

CHALLENGES TO THE TAXATION OF THE DIGITAL ECONOMY

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Abstract: *Globalization and digitalization have led to the emergence of new business models based on the remote provision of services. Digital companies have access to consumers in countries all over the world without physical presence in these countries. As a result, their profits remain untaxed. There is an increasing awareness that the existing legislative provisions for corporate income taxation that date back to the 1920s need to be modernized. Currently, the possibilities for taxation of digital businesses are discussed in the context of the OECD and EU. However, progress is slow due to the different views and interests of the countries involved. Therefore, several countries have planned or already introduced digital taxes unilaterally. The purpose of the paper is to explore the specifics of digital taxes and to analyze the possibilities and challenges to their broader application. The paper is organized as follows: the first part outlines the most important digital business models; the second part dwells on the digital taxes that are implemented in several countries; the third part presents the projects for international coordination of these taxes; and the fourth part concludes.*

Keywords: *Digital taxes, Digital economy, BEPS Project, OECD, EU.*

1. INTRODUCTION

The growth of the digital economy has led to the emergence of new types of business models based on online platforms. Thus, the provision of services has become increasingly accessible and profitable. The digital economy is already an important part of the everyday life of individuals and firms mainly as a result of the rapid expansion of the Internet throughout the world and the development of information technologies. These developments create important tax issues. The existing rules on corporate income taxation date back to the 1920s and they are applicable to businesses operating in different countries through some form of physical presence. Digital products, on the other hand, are provided online and do not require any type of physical presence of the supplier in the countries of the customers. Thus, the revenues from these services remain largely untaxed. Furthermore, in the past services were predominantly non-tradable, whereas in the digital age international trade with services has thrived.

It should be noted that the digital transformation creates challenges to corporate income taxation in all sectors of the economy and is not limited to the companies providing only electronic services. Multinational firms in general benefit enormously from digitalization. In a world of modern communications, it is relatively easy for businesses to run from many different locations, in increasingly complex supply chains - to the extent that identifying “the” location of a particular activity becomes increasingly difficult (Devereux, Vella, 2017, p. 95).

The present paper is focused specifically on the taxation of companies operating in the digital sector of the economy. Its objective is to analyze the specifics of digital companies and to explore the possibilities and challenges to their taxation. The paper is organized as follows: the

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2. MAIN TYPES OF DIGITAL BUSINESS MODELS

Technological development and the spread of Internet throughout the world have led to the creation of new types of business models based on online platforms. Generally, information and communication technologies are used in all sectors of the economy. Some companies, however, are specialized in the remote provision of services through the Internet, thus generating substantial profits. While some of these electronically provided products are paid (subscription services, online marketplaces, collaborative platforms), others are free of charge (social media, search engines) and are financed with advertising revenues. The main types of digital business models are presented in Table 1.

Table 1. Main types of digital business models

Model	Description	Method of financing
Online marketplaces	Sell goods or connect buyers and sellers	Placement fee or commission
Social media	Connect individuals and firms and enable them to share information	Revenue from targeted advertising messages
Search engines	Provide access to user generated content on the basis of Internet search	Revenue from targeted advertising messages
Subscription services	Provide continued access to digital services	Subscription fee
Collaborative economy platforms	Connect spare demand and supply in an online environment	Fixed or variable fees

Source: European Commission, OECD

Digital businesses have some specific features that distinguish them from traditional business models. These key characteristics were defined by the Organization of Economic Development and Cooperation (OECD). In the first place, digital companies operate in many countries without physical presence, thus they do not fall within the scope of the current legislative regulations.² The internationally accepted rules on corporate income taxation date back to the 1920s. In the past the issue of physical presence was solved through the concept of permanent establishment (PE) as a *compromise between source and residence claims* for tax jurisdiction. A source country may only tax a foreign person if such person participates to a significant extent in its economy (and only to the extent of such participation) with PE-type physical presence being an acceptable proxy for such sufficient participation (Brauner, Baez, 2015, p. 4). Most digital companies, however, do not need an office or other type of permanent establishment in the countries where they operate and generate revenues. Thus, the question arises how to allocate the taxing rights between the source and the residence country.

