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THE FUTURE OF THE DIGITAL PERMANENT ESTABLISHMENT CONCEPT: CHALLENGES AND OBSTACLES

Abstract

Addressing the challenges and implications of taxing the digital economy through the concept of Digital Permanent Establishment [DPE] is the main focus of this article.

Traditional tax systems based on physical presence are inadequate for digital businesses that generate significant revenues without a physical footprint. The research examines whether the introduction of DPE can increase tax revenues in countries where digital services are provided. The hypothesis is that DPE will lead to higher tax revenues by capturing profits that are currently shifted to low-tax jurisdictions.

The objectives of the article are to analyse the potential effectiveness of DPE in increasing tax revenues, the barriers to increasing tax revenues of DPE, and to compare the economic impact between countries that have adopted DPE and those that have not. The research methodology includes legal analysis, historical analysis and comparative analysis of approaches from chosen countries.

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Challenges and other factors affecting the enforceability and profitability of the tax reduce the expected finding that countries that have adopted DPE have seen an increase in tax revenues from digital services.

This does not mean that DPE is effective in combating base erosion and profit shifting [BEPS] in the digital economy. However, the study also highlights administrative challenges and the need for international coordination to avoid double taxation.

In conclusion, the article's findings confirm that DPE can increase tax revenues and contribute to fairer taxation of the digital economy. It provides new insights into the implementation and impact of DPE and highlights its potential to modernise international tax systems. The findings underline the importance of adapting tax policies to the realities of the digital economy.

Key words: Digital Permanent Establishment, Digital Economy, Taxation, OECD, BEPS, International Tax Policy, Tax Revenue

JEL Classification: H21, H26 and K34.

1. Introduction

In the context of a rapidly evolving digital economy, traditional tax systems are failing to effectively tax businesses that generate significant revenues without a physical presence in a given jurisdiction. This article will focus on the concept of Digital Permanent Establishment [DPE], which has the potential to combat base erosion and profit shifting [BEPS] and increase tax revenues in countries where digital services are provided. This article will analyse whether the introduction of DPE leads to an increase in tax revenues and evaluate the effectiveness of this approach.

This article assesses the impact of the introduction of a DPE on tax collection in different countries. This article tests the hypothesis that the introduction of a DPE will increase tax revenues by capturing profits that are currently being shifted to low-tax jurisdictions. The existing literature and evidence clearly demonstrate that DPE is an effective tool for ensuring fair taxation of digital businesses.

The concept of a DPE is a key area of interest for international tax authorities and policymakers. This concept is the answer to the challenges posed by the digital economy, where companies can generate significant revenues in countries where they have no physical presence. The future of the concept will undoubtedly be influenced by several factors, including international initiatives, legislative changes and technological advances.

2. Permanent Establishment and its past

The term "permanent establishment" was first defined in detail in Article 4[3] of the Model Tax Convention of the League of Nations. After the Second World War, the foundations of modern international tax law were laid by the OECD Model Tax Convention. The first version of this Convention was published in 1958 and included a definition of a permanent establishment that became the basis for many bilateral tax treaties around the world [Avi Yonah, 1996]. Another major revision was published in 1963, which consolidated the definition of PE in Article 5. This version emphasised the importance of physical presence as a key factor in determining the existence of a PE [Avi Yonah, 1996]

2.1. Concept of permanent establishment

A permanent establishment is generally defined as a fixed place of business through which an entity carries out all or part of its activities [OECD, 2017]. To determine whether a particular location constitutes a permanent establishment, a set of criteria must be met. When these criteria are met, a permanent establishment is created in that jurisdiction. These are the criteria:

a) Physical presence;
b) Duration; and
c) Actual activity.

Physical presence is typically demonstrated by the presence of offices, factories, workshops or other premises. The establishment must be permanent, which usually means it must exist for a minimum period of time (e.g., 6 to 12 months) [OECD, 2017]. There must be actual economic activity. It is not enough to simply own property that is not used for commercial purposes [OECD, 2017].

