direction of a broad worldwide harmonization of taxation rules, but in the short term "several reserves and opting-out options of the MLI"200 let large tax planning opportunities to those MNEs which are dispersed around the globe. Nevertheless, the BEPS project should be considered as a step forward in the process of harmonization of tax provisions and political relationships between states. More than 135 jurisdictions have cooperated and achieved, in any case, a common agreement on minimum standards to fight tax avoidance and to encourage tax justice. From any standpoint, this is an undiscussable progress in the field of international taxation. The key question regarding the BEPS project, including the OECD Transfer Pricing Guidelines, should be however: is it enough? Will it change things, by promoting tax justice and assuring tax certainty to the taxpayers? Whether, as already mentioned, these publications represent a relevant step forward in terms of political engagement and cooperation, from the point of view of this thesis it is important to assess the practical effectiveness of the new rules, which have been lately introduced. The BEPS project and the OECD Transfer Pricing Guidelines, unfortunately, may not represent the expected decisive step forward to guarantee more tax justice and to contrast international tax avoidance. In the following paragraphs, the arguments grounding this thesis will be set out in details, with a particular focus on the treatment of intangibles in Transfer Pricing, which is the key topic of this elaborate.

5.1.1 TOO MUCH SUBJECTIVITY

One key problem of either the BEPS Action Plan and the OECD Transfer Pricing Guidelines, is the subjectivity which is still left to tax administrations in their assessment, and to companies in their planning. The problem is exacerbated when dealing with the Transfer Pricing analysis of transactions involving intangibles. The issue per se is extremely complicate and broad, and the biggest problem of the OECD publications is that instead of simplifying it, it makes it even more difficult. The author is referring, in particular, to the introduction of the DEMPE approach, and to the valuation methods for the HTVIs. These two concepts are emblematic, within the

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¹⁹⁹ This Multilateral Instrument (MLI) will swiftly implement a series of tax treaty measures to update international tax rules and lessen the opportunity for tax avoidance by multinational enterprises. See OECD (2016), *Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting*, OECD publishing.

²⁰⁰ See P.A. Hernàndez Gonzàlez-Barreda, *supra* n.196.

BEPS Action Plan and OECD Transfer Pricing Guidelines, of how the rules have made the management of the intangibles more complicated than what they were. The author does not want to put into discussion the good faith of the OECD/G20 approach, but simply the results risk to make both the analysis of tax administrations and the tax valuations of MNEs more complex than before. The DEMPE approach aimed at assigning any extra return coming from the exploitation of an intangible to the parties according to the functions they perform, the assets they use, and the risks they assume in the development, enhancement, maintenance, protection and exploitation of the asset.²⁰¹Furthermore, the OECD specifies that each situation needs a peculiar approach, depending on the industry, market and conditions in which the company operates. As a consequence, the OECD states that "certain important functions will have special significance" and that the "nature of these important functions in any specific case will depend on the facts and circumstances". ²⁰²This sentence assigns a great level of subjective assessment to the tax administrations, in assessing the importance of some functions with respect to the others. The OECD, in its Transfer Pricing Guidelines, does not set out further explanations on how to spot these "important functions", and how to assess the "special significance" and "the facts and circumstances". ²⁰³ As easily understandable, even before the introduction of the DEMPE approach, the recurring to tax disputes and litigation was not seldom, but this sentences in particular risk to give rise to infinite discussion and to harm both the tax justice and the tax certainty. Unfortunately, despite the good faith accompanying the introduction of this new approach, in practice it is likely to produce less fairness and more inefficiency. It will be easy for MNEs to defend their aggressive tax planning, as the criteria of "special importance" of functions to allocate extra-returns from an intangible is too subjective, and therefore hardly verifiable. Moreover, in many situations, important functions are not performed in one country only, but they are split among a certain number of locations. Imagine the criteria with which tax administration valuate the arm's length for intangibles remuneration, when important functions related to the development, enhancement, maintenance, protection and exploitation of the asset are performed in three countries. The degree of subjectivity in this process would be incredibly high, as well as the probability of incurring in long and costly tax disputes which will weaken the moral stature of the tax administrations, hence strengthening the bargaining

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²⁰¹ See paragraph 3.3.3.1. of this thesis and OECD and also *supra* n.86 at paragraph 6.42. for deepening the argument. The DEMPE approach has been lately introduced to avoid the practice of "cash boxes" firms, entitled to extra returns from an intangible. These companies, located in low tax jurisdictions, are formally owner of the asset actually controlled by subsidiaries, which also bear the risk, use assets and perform functions connected to it.

