

INFORMATION SOCIETY AND TAXATION:
THE CASE OF E-COMMERCE

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ABSTRACT: The use of information technologies in business activities has led to significant changes, some of them of a legal nature. Among them, those related to taxation have gained relevance, since electronic commerce generates many financial transactions that may result in taxation. Therefore, these new manifestations of online economic activities bring about the problem of the concept of “functional” sovereignty and various issues related to fiscal responsibility for e-commerce. This forced us to analyze the new solutions adapted to the delocalized nature of electronic commerce, as the European Union did with the now called “Amazon Tax.” In this article, we will try to make a comparative study, between Mexico and the European Union, seeking to clarify the historical evolution, as well as the pragmatic solutions and regulatory problems posed by the taxation of e-commerce.

KEYWORDS: *Tax obligations, e-commerce, Amazon Tax.*

RESUMEN: *El uso de las tecnologías de la información en la actividad empresarial ha supuesto importantes cambios, algunos de ellos de carácter legal. Y entre ellos cobran importancia los relacionados con la tributación, ya que el comercio electrónico genera muchas transacciones financieras que pueden dar lugar a tributación. Por lo tanto, estas nuevas manifestaciones de actividades económicas en línea introducen el problema del concepto de soberanía “funcional” y varias cuestiones relacionadas con la responsabilidad fiscal para el comercio electrónico. Eso nos obligó a analizar las nuevas soluciones adaptadas al carácter deslocalizado del comercio electrónico, como hizo la Unión Europea con la ahora denominada “Tarifa Amazon”. En este artículo intentaremos hacer un estudio comparativo, entre México y la Unión Europea, buscando esclarecer la*

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evolución histórica y las soluciones pragmáticas y los problemas regulatorios que plantea la tributación del Comercio Electrónico.

PALABRAS CLAVE: *Obligaciones fiscales, comercio electrónico, impuesto de Amazon.*

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I. INTRODUCTION

The circumstances in which people interact with each other have changed dramatically since the 1980s, so that social, economic, commercial, political, and fiscal practices have become transnational. These changes were intro-

duced by a set of circumstances in which local, national, and global relations stimulated by the invention of new communication technologies caused a growing economic interdependence and development of a new structure in international trade, as well as new online consume behaviors. It can be stated that, today, “e-commerce is everywhere, offering customers new and used products, —and becoming a global force in the fields of logistics and retail.”¹

The use of information technology in business activities has led to important changes, some of them of a legal nature. And among them those related to taxation acquire great importance, since electronic commerce generates many financial transactions susceptible to taxation.

Consequently, new manifestations of economic capacity have emerged that pose the problem of the functional concept of sovereignty, and, within this, issues related to fiscal powers in electronic commerce. This forces us to seek new solutions adapted to the delocalized nature of electronic commerce, as the European Union did with the so-called “Amazon tax,” introduced by a new regulation “of the Value Added Tax that obliges all online stores to invoice this tax in the buyer’s country of origin and not where the service provider is located.”²

Contributions are taxes on manifestations of economic capacity, and it is clear that in new digital environments, and particularly in electronic commerce (e-commerce), events that can be considered as such occur.

We can consider that they fit in the definition stated above: 1) transactions between companies (“Business-to-Business,” “B2B”); 2) transactions between companies and final consumers (“Business-to-Consumer,” “B2C”); 3) transactions between final consumers (“Consumer-to-Consumer,” “C2C”); 4) transactions between companies and public administrations (“Business-to-Government,” “B2G”).

Therefore, we can place various nodal questions, which we will try to answer throughout this presentation and which we can summarize as follows: 1) Is there a difference between who acquires a merchandise through any of the traditional methods and who does it through the Internet? 2) From the point of view of taxation, are the incomes different when gained by a merchant or a businessman who uses open communication networks to obtain them?

Obviously, the answer to the previous questions must be negative; hence we will face important problems. Although it is true that electronic commerce cannot be conceived as an easy formula to defraud, it is no less so that in practice there are numerous problems that need to be solved.³

¹ Spence, Michael, *La lógica inexorable de la economía colaborativa*, PROJECT SYNDICATE, (Sept. 28, 2015), <https://www.project-syndicate.org/commentary/inexorable-logic-sharing-economy-by-michael-spence-2015-09/spanish>.

² See *Claves del nuevo IVA para el Comercio Electrónico*, PYMES CONSULTANTS/ASESOR DE PYMES, <https://www.cesce.es/es/w/asesores-de-pymes/claves-del-nuevo-iva-para-el-comercio-electronico>.

³ Teresa Maria Da Cunha Lopes & Martha Ochoa León, *El control de la administración tribu-*

To draw valid conclusions on these issues, it is convenient to refer, first, to taxes levied on electronic commerce, so we therefore consider the comparative approach to be more productive.