The OECD provides a clear example of a permanent establishment. These are company offices, branches, factories, manufacturing plants or construction projects or sites [if they last longer than a certain period, usually 12 months] [OECD, 2017]. This does not mean that a permanent establishment cannot be represented by other facts reflecting physical presence and activity in a given jurisdiction.

2.2. Permanent establishment under legal regulations

This concept is enshrined in several main legal regulations and documents. The following list details the primary sources of legislation pertaining to a permanent establishment. This article is primarily concerned with aspects other than the legal anchoring of a permanent establishment. The list below is demonstrative and is supplemented only by a brief illustrative description.

The OECD Model Tax Convention is the foundation for many bilateral tax treaties between countries. It defines a permanent establishment and sets out the conditions under which taxation can be applied [OECD, 2017]. Article 5 defines a permanent establishment as a fixed place of business through which an enterprise carries on all or part of its business [OECD, 2017].

The UN Model Double Taxation Convention provides an alternative to the OECD model and is the preferred choice for many developing countries in their international tax agreements. Article 5 defines a permanent establishment with wording that reflects the specific needs of developing countries [United Nations, 2017].

The European Union has made it clear that it considers the concept of a permanent establishment to be an important part of its legislation. This is evident in the Anti-Tax Avoidance Directive (ATAD) and the Directive on Administrative Cooperation (DAC7), which introduce rules against tax avoidance and the obligation of digital platforms to report on economic activities.

The permanent establishment is also regulated by individual national legal regulations. In the United States, the concept of a permanent establishment is defined in the Internal Revenue Code (IRC) and further developed in the relevant US tax treaties [IRS, 2020]. The UK has a clear definition of a permanent establishment in the Income Tax Act 2007 and in double taxation treaties [UK Government, 2007].

A bilateral agreement on the avoidance of double taxation is a common legal regulation of a permanent establishment. These treaties between two countries set out the conditions under which the income of enterprises from one contracting country can be taxed in the other contracting country. These treaties are often based on OECD or UN model conventions, but may also contain specific modifications according to the needs and agreements of the parties involved [OECD, 2017].

3. Challenges for the permanent establishment concept

As stated above, the concept of Permanent Establishment (PE) is fundamental in international tax law. It determines the tax obligations of multinational enterprises in jurisdictions where they conduct business. However, the traditional PE concept is facing significant challenges in today's globalised and digitalised economy.

First and foremost, it is the development of digitalisation and e-commerce. The traditional PE concept is based on physical presence, which is irrelevant in the digital economy. It is now possible for companies to generate substantial revenues from jurisdictions without any physical presence through digital platforms and e-commerce [OECD, 2020].

The traditional PE concept is flawed by the fragmentation of business operations. MNE often fragment their operations across multiple jurisdictions, making it difficult to identify a single place of business that qualifies as a PE.

Some businesses are using commissionaire and agency arrangements to avoid creating PE in the jurisdiction. These arrangements allow businesses to conduct significant activities in a country without being taxed there because they do not meet the PE threshold under traditional definitions. It is common practice for the company to sell its products through an intermediary, who is not acting on behalf of the company to avoid the creation of a PE [OECD, 2017].

The final challenge we must overcome is the problem of Base Erosion and Profit Shifting [or BEPS]. This problem is created when companies exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity. In doing so, they undermine the PE concept. Let's consider an example. This is where profits are shifted through intra-group transactions, intellectual property rights and the strategic location of intangible assets [OECD, 2015]. One of the most effective ways to combat BEPS is to establish a minimum threshold of revenue generated from digital services provided in a given jurisdiction [OECD, 2020].

4. DPE

A DPE is a topic that is very current and highly debated. It concerns an economic presence based on digital activities, such as the number of users or the volume of digital transactions, rather than physical presence [OECD, 2020]. It is not a futuristic concept. In fact, some countries, such as France and India, have already implemented or plan to implement it within the framework of rules for the taxation of digital activities [European Commission, 2018]. The OECD has included them in its legislation as a response to more effective taxation of the digital economy [OECD, 2020].