²⁰² See OECD, supra n.86, at paragraph 6.56.

²⁰³ See also A. Musselli & A. Musselli, *supra* n.111, at paragraph 10.

power of the MNEs. The second aspect in which the OECD publications leave too much space to subjectivity is the choice of the Transfer Pricing valuation method. 204 Of course, each situation differs from the others, and a good degree of flexibility is therefore necessary in order to pick the most suitable valuation method. Nevertheless, on the other hand letting too many possibilities of choice to the companies and tax administrations may lead to "cherry picking". ²⁰⁵It is true that, in presence of reliable comparables, the determination of the arm's length of a transaction involving intangibles is still characterized by a good degree of objectivity. Indeed, on one side some arbitrariness is still left in the selection of comparables, but then the pricing assessment is objectively based on a transaction actually occurred. Nonetheless, as already mentioned in many circumstances within this thesis, when dealing with intangibles, the comparables are usually very hard to find, at least the reliable ones. Therefore, in many cases, companies and tax administrations are obliged to discuss on methods such as the Profit Split Method and the financial valuation techniques. The intrinsic subjectivity of such methods is undeniable, but the OECD did not specify any border to their utilization. The financial valuation techniques are not exact science, and the divergent views on the "real" value of assets or stocks is widely accepted.²⁰⁶ But the standpoint of taxation must differ from the financial ones: when it comes to rules, then rules must be as clear and transparent as possible. As the OECD cares to specify the independence between the accounting and the taxation rules, then also the emancipation from the financial purposes in valuation should be claimed. Some hints may be declaring which financial model must be utilized, instead of generally allowing the income-based models. Although the use of DCF model is very common, many other techniques can be categorized as income-based, such as the Residual Earnings or the Royalties Method. By allowing, for instance, only the use of the DCF method, then the eventual dispute between the company and the tax administrations, would be moved to an economic discussion on the assumptions. In order to make things even more schematic, provisions on (for instance) caps for growth rates, on the computation of the discount rate, may be introduced. These two values usually make the difference on the final outcome, and they are easy usable to create

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²⁰⁴ See chapter 3.3.4. for deepening the issue of evaluating the intangibles in Transfer Pricing. The valuation methods, especially those not relying on comparables, already leave many parameters to be subjectively computed, as well as the underlying assumptions of the model. This is why the OECD should place stakes in the context of valuation methods.

²⁰⁵ The companies and tax administration could choose the valuation method whose result sounds more convenient to them, although other methods would better fit the characteristics of the transaction under consideration.

²⁰⁶ See also paragraph 3.3.4.5. for getting into details of the financial models used in valuations. A big set of parameters, the "key value drivers", depend on human assumptions. From a mathematical point of view, a small change in these parameters gives rise to a huge change of the final outcome.