We will highlight, on the one hand, the taxes that, under current regulations in Mexico, fall on income: Personal Income Tax,⁴ Income Tax for Non-Residents in Mexico, the Corporate Income Tax and, on the other hand, the Value Added Tax levied on consumption. Those other contributions also affect electronic contracting, although to a lesser extent, and to which we will briefly refer.⁵

Moreover, based on the application of the comparative method with the European Union, we will try to analyze the innovative solutions that have allowed the taxation of transnational e-commerce companies and online service providers—which we will call “serial” tax evaders—, like Amazon and Google.

II. THE PROBLEMS INHERENT TO THE SPECIFIC NATURE OF E-COMMERCE

In the first instance we must refer to the specific characteristics of the nature of Internet transactions. These are variables that, from the point of view of taxation, impact the widespread growth of electronic commerce and online contracting operations and, therefore, require tax solutions appropriate to the new possibilities for expansion of e-commerce.

These variables are:⁶ 1) Increasing business efficiency through the use of new possibilities for communication; 2) The multiplication of access points in time and space (fewer restrictions and geographic relocation of businesses); 3) The digitization of economic activity (intangible available services); 4) The emergence of new intermediaries; 5) The increase in the value of human capital in companies, and the introduction of new labor structures⁷ of the “new economy”,⁸ 6) The generalized use of the languages with the greatest

taria sobre el comercio electrónico, 4 DER. BIO. Y NUEVAS TEC., (August 11, 2021) https://www.researchgate.net/publication/301607629_EL_CONTROL_DE_LA_ADMINISTRACION_TRIBUTARIA_SOBRE_EL_COMERCIO_ELECTRONICO.

⁴ Ley de Impuesto sobre la Renta [LISR], Nov. 12, 2021, <https://www.diputados.gob.mx/LeyesBiblio/pdf/LISR.pdf>

⁵ LISR, Title II ISR NP, Title II, Nov. 12, 2021, <https://mexico.justia.com/federales/leyes/ley-del-impuesto-sobre-la-renta/titulo-ii/>

⁶ See García Espinar, *Aspectos Fiscales de Internet: hacia una tributación transfronteriza*, in PRINCIPIOS DE DERECHO DE INTERNET, 485-545 (Pablo García Mexia coord., Tirant Lo Blanch, 2005).

⁷ Teresa Maria Da Cunha Lopes, *et al.*, *Economía del Conocimiento y su impacto en las estructuras laborales*, II 3 REV. INTL. CS. JUR., (2014) <https://revistainternacionalcienciasjuridicas.org/2013/08/27/economia-del-conocimiento-y-su-impacto-en-las-estructuras-laborales-teresa-da-cunha-lopes-victor-acevedo-valerio-y-miguel-medina-romero/>.

⁸ The new economy focuses on technological and organizational transformation. Cities play an important role in this relationship and in the relationship - problematic - that is established between it and the social and institutional processes that are at the basis of our

demographic penetration, one of these being Spanish; 7) The growing concentration of virtual services in transnational companies such as Amazon or Google that monopolize huge shares of the online market; 8) The paradox of the globalization of the economy that allows local adaptations to world-scale markets; 9) The mass use of smartphones and their new possibilities for e-commerce activities.

Secondly, the problems posed by the effective application of these taxes, as well as possible solutions, will be analyzed. It must be considered that certain characteristics of electronic commerce affect the traditional principles of taxation, such as:⁹

- 1) Dematerialization of products that can be digitized. These products, which have traditionally required a physical support for their commercialization, can now be sold over the Internet without the need for the material component that went with them, which had no value for the consumer.
- 2) Marketing of online services. The use of new technologies makes it possible to provide services entirely through the Internet and, therefore, remotely. For example: consulting services, legal, financial, insurance contracting, organization of auctions, auctions, travel agencies, and so on.
- 3) Internationalization of services. The market for the supply of services provided online and telecommunications does not only include national operators, but also non-established operators who wish to compete in it, as it is not necessary for them to have a physical location inside.
- 4) Relocation of the actors. Internet and direct electronic commerce favor that the agents involved do not know each other's location. The buyer only needs to know the electronic address of the website (the IP) where the seller is exposed, as well as to have a device with an Internet connection and with the capacity to store the computer bits that he is going to acquire. As for the seller, the point of sale rests on a material basis, the server. However, basically it is nothing more than a memory space of an electronic equipment occupied by software and data, ultimately bits, which can be transferred to another server located in a different State electronically. Even the server could be a portable electronic equipment and likewise, the modification of the content of the website could be done electronically. In short, the Internet enables the immediate relocation of the point of sale of virtual companies, without costs or transfers.
- 5) Anonymity. Knowing who the interlocutor is becomes complex, since few traces remain, if the parties do not use secure authentication mechanisms based on cryptographic techniques, such as digital certificates

coexistence and our lives. An important reference see Manuel Castells, *La Ciudad de la Nueva Economía*, 7 27 PAP. POBLAC., (2001), https://www.scielo.org.mx/scielo.php?pid=S1405-74252001000100009&script=sci_arttext.