Secondly, most digital businesses rely on the contribution of customers (users) for value creation. In other words, large part of the content on the respective online platform is delivered directly or indirectly by its users. Users' participation can have different forms varying from

² The OECD uses the term "scale without mass" in order to describe the fact that digitalized companies often operate in a country only through virtual presence. This is in contrast to the traditional "brick and mortar" business models based on physical presence in the country where the customers are located.

liking a page or writing a review to uploading content. In any case it contributes to the establishment of the brand, the generation of valuable data, and the development of a critical mass of users which helps to establish market power. The value generated by user participation is not captured under the existing international tax framework, which focuses on the physical activities of a business (OECD, 2019, p. 10)

Lastly, digital companies are characterized by strong reliance on intellectual property assets (such as software or algorithms) which support their platforms, websites and other critical functions of their business models. The active use of intangible assets makes difficult the allocation of profits of multinational enterprises and increases the risk for locating income in low or no tax jurisdictions (OECD, 2019, p. 6). It should be noted that intra-firm trade with intangibles is not limited only to digital companies. It has become an important channel for tax avoidance for multinational enterprises in many sectors of the economy. Solution of this problem is also sought in the context of other anti-tax avoidance legislative reforms.

These factors complicate the taxation of the incomes of digital businesses. It is not only a political matter, but poses a challenge from a technical point of view. There is an acknowledgment that it would be difficult to “ring-fence” the digital economy from the rest of the economy for tax purposes because of the increasingly pervasive nature of digitalization (OECD, 2019, p. 5). The two main questions are:

- *Where to tax?* – how to establish and protect taxing rights in a country where businesses can provide services digitally with little or no physical presence despite having a commercial presence; and
- *What to tax?* – how to attribute profit in new digitalized business models driven by intangible assets, data and knowledge (European Commission, 2017, p. 7).

Although addressing these challenges is difficult, there is an increasing understanding that the international tax regime should keep up with technological and economic developments. Moreover, digital companies are among the largest and most profitable in the world. As can be seen in Figure 1, in 2019 7 out of the 10 largest companies in the world, as measured by the market capitalization, belong to the digital economy and the top 5 includes 4 such companies.

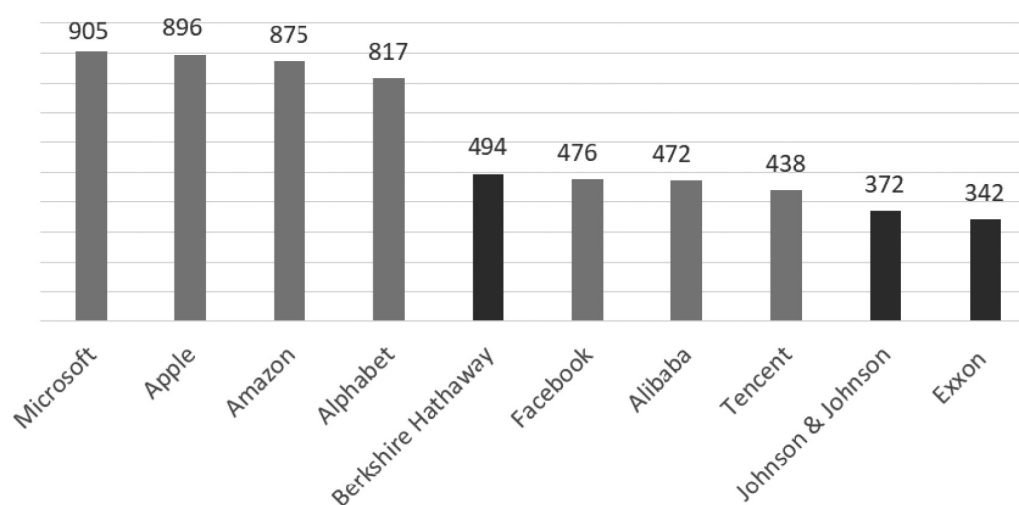


Figure 1. Top 10 global companies by market capitalization in March 2019
(In billions of dollars)

Source: PWC, 2019

3. DIGITAL TAXES IMPLEMENTED THROUGHOUT THE WORLD

The digital transformation of the economy has implications on both direct and indirect taxation, but with different degree of complexity. Although these issues cannot be entirely separated from the more general problem of tax avoidance of MNEs, digital business models require specific tax solutions.