speculation, although formally justified by different and legit assumptions. ²⁰⁷Ultimately, it seems clear that "the degree of subjectivity in interpreting fiscal law seems to have increased instead of lowered". 208 As the subjectivity increases, more space is left to abuses by both companies and tax administrations, with the result of decreasing the effective power in income adjustments by the controllers and decreasing also the tax certainty of the companies, which are becoming more and more sensitive to this issue. Nonetheless, the intrinsic nature of laws is subjective. Even provisions which are highly specific and circumstanced, in space and time, may be subject to interpretations which follow convergent interests. That is the reason why judges are needed. Imagine a world where all rules are univocal and all agents interpret the rules in a unidirectional way. Then, no dispute would ever arise, about the interpretation of rules to the events. Although this would be a desirable world, then this will never be real. The subjectivity in rules is a structural problem, even larger for international provisions which are subsequently transposed to national laws. But, whether on one side the problem cannot be eliminated, on the other hand it can be blunt down. There are two direction to move to: the first one is decreasing the subjectivity of provisions as much as possible, the second one is provided by instruments which render equivalent the interpretation of laws in advance, for the subjects involved. About the first problem, many areas to work on are present: the main ones are already mentioned within this paragraph, with the specific possible solutions. On the second one, two possible actions may be taken to reduce the variety of interpretation of tax laws. The first action, could be the introduction of an international court, entirely dedicated to international tax disputes. This court would be a relevant step forward to the contrast of tax avoidance, thanks to the production of judgments and acts that would make international jurisprudence. Those acts would start to create a path of a clear interpretation of international tax laws, which still lacks. The available jurisprudence is so far concerning national judgments, which may also be opposite to the analogous act provided by another national court. The jurisprudence produced by an international court would therefore be (approximately) univocal and would start to create a common path of interpretation across all countries. A second action, specifically regarding the Transfer Pricing issues, is the incentivization of the APAs. Those instruments are extremely useful to assure both companies and countries tax certainty and to avoid any dispute, along with any risk of eventual double taxation. Thanks to those arrangements, MNEs and countries agree on the methods to be applied in determining transfer prices in advance and prevent the incurring issues. Therefore, the introduction of an international court entirely dedicated to international

²⁰⁷ In particular, they have a huge impact on the Terminal Value, which is the perpetual annuity of the earnings generated by the intangibles. This value is the major part of the outcome of the model, and it is heavily impacted by the growth rate and discount rate assumed to the infinite. For more details, see Figure 7.

²⁰⁸ See A. Musselli & A. Musselli, *supra n.* 203.

tax issues, along with the incentivization of APAs, may blunt the problem both in prevention and in resolution of disputes. These actions, especially the first one, require a long process of convergence and political willingness, as usual. However, the BEPS project is a first step towards the direction of a cooperation and sharing across countries, and a new common conscience about the tax avoidance problems could be born. No illusions should be created on the complexity of such processes, but an optimistic view on future developments may not be considered ungrounded.

5.1.2 ABSENCE OF ECONOMIC GROUNDING

This second argument sustaining the ineffectiveness of the BEPS project regards a poor connection with the economic theory.²⁰⁹Some may argue that, being a matter of taxation and not of economics, the correspondence is not supposed to be necessary. However, a deeper view of taxation and economics would lead to a different conclusion. Taxation exists in function of the economic system, as the economy creates wealth that countries subsequently tax. This is the reason why taxation law is deeply connected with economic theory and practice. Issuing taxation laws not compliant with economic mechanisms would lead to ineffectiveness and inequality of tax levy. Therefore, the write out of provisions not grounded by the economic theory, may reveal an additional contrast to the reality of business. The DEMPE approach, once again, goes under examination, as it implicitly drives a message: the risk (and therefore the return) is borne by the party employing the labor factor, and not by the one providing the capital. This is due to the theory behind the DEMPE approach: no residual profits in excess of a riskfree return should be assigned to the party not actively involved in the development, enhancement, maintenance, protection and exploitation of the intangible. The logic is: the party providing funds is not actually bearing any operating risk, besides the one of not being reimbursed. The OECD sustains that the purchaser of a research contract connected to the development of an intangible asset, in absence of a constant control on the activities performed by the researchers, is not entitled to any return although being the owner of such asset. The returns should therefore be addressed to the party performing the research activities, which are already remunerated for that. The problem is simple: it is opposite to what happens in reality. ²¹⁰Indeed, in real economy, the funder bears all the risks related to the development of, for

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²⁰⁹ See A. Musselli & A. Musselli, *supra* n.111 and A. Musselli, *supra* n.163, along with the section 4.1. of this thesis which deeply investigate the economic basis of the DEMPE approach, promoted by the OECD and G20 guidelines.