⁹ See Da Cunha Lopes, *supra* note 7.

and, especially, advanced electronic signatures. Although anonymity is defended by those who consider it an incentive for the development of this type of commerce, others reject it because they demand greater security and transparency in these transactions to avoid the risk of online fraud. In addition, from the perspective of taxation, it is necessary for the taxpayer of the consumption tax levied on the operation to know the nature of the buyer, the final consumer, the entrepreneur or professional, and his State of residence or where he is established.

Due to the importance, they are achieving in today's globalized society, the taxation of payment by electronic means deserves special attention. The last section of this chapter will be devoted to commenting on the possibilities for the Tax Administration to control electronic commerce.

III. TAXES ON E-COMMERCE IN MEXICAN LAW

The taxes levied on electronic commerce are the same as those currently applied to traditional trade: Personal Income Tax (PIT, refers to Natural Person), Non-Resident Income Tax (NRIT), Corporation Tax (CT, refers to Corporative Person), and Value Added Tax (VAT), these three taxes that fall on income and the one on consumption, are the ones that most directly affect trade, but they also affect contracting other taxes such as Special Taxes on Production and Services (STPS),¹⁰ the Tax on Patrimonial Transmissions, and Customs Taxes.

Next, we will analyze the characteristics of these taxes and the assumptions on which they apply, which will allow us to understand the problems that may arise when they fall on electronic commerce.

1. *Personal Income Tax*

The taxable event for Personal Income Tax is the obtaining of income by the taxpayer, who must be a natural person with permanent residence in Mexico.¹¹ The criteria to consider that a person has his habitual residence in Mexico are the following:

- 1) When the person has his home established in Mexico.
- 2) When the main core of the person's economic interests is in the national territory, even if his home is in another country.
- 3) When the person holds the Mexican nationality and is a state official or workers, even if his center of vital interests is abroad.

¹⁰ LISR, Title IV, ISR NP, 2021.

¹¹ Código Fiscal de la Federación [CFF], art. 9, Nov. 12, 2021.

The tax base consists of income in cash, credit, goods, services, or any other type. Logically, the income comes from economic activities that are directly related to the taxation of electronic commerce. In addition, article 130 of the Income Tax Law (LISR) and article 16 of the Federal Tax Code (CFF) include a list of activities that should be considered income from economic activities, and among them is the trade or provision of services.

Taking the foregoing into account, it would seem clear that when the person carrying out economic activities through the network is a natural person residing in Mexico, the income obtained will be subject to this tax.

None of the articles in the Federal Tax Code leads us to think that because commerce can be considered electronic, it will escape taxation by this tax.¹² However, there is still the problem of locating income in cyber space.

2. Non-Resident Income Tax

The Income Tax for Residents Abroad with Income from a source of wealth located inside Mexican borders taxes the different income that can be obtained by individuals and non-resident entities. Title V of the Income Tax Law establishes what income should be considered obtained in Mexican territory. The incomes mentioned include the ones related to economic activities or operations, with the difference that in one of them the activity or operation is carried out through a permanent establishment located in Mexican territory and in another one without its mediation. In the latter case, for the income obtained to be taxed in Mexico, one of the following circumstances must be present:

- 1) The economic activities or operations should be carried out in Mexican territory.
- 2) They should involve services provided in Mexican territory, particularly those related to carrying out studies, projects, technical assistance, or management support.
- 3) Also in this case, income derived from electronic commerce must be included among the income subject to taxation, provided that the aforementioned requirements are met.

3. Corporate Income Tax

In Mexico, Title II of the Corporate Income Tax Law taxes the income earned by companies and other legal entities. The taxable event is set up pre-

¹² In Mexico there is no law equivalent to the Spanish LSSI (Law of Services of the Information Society and Electronic Commerce) that regulates Electronic Commerce with more precision.

cisely by obtaining this income, its source or origin being indifferent. Thus, as was the case with the previous taxes, there is no reason to exclude those obtained in electronic commerce. This is why, as of the 2020 reform of this LISR, in Title IV Individuals Chapter II Of Income from Business and Professional Activities, Section III Of Income from the sale of goods or benefits is added. Of services through the Internet, through technological platforms, computer applications and the like, will be effective as of June 1, 2020.¹³

For this tax, entities resident in Mexico are those that comply with any of the following requirements:

- 1) That their incorporation has been carried out in accordance with Mexican laws and the free trade agreements signed by Mexico.
- 2) That their registered office is in Mexican territory.
- 3) That they have their effective corporate address in said territory. If it is a question of operations of legal entities residing abroad, those operations. In case of several operations, the premises of the main administration of the business is located in the country, or failing that, the one designated.