As regards indirect taxes, solutions are available within the legal framework of value added tax.³ As of 2020, over 70 countries in the world already charge VAT on electronically provided services (KPMG, 2020, p. 36). Moreover, in recent years most of them reformed the applicable rules on cross-border retail sales. In the past, business-to-business (B2B) services were subject to VAT in the country of residence of the customer, whereas business-to-consumer (B2C) services were taxed in the country of residence of the supplier (European Commission, 2019). The taxation of B2C services in the country of origin created competitive advantage for low-rate countries.⁴ Nevertheless, its distorted market conditions and contradicted the basic principle that VAT should be levied in the country where the customers are located (the so-called destination principle). Therefore, in 2015 the OECD adopted a recommendation for introduction of the destination principle in all cross-border supplies of electronic services, regardless if the buyer is a registered business or a final consumer (OECD, 2019a). This change aimed at creating equal opportunities for local and foreign suppliers and to achieve fair allocation of VAT revenues. In accordance with these recommendations, many countries throughout the world switched to the destination principle of taxation of retail digital services. The European Union also implemented the OECD recommendations in its VAT legislation.⁵

The inclusion of the profits of digital companies in the “tax net” is more challenging, due to the characteristics presented in the first part of the paper. It requires an extension of the definition of permanent establishment, thus giving source countries the right to tax on their territory the profits generated through remotely provided services. Only two countries, Indonesia and Israel, have already introduced such changes in their legislations. However, in order to be effective an update of the definition of permanent establishment should be applied on a worldwide basis.

An alternative approach is to adopt a digital services tax (DST) on the revenue stemming from the provision of digital services. Several countries throughout the world have already adopted such taxes, while others have announced their introduction. Digital services taxes are aimed only at the digital services which involve users’ contributions for value creation. The taxes already implemented are summarized in Table 2. Italy’s DST (in effect since 1 January 2020) has the widest scope. It is levied at a rate of 3% on the gross revenue from the three main types of digital services: advertising on a digital interface; a multilateral digital interface that allows users to buy/sell goods and services; and the transmission of user data generated from using a digital interface (KPMG, 2020, p. 8). In other cases, the scope of the DST is limited to one type of digital business. For example, Kenya applies such a levy on the income accruing from digital marketplaces, Costa Rica and Greece introduced taxes on the income from provision of tourist rental services via digital platforms, whereas Austria and Hungary have implemented digital advertising taxes only on the revenues from advertising services on digital interfaces (KPMG, 2020).

³ Some countries apply a Goods and services tax but it is also a multi-stage tax with input deduction like VAT.

⁴ For example, Luxembourg for many years applied a VAT rate of 15% (the lowest possible in the EU), thus attracting many technological companies and raising significant revenue.

⁵ Council Directive 2006/112/EC of 28 November 2006 on the Common System of Value Added Tax.

As can be seen from the table, a number of countries have instead chosen to include the revenue from digital services into the scope of the already existing legal regulations, and in particular withholding taxes (WHT). Generally, withholding taxes are applicable to different types of income accruing only to non-residents in a jurisdiction. As can be seen from the table, several countries, including Malaysia, Mexico, Slovakia and Turkey, have extended their withholding tax regimes to the income arising from the provision of certain digital services. The main disadvantage of withholding taxes is that they discriminate against foreign companies. Although this approach is a second-order alternative to a solution on the basis of digital permanent establishment, it is considered a possible response to the challenges of the digital economy (Brauner and Baez, 2015, p. 3).