²¹⁰ See paragraph 4.1.2. of this thesis and A. Musselli, *supra* n.163 for digging into the argument. The presentation takes inspiration from the Example 17 of chapter VI, in the OECD Transfer Pricing Guidelines. In that case, the purchase of a research contract is recharacterized as a loan, despite the lack of collaterals provided by the borrower.

instance, a research contract which has been purchased. The party providing assets and performing functions differs from the one which assumes risks, related to the development of a determined intangible. The purchaser of an intangible is the party assuming risk related to its enhancement, thus it is also the one entitled to any extra return coming from its exploitation or commercialization. Moreover, the OECD, in an example provided in its Transfer Pricing Guidelines' annex, states that such purchase, for Transfer Pricing purposes, should be recharacterized as a loan, without collateral. This is also ungrounded on a financial point of view, as no bank in real world would deliver loans for such risky projects in absence of collaterals. Furthermore, even if this loan was allowed, the interest rate charged would be at 100%. 211 This argument has already been set out in this thesis and demonstrates how the OECD publications lack of a substantial economic basis, which is also reflected in a poor acknowledgment of the mechanisms of risk, control and uncertainty. The OECD aimed at contrasting the "cash boxes" companies which are located in low-tax jurisdictions, and legal owner of intangibles actually controlled by a subsidiary, located in a developed and (usually) high tax country, with a high presence of human capital. However, the problem was the mispricing of this transfers: cash boxes transferred a consideration based on "subjective profit projections of intangible use" and ended up paying too little, in respect of the value of the asset.²¹²Problems came mainly from misevaluation, not from the ownership. OECD, instead of clarifying and drawing the perimeter of acceptable valuations, as aforementioned, introduced the DEMPE approach, which evidently lacks a sound economic grounding. This downside has two consequences: the possibility of being not credible, and the difficulty of application in real audits. As already mentioned, the lack of economic grounding, in taxation provisions, is sooner or later reflected in real deficiencies. The DEMPE approach reverses one of the basic mechanisms of how the economy works: it states that the risk managers and the researchers, which are performing functions connected to the intangibles, but not committing capital, are entitled to the residual profits and on the other side, the investor is not. It's like if a firm publicly listed, when distributing dividends, gave them to the risk managers instead of the shareholders. 213 It does not work like that, at least in the context of a capitalistic system. The OECD, despite the good intentions, instead of relieving the existing problems related to

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²¹¹ See chapter 4.1.3, OECD, supra n.161, A. Musselli & A. Musselli, *supra* n.111 and also A. Musselli, supra n.163 to have further information on such issues and a thorough demonstration of the arguments sustained. ²¹² See also A. Musselli & A. Musselli, *supra* n.111, at paragraph 5. Once again, the problem of subjectivity is related to the Transfer Pricing, and its presence in the valuation context has not fallen thanks to the BEPS

related to the Transfer Pricing, and its presence in the valuation context has not fallen thanks to ti project.

²¹³ Of course, in the example it is assumed that the risk managers are not shareholders.

Transfer Pricing of intangibles, created more confusion with principles which are both vague and theoretically ungrounded.

5.1.3 WHERE IS THE INTERNATIONAL TAXATION GOING?

The forecast of the scenarios may be articulated in two periods: the short run and the long run.²¹⁴The discrimination is necessary, as some effects of the new provisions may take place in different times and with different modes. Although the concepts themselves of short and long run are ambiguous, this is an economic way to distinguish between the earlier effects and later ones, which are more likely to become permanent. The short term may not necessarily be tomorrow, or one year, as well as the long term should not be considered as 100 years from now. BEPS project, as all the political acts, both national and international, produce short term and long term effects. It is therefore important to try to analyze each of them, in order to draw the path the international taxation is walking on. On the short run, it may be possible to imagine a global scenario which gets more and more confused, dominated by economic and politic conflicts, by health challenges and by an increasing fragmentation of the world. As widely known, the taxation is a direct consequence of creation of wealth, hence it is a function of economic variables. The actual situation of the global economics makes uncertainty increase, maybe at levels which it has never reached before. The Covid-19 pandemic has put in discussion a whole economic paradigm, made of outsourcing and internationalizing the value chains. ²¹⁵Going from a macro-view to the arguments addressed in this thesis, the rules provided by the OECD are likely to add still more uncertainty to already shocked MNEs. The foreseeable increase of tax disputes, due to the increased subjectivity of rules, will lead to the decrease of tax certainty, considered as basic by companies. Along with the extremely negative economic cycle, this will head to an even more severe decrease of investments, and maybe the closing of subsidiaries around the world, to solve the problem at his roots. On the long run instead, taking for granted that the pandemic will be off, it is possible to think of a huge re-allocation of assets and functions taking place, if such rules will not be reviewed. Indeed "in the medium and long term [...] the ALP only incentivizes firms to relocate key managers of intangible development to low-tax countries". 216 With this operation, firms will be able to prove that the performance