4. *Value Added Tax*

The VAT¹⁴ is an indirect tax that is levied on consumption, on deliveries and services made by businessmen or professionals (internal operations), intra-community acquisitions of goods and imports of goods. Deliveries of goods and services must be made by businessmen or professionals for consideration, on a regular or occasional basis, in the development of their business or professional activity. Electronic contracting can be included in any of the three cases, so that electronic commerce cannot be considered excluded from the application of this tax.

5. *Special Taxes*

In Mexico¹⁵ Special Taxes on Production and Services, also indirect taxes, are levied on specific consumption: alcohol and alcoholic beverages, hydrocarbons, tobacco products, electricity, and certain means of transport. They are taxed on their manufacture, importation and, where appropriate, introduction into the internal territorial scope, and registration.

¹³ Tit. IV, Chap. II, Sec. III, LISR 2020.

¹⁴ LISR, Tit. IV, Chap. II, Sec. III.

¹⁵ Ley del Impuesto Especial sobre Producción y Servicios (Special Tax Law on Production and Services) [IEPS] [STLPS], Nov. 12, 2021.

6. *Tax on Property Transfers and Documented Legal Acts*

In Mexico special taxes are included within the Title IV of the Income Tax Law in its chapters IV and V¹⁶ contemplated in Patrimonial Transmissions and Documented Legal Acts. We are interested in the first category: patrimonial transmissions. In this case, the tax is imposed on onerous patrimonial transfers of assets and rights, regardless of their nature, that were located, could be exercised or had to be fulfilled in Mexican territory or in foreign territory, when, in the latter case, the obliged to payment of the tax has residence in Mexico.

7. *Customs Taxes*

By Customs Taxes we must understand all those that have as object the international traffic of merchandise.¹⁷ The most important tax included in this category are import duties, which are required for the entry of goods into the customs territory.¹⁸ But they also include the following: suspensive customs regimes, agricultural regulatory levies and other import levies required under the free trade agreements in force, anti-dumping and anti-subsidy duties as well as other minor duties.

IV. TAX PROBLEMS RAISED BY ELECTRONIC COMMERCE

1. *Some External Comparative References to Mexico*

Once the different taxes levied on electronic commerce in Mexico have been analyzed, it is necessary to delve into the particularities of taxing that businesses have through the Internet, emphasizing that these problems are not exclusive to the taxation of electronic commerce in Mexico, but that they “are of the nature of this, and are general to all tax administrations.”¹⁹

Quoting Guillermo Alegre,²⁰ “The Internet does not generate wealth by itself, but it is of fiscal interest insofar as it can generate income in favor of its operators (which concerns direct taxation), and/or it reveals the economic capacity of its users (which affects the indirect taxation).”

¹⁶ LISR 2021, Tit IV chap. IV and V.

¹⁷ In this regard, see JORGE WITKER, *LAS REGLAS DE ORIGEN EN EL COMERCIO INTERNACIONAL CONTEMPORÁNEO*, (IIJ-UNAM, 2005).

¹⁸ As established by the Customs Law in force in Mexico.

¹⁹ García, *supra* note 6.

²⁰ Guillermo Alegre, *La Fiscalidad del Comercio Electrónico*, GUILLERMO ALEGRE (Aug. 15, 2021) <http://www.guillermoalegre.es/la-fiscalidad-del-comercio-electronico/>.

The fact that electronic commerce is not tax-exempt, as we have proven for the Mexican case, does not mean that there are no problems that make it difficult to put the exposed theory into practice.

The most important problems that can arise are:

- 1) On the one hand, the qualification of the income obtained, and the operations carried out.
- 2) On the other, the determination of the place where electronic commercial activities should be understood to be carried out.

2. *Income Tax Problems*

In income taxation, it is necessary to distinguish the problems that occur depending on whether the object of the contract are on-line or off-line supplies. As we know, the difference between one and the other is that, in the first case the goods or services that are acquired through the network circulate through it. Thus, while offline supplies are usually material goods that are transported by traditional means or professional services contracted through the network, online supplies are always goods or rights derived from intellectual property. Obviously, this does not mean that goods derived from intellectual property cannot be transmitted offline, let us think, for example, of the purchase of a book or a compact disc on a Web page that will reach us by traditional means of transport.

Of course, off-line hiring presents the least complications, since it is only necessary to apply general regulations to the income obtained. This will be considered income from economic activities, taxation by the ISR of non-residents, or it will be integrated into the accounting profit in the case of the ISR of the CP. In short, the use of electronic means has no impact on this type of contract.

Regarding online contracting, the main question is whether the acquisition of the digitized product implies only obtaining a right for its use or, on the contrary, the product is acquired on computer support in the same way as it could be done on any other type of support.

To advance on this issue, it is convenient to clarify the legal difference between assignment for use and assignment for sale. With the transfer of the mere use, a product consisting of the support and the right to use it is purchased with the limitations imposed by the Law (in the case of the comparative reference model of the European corporii iura in the matter, such will have to be searched in directives and regulations and in the case law of the EU courts).²¹

²¹ See Press Release 49/12 on Case C-128/11, Axel W. Bierbach (bankruptcy trustee of UsedSoft GmbH) v. Oracle International Corp, <http://curia.europa.eu/jcms/upload/docs/application/pdf/2012-04/cp120049es.pdf>.