Table 2. Implemented direct taxes on the digital economy as of March 2020

Type of tax	Countries	Scope	Rate
Digital services tax (DST)	France	<ul style="list-style-type: none"> Provision of digital interfaces enabling users to interact with each other; Provision of services to advertisers which aim at placing targeted advertisements on a digital interface; 	3%
	Italy	<ul style="list-style-type: none"> Advertising on a digital interface; Multilateral digital interface that allows users to buy/sell goods and services; Transmission of user data generated from using a digital interface 	3%
	Kenya	Income accruing from digital marketplaces	n.a.
	Tunisia	Not yet determined	3%
	Turkey	<ul style="list-style-type: none"> Digital advertising, Sales of digital content, Services for the provision of digital platforms 	7.5%
Digital advertising tax (DAT)	Austria	Revenue from advertising on digital interfaces	5%
	Hungary	Net turnover from broadcasting or publications of advertisements	7.5%
Tax liability for tourist rental services	Costa Rica, Greece	Income from the provision of rental services via the Internet	n.a.
Withholding tax (WHT)	Malaysia	<ul style="list-style-type: none"> Payments to non-residents from the provision of certain digital services 	Variable
	Mexico		Variable
	Pakistan		5%
	Slovakia		5%
	Taiwan		n.a.
	Turkey		7.5%
Vietnam	Variable		
Equalization levy	India	Gross revenue from online advertising	6%
Digital permanent establishment (Digital PE)	Indonesia Israel	Revenue related to digital presence	n.a.

Source: KPMG, 2020

The existence of different approaches towards the taxation of the digital economy creates legal uncertainty for businesses and increase administrative and compliance costs. Moreover, the recent experience has shown that applying direct taxes on the digital economy is difficult from a technical point of view, especially in the absence of internationally accepted rules. Therefore, these fiscal instruments can be viewed as a temporary measure until a common approach is agreed on a global scale. It is to be seen in the years to come if the digital taxes already implemented are successful. The experience of the countries that have adopted such levies can serve as a basis for the improvement of the international tax regime.

4. PROJECTS FOR INTERNATIONAL COORDINATION

In recent years, there have been two important international initiatives for modernization of corporate income tax rules in the context of the digital economy. A coordinated response, including the introduction of a concept of “digital permanent establishment”, is the preferred approach by the European Union. In 2018 the EU presented a draft directive on the corporate taxation of significant digital presence. The objective of this proposal was to extend the concept of permanent establishment so as to include a significant digital presence through which a business is carried on and establish rules for the attribution of profits generated through such significant digital presence (Eur-Lex, 2018).

In parallel, the EU also put forward a draft directive on the common system of a digital services tax as an interim measure until the reform of the PE definition in a global context. According to the draft the DST at a rate of 3% would be levied on the gross annual revenue from the provision of three types of digital services: the placing on a digital interface of advertising targeted at users of that interface; the making available to users of a multi-sided digital interface which allows users to find other users and to interact with them, and which may also facilitate the provision of underlying supplies of goods or services directly between users; and the transmission of data collected about users and generated from users’ activities on digital interfaces. The tax would apply only to companies with a total gross annual turnover exceeding 750 million euro and a gross turnover in the EU over 50 million euro (Eur-lex, 2018a). According to the calculations of the European Commission the DST would raise around 5 billion euro per year in all Member States.

The two proposals did not obtain the necessary unanimity of the Member States. At the beginning of 2019 the European Commission presented a revised draft, according to which the DST would be applicable only to the revenue from online advertising, but it was also rejected.

In the last decades, the Organization of Economic Cooperation and Development (OECD) asserted itself as the main platform for international coordination of corporate income taxation. In 2013 the OECD, together with G20, launched the so-called *Base Erosion and Profit Shifting Project (BEPS Project)* and as of 2020 over 135 countries are participating in the BEPS Project Inclusive Framework. The overall aim of the project is to limit the possibilities of multinational enterprises (MNEs) to avoid taxes through profit shifting strategies. It consists of 15 actions each of which is targeted towards a particular issue.

Action 1 of the BEPS Project is particularly focused on the challenges arising from digitalization. The specific measures were elaborated in a Programme of Work from May 2019 and were divided in two pillars. Pillar one has the objective to determine an appropriate method for reallocation of the taxing rights among the countries where digital companies operate. Pillar two is intended to ensure that the income of every multinational corporate group is subject to tax at a minimum rate thereby reducing the incentive to allocate returns for tax reasons to low taxed entities (OECD, 2019b, p. 32).