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²¹⁴ Although, according to the famous economist Keynes, "on the long run we are all dead".

²¹⁵ The uncertainty on international trade and health conditions of eastern Asia countries has got started a process of review of existing and consolidated global chains of value creation, especially for the technological companies. See also this interesting article: T. Zanni (2020), *Technology Supply Chain Disruption*, KPMG blog, accessed 6 September 2020, https://home.kpmg/xx/en/blogs/home/posts/2020/04/technology-supply-chain-disruption.html.

²¹⁶ See A. Musselli, *supra* n.163 and also J.J. Fichtner & A.N. Michel (2016), *The OECD's Conquest of the United States: Understanding the Costs and Consequences of the BEPS Project and Tax Harmonization*, Mercatus Research, Mercatus Center at George Mason University, Arlington, VA.

of such functions is located to the countries where the taxable income is moved, which of course will be the ones with low-tax rates. The reasoning is relatively simple. Under the DEMPE approach, companies will be paying more taxes in the countries endowed with a larger human capital, and will decrease the taxable income of countries with low skilled workers.²¹⁷Although being a simplification, usually the countries with higher human capital are the "developed" ones, and the countries with high availability of low skilled personnel are the "developing" ones. The developed countries are characterized by higher corporate tax rates, in respect of the developing ones, which use a favorable business environment to attract investments. It may be likely that on the long run, under the new OECD publications, companies will be incentivized to move human capital to the developing countries. By doing this, either the legal ownership and the carrying out of functions related to the intangibles will be located in the low-tax jurisdiction, and the tax authorities will not be able to contest it. The human capital will be made up of managers, researchers and all those people related to intangibles development, enhancement, maintenance, protection and exploitation. The consequences will be of course negative, from a western world standpoint, as the human capital is one the main drivers of economic growth. The taxable income of the industrialized world will fall down, and a symmetric increase will occur the developing countries. The overall global tax burden will fall, empowering a trend which is not new in the modern economy. The figure hereinbelow sets it out clearly:

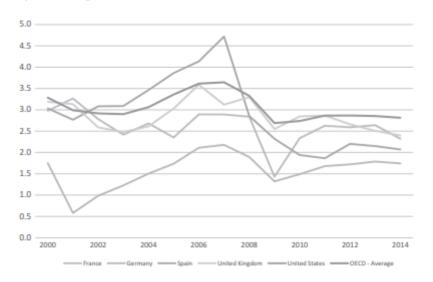


Figure 13. Corporate Income Tax Revenue, 2000–2014. (% of Total Tax Collection)

Source: P.A. Hernàndez Gonzàlez-Barreda (2018), A Historical Analysis of the BEPS Action Plan: Old Acquaintances, New Friends and the Need for a New Approach, INTERTAX, Volume 46, issue 4, pp.278.295, Kluwer Law International.

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²¹⁷ The DEMPE approach attributes extra returns to the company using assets, assuming risks and performing functions in the development, enhancement, maintenance, protection and exploitation of the intangible. The taxable income is moved to the countries employing intellectual skills, which are usually the most developed ones, characterized by higher corporate tax rates.