4.1. Concept of digital establishment

A DPE is a concept that responds to the fact that digital businesses can generate significant revenues in jurisdictions where they have no physical presence. It expands the traditional concept of a permanent establishment to include digital activities and economic presence [OECD, 2020]. A DPE is based on three key factors: economic presence, digital activities and revenue. A digital business has a significant and lasting economic presence in a country if it has a significant number of users or customers [OECD, 2020]. Digital activities include providing digital services, online advertising, selling data or operating online platforms that do not require a physical presence in the traditional sense [OECD, 2020].

The concept of a DPE is evolving from that of a traditional permanent establishment. It is also covering other types of business. Typical examples of digital PE include:

a) Online advertising providers [e.g. Google] with a significant number of users in a given country.
b) Digital platforms [e.g. Amazon, eBay] with a significant volume of transactions in the country.
c) Sellers of digital products and services [e.g. sellers of antivirus software] with significant revenues generated in a given country [OECD, 2020].

4.2. DPE under legal regulations

The most common legal arrangement in which the concept of a permanent establishment occurs is the double taxation treaty [DTT]. DTT legislation must be adapted to reflect new economic realities. Historically, DTTs have

been based on physical presence as a key criterion for taxation [OECD, 2017]. However, with the rise of the digital economy, it is clear that these contracts must be modernised.

It is clear that traditional DTAs focus on physical presence and do not consider digital presence. This allows digital firms to avoid taxation in countries where they have significant user bases [OECD, 2017]. But this does not mean that these contracts cannot be updated to reflect the realities of today's digital age. However, the risk of fragmented DTTs encourages inconsistency and will not achieve a fair level of taxation for all jurisdictions. As will be shown below, there is also a great risk of double taxation in case of incorrect formulation and imprecise determination of the subject or scope of taxation.

Bringing the concept of a DPE to life is as simple as projecting it into the Digital Services Tax [DST] or drafting legal frameworks coordinated by large international organisations. The OECD and other international organisations have long been pushing for changes that would include the concept of a DPE. These changes will enable the taxation of income generated by digital activities without the need for physical presence. The key to them is the close coordination of individual jurisdictions on the resulting solution [OECD, 2020].

4.3. Future of DPE

There is no doubt that the DPE represents a modern extension of the traditional permanent establishment concept that better matches the dynamics and characteristics of the digital economy. A traditional permanent establishment requires a physical presence, whereas a DPE focuses on economic presence and significant digital activity. This reflects the global and often virtual nature of modern business models. These changes are essential to ensure fair and efficient taxation in the era of rapid digitisation and globalisation of the economy [OECD, 2020]. However, the practical side of introducing the concept of a DPE is much more complicated and faces many challenges.

a) Administration and measurement

Firstly, we must determine the precise rules and mechanisms for measuring the digital presence in a given jurisdiction and subsequently allocating profits. Even if the legal regulation is written in a sufficiently clear and legible manner

for its addressees, the technical possibilities of detecting and measuring the taxable presence can present a problem. At the same time, it is crucial to identify and measure taxable presence in order to ensure fair taxation of companies that can generate income in jurisdictions where they do not have a physical presence. There are several technical options for determining and measuring taxable presence.

The first step is to analyse user data using the geolocation of users. This can be achieved by using various technologies, such as IP addresses, GPS data and Wi-Fi triangulation. IP addresses are a good way for businesses to determine the geographic location of users. GPS data and Wi-Fi triangulation provide more accurate location data, especially for mobile devices.

The goal is to identify the country or region from which users access digital services, ensuring that profits are allocated to the appropriate jurisdiction [OECD, 2020]. Geolocation is an essential tool for determining digital presence. However, each of the methods – IP addresses, GPS and Wi-Fi triangulation – has its gaps and limitations. Geolocation using an IP address is inaccurate, especially with mobile devices and VPNs [virtual private networks], which can mask a user's actual location. Some studies have found that city-level IP geolocation is only accurate 50–70% of the time [Li, Z., 2024]. Furthermore, many Internet Service Providers [ISPs] use dynamic IP addresses that can change regularly, making it impossible to track a user's long-term location. Furthermore, users can use proxy servers and VPNs to hide their real IP address, which can lead to incorrect localisation [Poese et al., 2011].