Thus, the sale also involves the transfer of intellectual property rights. Let us review the comparative case of the regulations in force in the European Union. In Directive 2001/29 / EC, “On the harmonization of certain aspects of copyright and related rights in the information society” and, in Directive 91/250 / EEC, “On the legal protection of computer programs,” “Patent rights” are expressly regulated (art. 9 of the latter). These directives also provide for the “transfer of the right to use” software, as well as the “transfer of exploitation rights”. In this sense, it will also be necessary to look in the jurisprudence for the criteria of the “license agreements by virtue of which the client acquires a right to use the software for an indefinite time, not transferable and limited to internal professional use”.

In principle, the use of a computer medium does not imply, a priori, that the income obtained should be classified as a transfer of use.²² Hence, it will be essential to study each contract to distinguish when the use of the program is transferred and when the intellectual property rights over it are transferred. For this purpose, according to the Advocate General, “the principle of exhaustion applies when the copyright owner who has authorized the download from the Internet of a copy of a computer program on a data carrier also confers a right for consideration of use of said copy without time limit.”²³

The commercialization of the programs (software) in the domestic sphere does not pose too many problems from the fiscal standpoint, but it does from the perspective of defining the scope of application of the “transfer of rights” clauses, briefly referenced above. If the income obtained by the author is a consequence of the sale of the program, it will be considered performance of economic activity.²⁴

The same will happen when the benefits come from the transfer of its use.²⁵ If the exploitation is carried out by a person other than the author, the income will also be regarded as income from economic activities. Finally, if the person other than the author only assigns the rights to exploit the program, the income obtained will be considered income from movable capital.²⁶ Individual taxpayers with business activities that sell goods or provide services through the Internet, through technological platforms, computer

²² European Parliament and the Council of the European Union, *Directive 2009/24 / EC*, 111 OFFICIAL JOURNAL OF THE EUROPEAN UNION 16, (2009) (on the legal protection of computer programs); which codifies *Council Directive 91/250 / EEC*, 122 OFFICIAL JOURNAL OF THE EUROPEAN UNION 42, (1991) (on the legal protection of computer programs).

²³ *Supra* note 21.

²⁴ Considered as a business activity in the LISR, TIT. IV.

²⁵ In the previous Law (LISR TIT. IV) it would have been classified as income from professional activities.

²⁶ LISR, Title IV, art. 113-A. Individual taxpayers with business activities that sell goods or provide services through the Internet, through technological platforms, computer applications and the like that provide the services referred to in section II of article, are obliged to pay the tax established in this Section. 18-B of the Value Added Tax Law, for the income generated

applications and the like that provide services. The tax referred to in this section will be paid through a withholding made by legal entities residing in Mexico or residing abroad with or without permanent establishment in the country, as well as foreign legal entities or figures that provide, directly or indirectly, the use of technological platforms, computer applications and the like.²⁷

3. *Transfer Pricing and Electronic Contracting*

Transfer prices, from a historical-doctrinal point of view, are defined as the amounts charged by one part of an organization for products or services that it provides to another part of the organization. But the term is sometimes used in a pejorative sense, to refer to “the transfer of taxable income from a company belonging to a multinational company —located in a tax jurisdiction with high taxation— to another company belonging to the same group —located in a jurisdiction of reduced taxation— through the use of incorrect transfer prices, in order to reduce the group’s global tax debt.”²⁸

In order to try to lessen the losses that the use of transfer prices as a mechanism to reduce taxation may entail for the tax administrations, they usually apply the principle called arm’s length.²⁹ According to this principle, for tax purposes, the prices agreed for transactions between entities of the same group should be deducted from the prices that would have been applied by other independent entities under similar conditions, in an open market. Most countries have provisions that allow tax authorities to adjust transfer prices that deviate from this principle.

But determining the market price to use as a reference can sometimes be difficult, because analogous situations may not exist. And in our object of study there are growing problems. It is common in large multinational companies to create private Intranet networks, which allow information exchanges between their staff at very low costs. How can you determine the price that these exchanges would have if an independent entity intervened? Clearly, it is almost impossible.

The most obvious solution is through the so-called “advanced price agreements” or prior agreements on related-party transactions. Returning to our comparative normative context, in Mexico as in the European Union, this possibility is foreseen.

through the aforementioned means for carrying out the aforementioned activities, including those payments received for any additional concept through them.

²⁷ LISR, 2021.

²⁸ Hubert Hamaekers, *Precios de transferencia. Historia, Evolución y Perspectiva*, 3 REVISTA EUROAMERICANA DE ESTUDIOS TRIBUTARIOS (1999), at 13.