Both the OECD average and the advanced countries have seen a decrease (or at least, stagnation) of their corporate income tax revenues, over the last decades. Of course, this is not only due to Transfer Pricing but also to, for example, tax rates reductions and economic crisis. On the other hand, it is undeniable that the practice of tax avoidance has contributed to this phenomenon. The tendency, instead of slowing down, may increase, in the following decades. The OECD and G20, despite an appreciable effort of cohesion and genuine will to contrast these practices, seem not to have hit the spot with the new rules within the BEPS project. Nevertheless, the problem of Transfer Pricing, especially when connected to the intangibles, appears to be unsolvable. The capitalistic system and the globalization inevitably favor the development of these practices, and the only effective solution would be the return to the world made of Sovereign states, closed to the outside. However, this brings also the return of wars between states, and the human civilization would go backward instead of forward. The general impression is that, although steps forward could be made, the problem of tax avoidance (in particular, Transfer Pricing) is not completely solvable in the context of our capitalistic and globalized world.

5.2 CAN WE CANCEL TAX AVOIDANCE OUT?

The international context so far suggests that huge problems like tax avoidance, cannot be solved in the framework of this economic system. The capitalistic system, especially the globalization process, has created opportunities and threats. The decrease in global poverty, for instance, is due to the capitalistic system. In 1993, 68,2% of the global population lived with less than 5,5\$ per day. In 2015, the percentage has fallen to 46,2%. On the other hand, indubitably the capitalism and globalization lead most of the wealth to a smaller and smaller share of population, while the purchasing power of the middle class is steady. In 2019, the richest 1% of the global population owned the 44% of the world's wealth. Of the current economic system. The different areas of the world are experiencing different cycles and have difference economic (and fiscal) and political necessities. The advanced countries have seen their growth slowing down in the last decades, especially the European Union, and they are looking for instruments to stop the movement of taxable income towards the low tax countries. On the other hand, the developing countries put all the efforts to create an attractive business environment, capable of receiving foreign investments. The usual incentives are low corporate income tax

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²¹⁸ Source of data: Macrotrends, *World poverty rate 1981-2020*, accessed 29 August,2020, World Poverty Rate 1981-2020. www.macrotrends.net.

²¹⁹ Source of data: Credit Suisse (2019), 2019 Global Wealth Report.

rates, low bureaucracy, low labor costs. The globalization has wrecked down all the existing barriers to internationalization, of both companies, individuals and capital. Although the BEPS project may be seen as an encouraging first step of convergence between these macro-areas, at the end the conflict of interests will remain unsolved, as it is intrinsic of the current economic system. Furthermore, focusing on the Transfer Pricing, the problem of pricing intangibles is old-fashioned in economics. The degree of uncertainty and subjectivity in such valuations can be obviously decreased, by setting up stricter criteria when dealing with taxation, but it cannot be eliminated. Despite the BEPS project, as already stated, decreased the degree of subjectivity in the process instead of reducing it, the pricing of intangibles will always be characterized by manipulation. The manipulation in using such techniques can be intended both on the MNEs side and on the tax authorities' side. Tax authorities are not impartial as they declare to be, they have the duty of maximizing the tax revenues their country, and the action of some tax administrations will inevitably harm the other countries' tax revenues. Viewing the companies as evil and the tax authorities as angels, is too simplified as countries have interests too. It is not the aim of these final considerations to implicitly state that nothing can be done in order to ensure more tax justice and to contrast tax avoidance. Indeed, within the elaborate, several suggestions are made to improve the existing rules, grounded by admirable political willingness but poor and confused in practice. Whilst pointing out the problem is intrinsic to the economic system, it is also important to say that every situation can be improved, with small steps towards the right direction. The OECD and the countries involved in the BEPS project should work on shorter, more transparent and not vague provisions, with low degree of interpretation by either MNEs or tax administrations. By doing this, the problem can be relieved and an increasing share of taxable income will be taxed in countries when it should be taxed. The hope is that, since an increasing share of the public opinion is becoming sensitive to the international taxation issues, the politician of the various member countries will progressively be more and more aware of the importance of fighting tax avoidance, toe encourage fiscal justice and fair competition among companies.

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