Let me be clear: even geolocation using GPS is not always accurate. It is important to note that the GPS signal can be significantly weakened or lost inside buildings or in densely built-up urban areas, which can lead to inaccurate location data.

To determine the taxable presence or location of users in a given jurisdiction using GPS, it is essential that users always have GPS services on their mobile devices. However, this is not happening. Active GPS tracking can quickly drain the battery of mobile devices, which is why users may turn off the feature [Zandbergen, 2009]. Some users may also be sensitive to their location being tracked and may turn off GPS or limit apps' access to GPS data due to privacy concerns. This allows us to geo-locate users in a certain jurisdiction using GPS.

It is important to note that geolocation using Wi-Fi triangulation also has its disadvantages. This method will never be accurate if used in areas with low Wi-Fi network density. Furthermore, the location accuracy of Wi-Fi access points can be affected by factors such as movement, turning off, or changing settings. Furthermore, Wi-Fi triangulation is generally less accurate than GPS [Honkavirta et al., 2009].

Each of the geolocation methods listed above has its advantages and disadvantages. Combining these methods will undoubtedly improve the accuracy and reliability of geolocation services. However, it is important to be aware of their limitations. It is essential that research and development of new technologies and methods continue to minimise these gaps and increase the accuracy and reliability of geolocation and its use in practical aspects of digital economy taxation.

In addition to the use of classic geolocation methods, transaction data can and should be analysed. In this case, data warehouses, Blockchain, or other analytical tools can be used. Tracking transactions made through digital platforms provides invaluable data on economic activity in different jurisdictions. Blockchain technology guarantees transparency and immutability of records.

It is also possible to track and identify users with the help of cookies, tracking pixels and mobile identifiers. This makes it possible to track user behaviour on websites and applications. The frequency and length of user visits can be used to determine the degree of engagement and thus economic presence in a jurisdiction.

Another crucial issue is the risk of data misuse. Financial authorities can obtain the data necessary to obtain sensitive information about the location, transactions and behaviour of users. This data can and will be misused for unauthorised surveillance and invasion of privacy of individuals and companies [OECD, 2020]. The main risk is that it involves large volumes of personal and business data. Unauthorised access to this data will inevitably lead to its use for non-tax purposes, such as tracking the movement of persons without their knowledge or consent. Data leaks can and will be misused by third parties, such as hackers or competing firms [Chen et al., 2017]. Data can and will be stolen and sold on the black market, leading to financial losses and damage to the reputation of the affected entities. It is essential that basic data protection includes encryption during both transmission

and storage [Zandbergen, 2009]. Ideally, strong encryption algorithms are needed to protect data from unauthorized access.

Restricting access to sensitive data to only authorised persons and systems is another effective data protection measure [Poese et al., 2011]. Implementing multi-factor authentication and role-based access control (RBAC) ensures that only authorised persons can access sensitive information. Regular audits and monitoring of approaches and changes in data are essential to maintain data security [OECD, 2020]. Security information and management [SIEM] systems must be used to monitor and analyse data access in real time.

The only way to protect data is to implement and comply with international data protection standards and regulations [GDPR, 2018]. Adhering to the GDPR in the EU is the only way to protect data. It sets strict requirements for the protection of personal data and imposes heavy penalties for their violation. Furthermore, differences in data protection regulations across different jurisdictions can also be problematic. It is clear that different countries have different data protection laws and regulations, which inevitably lead to inconsistencies and problems in cross-border data sharing [Devereux & Vella, 2014].

The EU has a strict GDPR regulation, while the US has various laws at the federal and state level that may not be as strict. The differing data protection requirements make it challenging for countries to cooperate and share the information needed to effectively tax the digital economy [GDPR, 2018]. Businesses operating in multiple jurisdictions must navigate complex and sometimes conflicting data protection requirements.