²⁹ Da Cunha, *supra* note 7, and the applicable Guidelines on Transfer Pricing to multinational companies and tax administrations of the OECD.

4. *Problems of Locating E-Commerce Activities in Income Taxes*

In electronic contracting, these conflicts are relevant when the parties involved have different tax residences. The greatest doubts arise in relation to the determination of the residence of the supplier or suppliers. The most used criterion is that of the “effective management site,” but with new technologies, defining which one it can be difficult.

For example, the place indicated on the website can be easily manipulated. But also, knowing who is behind a web page and where it is located is not an easy task, because the domain names owned by Internet providers do not necessarily correspond to a known physical location.³⁰ And if it is difficult to determine the residence of the seller, it will not be easier to locate the purchaser of the goods or services.

The impact that electronic contracting may have on the concept of permanent establishment deserves special attention. The Models of International Double Taxation Agreements on Income and Assets³¹ define it as “a fixed place of business in which a company carries out all or part of its activity.” Examples are cited such as headquarters, branches, offices, factories, workshops and mines, oil or gas wells, quarries, or any place of extraction of natural resources, as well as construction or assembly works whose duration exceeds twelve months.

From these models, which are the ones that serve as a reference in most of the agreements to avoid double taxation, it does not seem possible to deduce that the installation of computers or electronic equipment, without a physical presence that by itself can constitute a fixed place of businesses, is a permanent establishment, since they are excluded, as the 2010 OECD Model Convention states in its art. 5, paragraph 4:

4. Notwithstanding the previous provisions of this article, it is considered that the expression “permanent establishment” does not include: a) the use of facilities for the sole purpose of storing, displaying or delivering goods or merchandise belonging to the company; b) the maintenance of a warehouse of goods or merchandise belonging to the company with the sole purpose of storing, displaying or delivering them; c) the maintenance of a warehouse of goods or merchandise belonging to the company with the sole purpose of being transformed by another company; 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

³⁰ Philippe Vlaemminck & Pieter De Wael, *The European Union Regulatory Approach of Online Gambling and its Impact on the Global Gaming Industry*, 7 GAMING LAW REVIEW, (2003), at 177-184, <http://doi.org/10.1089/109218803766651467>.

³¹ See OECD COMMITTEE ON FISCAL AFFAIRS, MODEL TAX AGREEMENT ON INCOME AND ON ASSETS, (2010), <https://www.oecd.org/tax/treaties/47213736.pdf/>.

solely for the purpose of carrying out any other auxiliary or preparatory activity for the company; f) the maintenance of a fixed place of business for the sole purpose of carrying out any combination of the activities mentioned in sub-sections a) to e), provided that the whole of the activity of the fixed place of business resulting from such combination retain its auxiliary or preparatory character.

As we will see, the existence of a “loophole” remains, namely, the question of whether a server or a web page incorporated in a server located in the buyer’s country or in a third country can be considered a permanent establishment for tax purposes.

In the first case, it seems difficult to sustain the existence of a permanent establishment³² if we consider the concept adopted by the Mexican legislation. A server cannot be considered a facility or a workplace. Perhaps it could be if there were also company personnel working on the task of attracting clients that would connect through said access, but this is not going to be the most common case.

It should not be forgotten that, on the Internet, contracts are concluded between the company and the client electronically, so in principle there are no authorized agents to act on their behalf. Furthermore, the OECD Model Convention cited above, when defining the agent, uses the expression “person,” which makes it clear, if strictly interpreted, that computer equipment cannot be considered as such.

In the second case, the server is only enabling a company to establish a connection to the Internet, and it performs this service for the seller’s company without later controlling the transactions that it carries out through the server.

Ultimately, neither a web page nor a server can be considered a permanent establishment of a company in a state, and the source state will not be able to tax the income generated by them.

Regarding income derived from professional activities, Article 11 of the OECD Convention establishes that the income that a resident from a Contracting State obtains from the provision of professional services or other activities of an independent nature can only be taxed in that State, unless this resident has a regular fixed base in the other Contracting State for the practice of his activities. Sending works (documents, reports, etc.) does not seem to be included within the framework of the permanent establishment, so the State receiving the benefit cannot tax the income obtained by the professional.

³² LISR 2021, Article 2, first paragraph: “For the purposes of this Law, a permanent establishment is any place of business in which business activities are carried out, partially or totally, or independent personal services are provided. It will be understood as permanent establishment, among others, branches, agencies, offices, factories, workshops, facilities, mines, quarries or any place of exploration, extraction, or exploitation of natural resources.”

Another historical comparative reference to consider, in order to understand the evolution of Tax Law on electronic commerce, will be Directive 2002/38 / EC of May 7, 2002,³³ “amending and temporarily modifying Directive 77/388 / EEC regarding the value added tax regime applicable to broadcasting and television services and some services provided electronically,” which has the explicit objective of Recital 2:

(2) In order to ensure the proper functioning of the internal market, such distortions must be eliminated and new harmonized rules must be introduced for this type of activity. Measures must be taken to ensure, in particular, that those services, when they are carried out on a cost basis and consumed by customers established in the Community, are taxed in the Community and not if they are consumed outside the Community.