At the beginning of 2020 the Inclusive Framework of the BEPS Project issued a statement outlining concrete measures. As regards Pillar one, the proposal does not contain a change in the definition of “permanent establishment”. Instead it introduces a new mechanism for allocation of taxing rights between countries, which will allocate taxable profits of digitalized companies according to a formula, instead on the basis of transfer prices. This method takes into account

the possibilities of digital MNEs to operate and generate revenues in many jurisdictions without physical presence. Its application will be limited only to a share of the residual profit, if the amount so allocated is over and above the arm's length return that might be allocable to in-market activities such as baseline marketing and distribution (OECD, 2020, p. 9). In addition, it will be applicable only to large MNEs and under the conditions that: the digital services are automated⁶ and the revenue is generated from the sale of goods and services only to final consumers.

As already mentioned, Pillar two of BEPS Action 1 involves measures intended to limit the possibilities of digitalized MNEs to shift their profits to low-tax jurisdictions. Its implementation is based on the introduction of an income inclusion rule. The approach proposed by the OECD is to establish this rule as a top-up tax to a minimum rate calculated as fixed percentage. Its effect would be to protect the tax base of the parent jurisdiction as well as other jurisdictions where the group operates by reducing the incentive to put in place intra-group financing (OECD, 2020, p. 28). In addition, several other mechanisms are envisaged to complement the income inclusion rule.

A final report on the measures under BEPS Action 1 is expected by the end of 2020. However, many important issues remain unresolved. In the first place, the BEPS project does not provide a single definition of the digital economy. It only defines the characteristics of highly digitalized business models, but as already mentioned some of these features are present also in business entities from other sectors of the economy. Therefore, it is not clear which companies will fall under the scope of the proposed new rules.

Furthermore, several elements of the reform project are not likely to gain unanimous support. Despite the progress on the technical details, the OECD recognizes that there are some areas where critical policy differences remain. Most importantly, at the end of 2019 the United States presented an alternative proposal to implement Pillar one on a "safe harbor" basis. This would mean that the application of the new mechanism would be optional for MNEs. Many other members of the BEPS Inclusive Framework have expressed concerns that the inclusion of such "safe harbor" provision could undermine the overall impact of the reforms (OECD, 2020, p. 4).

Some authors are also skeptical towards the overall effects of the BEPS project on international aggressive tax planning. According to Devereux and Vella (2015, p. 98) even if successfully completed, the BEPS project could not fully eliminate the incentives and opportunities for tax avoidance of large multinational companies, but instead will influence the allocation of real economic activities. These authors suggest alternative options to the current regime, including through increased taxes on the income of the ultimate shareholders in a multinational company rather than the income of company itself. The reasoning behind this proposal is the lower mobility of individuals in comparison to corporate profits.

5. CONCLUSION

The thriving digital sector of the economy creates significant tax challenges. Although these challenges cannot be entirely separated from the more general problem of tax avoidance of MNEs, digital business models require specific solutions. Digital transformation has implications to both direct and indirect taxation. With respect to indirect taxes, the existing rules have

⁶ Automated digital service includes online search engines; social media platforms; online intermediation platforms, including the operation of online marketplaces, irrespective of whether used by businesses or consumers; digital content streaming; online gaming; cloud computing services; and online advertising services.

been already updated in many countries in the context of VAT legislation. The inclusion of the profits of digital companies in the tax net is much more complicated. There is an increasing understanding that large multinational companies have to pay their fair share of the costs of financing the public sector, but a commonly accepted approach has not been worked out yet. In the last years digital taxes have spread around the world, but the specific organization varies from country to country.

On an international level the work on direct taxation of digital companies advances at a relatively slow pace, due to the necessity to reconcile the differing views and interests of the countries involved. The European Union has been unsuccessful in its efforts to introduce new tax rules for the digital sector. Thus, the OECD, in close cooperation with G20, has become the main locomotive for the reforms, which are carried out through BEPS Project. Action 1 of the project contains concrete measures aimed at taxing the earnings of digital businesses and a consensus-based solution is expected by the end of 2020. However, some unresolved issues remain.

Against this background, it can be expected that in the near future the tax issues concerning the digital economy will be tackled on a country-by-country basis, through digital services taxes or other fiscal instruments. Unilateral actions complicate tax systems, lead to higher administrative and compliance costs and increase the risk of aggressive tax planning. On the other hand, they reflect the views and fiscal necessities of the respective country. If successful, digital services taxes already implemented can serve as the basis for improvement of the international tax regime.

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