The recommendations in this area can and should be made. It is imperative that international cooperation on the harmonisation of data protection regulations be established. This will facilitate the sharing of information and ensure its protection.

Businesses and financial authorities must adopt and adhere to the strictest data protection standards to ensure high levels of security and privacy [GDPR, 2018]. Financial authorities must be transparent about how they use and protect the data they collect and be held accountable for its security [OECD, 2020].

b) International coordination and risk of double taxation

International cooperation in the field of DPE is essential to avoid double taxation or, conversely, non-taxation. The digital economy is global in nature. This means that digital businesses can operate in multiple jurisdictions simultaneously without a physical presence. Without harmonised tax rules, there will be discrepancies and conflicts between the tax laws of different countries [OECD, 2020]. The OECD's Pillar 1 is a good example of this. It introduces a new nexus based on significant economic presence and redistribution of profits. To ensure uniformity and fairness, it requires coordination between countries.

Without international cooperation, a race to the bottom will occur. This is where individual countries lower taxes to attract digital firms, leading to an erosion of the tax base globally [Devereux & Vella, 2014]. Common rules must be put in place to prevent companies from using low-tax jurisdictions to minimise their global tax liabilities. International cooperation can also simplify and streamline the tax collection process, reducing administrative costs and increasing transparency [OECD, 2020]. This is greatly facilitated by common standards for reporting and information sharing, which improve the monitoring and taxation of digital transactions (e.g. country-by-country reporting).

It is unfortunate that international cooperation is not a matter of course. During international negotiations, diplomats must navigate a delicate balance. Jurisdictions have different interests and priorities, which inevitably leads to inconsistencies in the implementation and application of rules. This discrepancy makes it difficult to effectively enforce the rules and allows companies to exploit loopholes for tax optimisation [OECD, 2020]. Furthermore, some countries may view international cooperation as a threat to their tax sovereignty. Political and legal conflicts will undoubtedly arise if countries feel limited in their ability to determine their own tax policies.

Even if there is agreement on the new legislation and its enforcement, the introduction and enforcement of harmonised rules will be expensive and demanding on the administration. This will inevitably lead to high costs, which will discourage individual jurisdictions from participating in international initiatives. However, these are key to implementing effective digital economy taxation measures.

However, the goal of avoiding the risk of double taxation or double non-taxation should be the driving force behind individual jurisdictions working together, rather than dividing them. It is therefore safe to assume that the amended traditional bilateral treaties on the avoidance of double taxation (DTT) and new multilateral agreements will contain specific provisions in the future that address the digital economy and DPE. Furthermore, the implementation of the Multilateral Instrument (MLI) will allow countries to update their existing DTT based on BEPS recommendations and include DPE rules [OECD, 2017].

The risk of double taxation or non-taxation will be eliminated by new uniform rules for the redistribution of profits. These rules, based on economic presence and the creation of common allocation keys, ensure that taxable profits are fairly distributed between jurisdictions where real value creation takes place. The OECD Pillar framework provides a clear example of such rules. It proposes a new nexus and methods for redistributing profits that reflect digital presence and economic activity [OECD, 2020].

Once the legal framework for international taxation is established, it is crucial that mechanisms for resolving disputes between jurisdictions are in place and functioning properly. The establishment of effective dispute resolution mechanisms will undoubtedly reduce the risk of double taxation. These mechanisms provide a clear and fair process for resolving tax disputes between countries. Such mechanisms are the Mutual Agreement Procedure (MAP) or binding arbitration, which can help resolve tax disputes quickly and efficiently [OECD, 2017].

c) Resistance of MNE

Multinational companies [MNEs] are actively resisting the introduction of the DPE concept in various ways. These companies are employing a variety of strategies and arguments to protect their financial interests and minimise the impact of the new tax rules. Below are the most common methods by which MNEs try to prevent the introduction of new legislation.