5. Value Added Tax Problems

The application of the Value Added Tax, as occurs in the income tax, does not pose special problems when those contracted are material goods that do not circulate on the network. When goods or services circulate on the network, it is essential, as in the previous section, to classify the operations as assignments of use or as sales.

In this tax,³⁴ assignments of use are considered provision of services, while sales are acquisitions of goods, whether they should be classified as internal operations, intra-community acquisitions, distance sales or imports. And regarding the concept of assignment of use, the considerations made when dealing with this same issue in relation to income tax are applicable.

In the Mexican legal system, the concept of provision of services is included in the LIVA³⁵ from a negative point of view: any transaction subject to tax that does not have the consideration of delivery of goods, intra-community acquisition or importation of goods is considered as such. And the deliveries of goods are defined as the transmission of the power of disposition over tangible goods, considering as such: heat, cold, electrical energy, and other forms of energy.³⁶

Therefore, depending on whether or not the object of electronic contracting is the transmission of the power to dispose of a tangible asset, it may be classified as the delivery of goods or the provision of services. And logically, in assignments of use³⁷ the power of disposition is not transmitted; hence we

³³ Directive 2002/38/EC, (2002), <http://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32002L0038&from=ES/>.

³⁴ LIVA, art. 1, chapter II y III.

³⁵ LIVA, art. 17 to 18-A.

³⁶ Da Cunha, *supra* note 7.

³⁷ See *supra* note 21.

affirm that the cessions of use must be considered services provision. But, in addition, the digitization of goods or services can raise doubts regarding the existence of an authentic delivery of goods.

6. *Problems with Other Indirect Taxes*

A. *Special Taxes on Production and Services*

In relation to these taxes, there are no problems in qualifying the operations because the products subject to these taxes cannot circulate on the network. Let us remember that these taxes are levied on the manufacture, import, and, where appropriate, introduction into the domestic territory of products such as alcohol and alcoholic beverages, energy and flavored beverages, hydrocarbons, tobacco, and electricity, as well as certain means of transport. The use of the telematic means to contract this type of products does not show any differences compared with the use of any other contracting medium.

B. *Tax on Patrimonial Transmissions*

As was the case with VAT, the digitization of the products subject to tax may cause problems of qualifying the operation as a true acquisition of goods. And if there is no transfer of the asset, the taxable event of the tax is not carried out.

But even if goods or rights not circulating online are transmitted telematically, there may be problems that do not arise in traditional commerce. Perhaps the most important one is to determine when the encumbered act or contract is understood to have been carried out: At the moment in which the acceptance comes to the knowledge of the offeror or at the moment in which the acceptor issues the declaration?

C. *Customs Taxes*

Once again, if the goods subject to these taxes do not circulate on the network, the electronic nature of the contract is irrelevant. But when it comes to online supplies, difficulties arise, especially since these goods will not physically pass through customs. The solution that has been advocated involves the exemption of Customs Tax on digitized goods.

In this regard, it should be noted that the World Trade Organization favors the practice of not applying customs duties to electronic commerce operations. This can be deduced from the Declaration on Global Electronic Commerce, of May 20, 1998, issued in Geneva at the WTO Ministerial Confer-

ence. Likewise, the US Government proposed the complete elimination of customs duties on goods and services delivered over the Internet. Both community institutions and member countries share this idea.

V. ELECTRONIC PAYMENT MEANS AND TAX ADMINISTRATIONS

Electronic means of payment can cause significant problems for tax administrations because they facilitate the use of banks established in tax havens. A few years ago, evading money to these places was, in addition to being complicated, expensive. Today, they can be accessed with a simple electronic transaction. In relation to the tax aspects of the virtual banking system that uses tax havens to capture deposits through the Internet, the regulations for operations carried out with or by persons residing in tax havens apply.³⁸

Focusing on the question that interests us, there is no inconvenience to tax computer documents. If all the necessary circumstances exist to prove the authenticity of the electronic files or the content of the disks of the computers or processors, and the veracity of the documentation and the authorship of the signature are guaranteed, with the necessary expert evidence, electronically used, the commercial document in computer support, with a remittance function, must enjoy, as established in article 17-D third paragraph of the Federal Fiscal Code.³⁹

The electronic signature is one that a signer places in digital form on some data, adding it or logically associating it to them, and uses it to indicate his approval of the content of that data. In general, it meets the following requirements:

- Linked only to the signer.
- Able to identify the signer.
- Created using a technical means that is under the control of the signer.
- Linked to the data to which it refers.