MNEs invest significant financial resources in **lobbying** and subsequently lobby governments and international organisations intensively to influence legislative and regulatory processes in their favour. Tech giants such as Google, Amazon and Facebook are investing heavily in lobbying to mitigate the effects

of the new tax rules [Big-Tech Lobbying, 2024]. MNEs are quick to point out that increased tax burdens could hinder innovation and growth. They claim that this would result in less research resources and development. At the same time, they highlight their economic contribution in the form of job creation and investment in the given jurisdiction [KPMG, 2020].

MNEs frequently turn to the courts to challenge new tax regulations. **Lawsuits** frequently target discrimination or her ban. They are certain that the new taxes discriminate against digital firms and violate international trade agreements. Companies are right to argue that the introduction of DPE is unfair and does not reflect the true value they bring to different jurisdictions [KPMG, 2024]. Another argument is that the new tax regulations would be too complex and costly to implement, which would have a negative impact on their business and innovation. Some MNEs have decided to challenge the new tax regulations in the courts in order to delay or cancel their implementation. In 2020, Google and Facebook boldly challenged a digital tax in France, asserting that it was discriminatory and a clear violation of international trade rules [Bloomberg, 2021].

MNEs will **relocate their headquarters** or restructure their business operations to avoid establishing a permanent establishment in high-tax countries. Another option is to adjust the supply chain and internal transactions to minimise tax liabilities. Companies are quick to defend these steps as necessary to maintain efficiency and competitiveness in the global market [PwC, 2024].

MNEs use **media campaigns** to gain public and influential support against new tax regulations. Companies fund studies and reports that back up their arguments against raising taxes. In these cases, MNEs are quick to argue that there is a public interest in not introducing such legislation. They confidently argue that increasing taxes would have a negative impact on consumers, as it would inevitably lead to higher prices for digital services [Tech Transparency Project, 2020]. Finally, MNEs **can use Double Taxation Treaties [DTTs]** to minimise their tax liabilities by invoking exemptions and reliefs provided in these treaties [EY, 2020].

5. Conclusion

The future of the DPE concept depends on the success of international initiatives such as OECD Pillars 1 and 2 and the ability of national legislations to adapt to rapidly changing technological and economic conditions. The DPE

concept is essential for ensuring fair and efficient taxation in the era of rapid digitisation and globalisation of the economy.

Some jurisdictions are already adjusting their definitions of permanent establishments to better cover today's digital business. However, two aspects in particular represent a hidden threat. The risk of double taxation is enormous in such situations. The distribution of profit according to the place of creation of value in a given business is key. It is clear that countries find it difficult to find a global consensus on this. The time-consuming nature of the process is the reason some jurisdictions try to unilaterally tax income from digital taxation.

The majority of states have already accepted the call to adopt a fundamental reform of the international appearance through the OECD and are taking steps to achieve it. The overall concept is complex and will take time to implement. However, it is now clear that without a common approach in multilateral negotiations on the taxation of the income of non-resident MNEs and the creation of sufficiently general rules that would not create unjustified differences, the reform will never be successful. It is clear that focusing on specific narrow sectors will soon be insufficient in view of the rapidly developing digital economy. It is therefore clear that the unilateral enforcement of DPE regulations is very risky and the author does not recommend it. Unilateral solutions will inevitably lead to double taxation and geopolitical international conflicts.

The author is convinced that the DPE concept, as described in the text above, is open to another risk: its practical enforceability and the approach of individual jurisdictions to tax assessment. There are several methods for determining in which jurisdiction the value is created and where the end users of the digital service are located. These methods are open to question in terms of accuracy and potential circumvention. Another question is what problems it can cause when individual countries verify the data reported by tax subjects in tax returns [reported now, for example, as part of Country-by-Country reporting] using different methods. Further research must focus on how to most effectively check whether the data reported by jurisdictions is correct and, if applicable, also on identifying the security risks of these methods. On the basis of the above, the hypothesis cannot be easily confirmed. However, it is certain that the hypothesis will be correct in the event that above mention issues would be resolved in the future.

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