A particular class of electronic signature that offers greater security to users is the asymmetric public key digital signature. This type of signature consists of a cryptosystem based on the use of a pair of associated keys: a private key that is held by its owner and a public key that is freely distributed so that it can be known by anyone. Basically, the procedure for the asymmetric key digital signature is as follows:

³⁸ In regulations of Spain, LSISEC, article 17.2, is of special importance: "The Tax Administration may value the operations carried out with or by entities resident in countries or territories classified by regulation as tax havens at their normal market value, when the agreed valuation would have determined a taxation in Spain lower than that which may have corresponded by application of the normal market value or a deferral of said taxation."

³⁹ CFE, art. 17-D.

- The sender of a message encrypts it digitally using his private key.
- The recipient of the message can decrypt it using the sender's public key.

As the application of asymmetric cryptography on the entire message is very expensive, in long messages a summary algorithm is usually applied that transforms a sequence of bits into a smaller one, called a hash function in italics. By applying this function, a summary of the message called fingerprint is obtained, whose main characteristics are its irreversibility (the complete message cannot be obtained from the hash) and the impossibility of getting a second message that produces the same summary, so that any change in the message would produce a different hash.

Once the hash function has been applied to the main message, the resulting summary is encrypted with the signer's private key, and is sent together with the original message, in such a way that the receiver, to verify that the message has been signed by the sender, must perform two operations: decrypt the hash applying the sender's public key, and apply the hash function on the complete message obtained. If the hash received and decrypted and the hash obtained match, you will have verified that the message has been sent by the person who said it was sent, and that its content has not been altered.

These asymmetric cryptography systems allow confidential messages to be sent, providing authenticity, integrity, and non-repudiation by the recipient and, according to the current state of the art, they achieve the level of security necessary to assimilate them to the signature written on paper.

Although so far most of the regulations issued on the matter are based on this type of signature, I consider that the best legislative criterion will be the one that takes an open position that allows the development of new techniques and does not limit itself to enthrone this system at the expense of better future techniques.

In the specific case of the Mexican legal system, the Decree on Electronic Signature, of August 29, 2003 regulates this field.

VI. THE TAX ON DOCUMENTED LEGAL ACTS AND THE ELECTRONIC DOCUMENT

In Mexico this tax is levied on the formalization of certain notarial, commercial, and administrative documents. As regards commercial documents, which are the ones that interest us, these are subject to:

- Bill of Exchange.
- Documents that perform a draft function or substitute for the bill of exchange. It is understood as such when the document certifies remittan-

ce of funds or equivalent sign from one place to another, it implies a payment order, or it includes the clause “to the order of”.

- The receipts or certificates of transferable deposits.
- Promissory notes, bonds, obligations, and other securities issued in series, for a term not exceeding eighteen months, in which the consideration is set at the difference between the issuance and reimbursement amounts.

The taxpayer is, in the case of the bill of exchange, the drawer, except if it has been issued abroad, in which case the first holder in Mexico will be obliged to pay. In the rest of the aforesaid documents, the taxpayers are the persons or entities that issue them.

Focusing on the issue that interests us according to the provisions of article 17-D third paragraph of the Federal Tax Code, the legal validity of electronic documents for tax purposes is recognized: “For the purposes of the aforementioned, a document will be understood as any written support, including computerized ones, by which something is proven, accredited or recorded.”⁴⁰ Therefore, there is no downside to taxing computer documents as well.

VII. CONCLUSION

Considering everything we have seen in the previous sections; for the taxation of e-commerce constitutes a great challenge. For example, the methods used so far are ineffective in the fight against fraud related to this matter, a perspective that is beyond the scope of this article but deserves this brief mention.

From the parallel study of Mexican tax law and EU regulations, which we have been conducting every five years, tax law is evolving to meet the challenges of new technologies. Electronic commerce, as it has developed in its beginnings, is almost at the margin of tax law, especially regarding intangible goods that can circulate without the possibility of apprehension by the public authorities. The potential losses for governments are enormous.

The two fundamental characteristics of e-commerce, namely the virtuality of sites and the immateriality of transactions passing through them, are shaking up the rules on which the taxation of traditional commerce is based.

The novelty is such that the question arises as to whether this new activity should be subject to taxation. Realistically, one can answer that taxation has never let a lucrative activity escape, but the arguments put forward in this debate are nonetheless interesting in terms of the directions that could be taken in the future and the way in which, over time, e-commerce activities could be regulated for tax purposes.

⁴⁰ CFE, art. 17-D, third.

The subject of e-commerce is still young, and one wonders whether normal taxation might not hinder its development when great wealth is expected from it. A first approach was to look for a specific taxation principle for this new activity. However, we were rather inclined towards tax neutrality, as it is the most operational approach.

Be that as it may, the absence of an official global position, both in terms of corporate income tax and excise taxes, allows Mexican companies to plan their transactions and revise their business strategy to be optimal now and for the future. If they comply with the principles and rules of the two regions with which they have the most important trade agreements with Mexico: Canada, the United States and, of course, the European Union.