INTRODUCTION

On a beautiful autumn day, I was working in my office at the Ankara Law School. I was searching the Internet for new books that the law school was going to order for its library. After visiting several publishers’ websites, on the Digi-book Inc.’s website I saw a new treatise about the U.S. federal tax laws.

Digi-book Inc. is a company located in the U.S.A., which sells digitalized versions of books over the Internet. Digi-book has servers in several continents to provide faster (and sometimes customized) service to its customers. Those servers host copies of the company’s website from which the customers all around the world can access general information about the Digi-book, including its phone and fax numbers, and e-mail addresses. In addition to the general information, a database (catalogue) of the digitalized books is stored on those servers. Customers visiting Digi-book’s website can browse this database before ordering and paying for the books. After the purchase, customers can directly download the digitalized books to their computers.

After reading a review about this new treatise, written by a leading authority in tax law, I decided to buy it without thinking more than a second. Who would use the ‘old’ ordering methods, and wait weeks for delivery instead of downloading it in a few minutes. I clicked few links, gave my credit card number, and here it is: I had a new book quickly; not on my bookcase maybe, but somewhere in my computer.

* Ankara Üniversitesi Hukuk Fakültesi Vergi Hukuku Anabilim Dalı Araştırma Görevlisi.
That day, like every other day, Digi-book earned income all around the world from many customers like me...

It is well known that the Internet has enabled entrepreneurs to conduct commerce electronically, which exceeds the borders of the countries. This development raises several tax issues concerning matters such as: (1) whether an enterprise (Digi-book) in a jurisdiction (the U.S.A.) engaged in electronic commerce in another jurisdiction (Turkey) has a sufficient presence in that other jurisdiction to justify its exercising taxing authority; (2) whether income generated by electronic commerce transactions is categorized as sales income, royalties, rental income, income from services, etc.; (3) whether once categorized, the income arises in a particular jurisdiction; and (4) how income and deductions should be allocated among various parts of a multi-jurisdictional enterprise engaged in electronic commerce.¹

Tax authorities of countries worry about the rapid development of electronic commerce. Existing international tax rules, which were evolved in agricultural and industrial stages of the world, might be inadequate for the electronic age: and the countries could lose tax revenues. On the contrary, entrepreneurs worry that potential tax rules, which might be conflicting and excessively burdensome, could hinder the growth of electronic commerce. Obviously, the question of how the jurisdictional problems raised by electronic commerce should be solved is too complex to study in an article. This article does not aim to serve as an outline for the tax policy questions raised by the development of electronic commerce. Its purpose is to examine the technical applicability of a specific concept of international taxation to electronic commerce. Particularly, in this study the applicability of the permanent establishment concept to electronic commerce will be analyzed. Additionally, within a limited scope, some other subordinate issues will be addressed too.

This article is organized as follows: Part II briefly reviews the electronic commerce concept and its technical background. Part III briefly reviews the current international tax regime that governs the jurisdictional conflicts raised by cross-border business activities. Part IV defines and analyses the permanent establishment concept as a vehicle of the current

¹ Although the Internet and electronic commerce raises several tax problems concerning different categories of taxes, this study is limited to analysis and discussion of taxation of international flows of income.

international tax regime, and examines the applicability of the permanent establishment concept definition in electronic commerce. Finally, Part V reviews the findings of the study.

OVERVIEW OF ELECTRONIC COMMERCE

The importance of the electronic commerce comes from its rapidly expanding volume. For example, according to the Economist, business-to-business electronic commerce accounted for $150 billion in 1999 and expected to reach over $3 trillion by 2004.\(^3\) Organisation of Economic Cooperation and Development (OECD) estimates that it may reach a value of $330 billion by 2001-2002 and $1 trillion by 2003-2005.\(^4\) These figures attract the attention of tax authorities of the countries on the taxation issues with in relation to electronic commerce. However, do the tax authorities have at least a rudimentary understanding of electronic commerce, its technical background, and its distinctive features than the traditional business methods? We should start from here.

The term ‘electronic commerce’ simply means conducting business online. In 1996, the Office of Tax Policy of the U.S. Treasury Department issued a report on the policy implications of global electronic commerce\(^5\) that defined the term as "the ability to perform transactions involving the exchange of goods or services between two or more parties using electronic tools and techniques."\(^6\) Treasury Report definition has a broad scope which seems to include traditional forms of electronic commerce such as telemarketing, mail order sales, and television sales.\(^7\)

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\(^3\) The Economist, A Survey of E-commerce, (26 February 2000).

\(^4\) Susanne Teltscher, Tariffs, Taxes an Electronic Commerce: Revenue Implications for Developing Countries, 1 (2000).


\(^6\) Treasury Report, supra note 5, at 8, para. 3.2.1. Another definition of the concept is "a modern business methodology that addresses the desire of firms, consumers, and management to cut costs while improving the quality of goods and increasing the speed of services", Ravi Kalakota & Andrew B. Whinston, Frontiers of Electronic Commerce 215 (1996).

\(^7\) Similarly, The United Nations Commission on International Trade Law (UNCITRAL) defines electronic commerce as "commercial activities conducted through an exchange of information generated, stored, or communicated by electronic, optical, or analogous means...", Richard Hill & Ian Walden, The Draft UNCITRAL Model Law for Electronic Commerce: Issues and Solutions, 3 Computer Law 18, (1996). A commentator states that "(i) there are currently six different mediums of electronic commerce (e-commerce): telephone, fax, television, electronic payment and money transfer systems (e.g., EFT), Electronic Data Interchange (EDI) and Internet." Arvind Panagariya, E-commerce, WTO and Developing Countries, 1 (2000).
A more narrow definition might be: "the use of computer networks to facilitate transactions conducted involving the production, distribution, and sale and delivery of goods and services in the marketplace." Hereafter, the term ‘electronic commerce’ is used in this narrow meaning.

**Technical Highlights**

The Internet (interconnected networks) consists of thousands of interconnected logical networks linking millions of computers around the world. Though often thought of in a physical sense, this term actually refers logical connections between the computers, not physical connections (e.g. phone lines, cables, and radio transmissions). The Internet provides several ways of exchanging information between the connected computers. The World Wide Web is the most frequently used tool for this purpose. The term ‘World Wide Web’ (WWW or Web) is usually used interchangeably with the term ‘Internet’. However, the Web is only a navigation tool for accessing information in a multimedia format featuring text, color, graphics, audio, and video. Users can access the Web through Web browser software, and can travel from site to site easily by using a pointing device (e.g., a mouse) to click on a word or picture on one site that takes the user to another site.

To be able to conduct business over the Internet, an enterprise needs access to at least one server. It may prefer to have its own server(s) or may

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8 Abrams & Doernberg, supra note 2, at 1573.
9 For a more comprehensive introduction to cyberspace, see Joshua Eddings, How The Internet Works (1994); Kalakota & Whinston, supra note 6; Abrams & Doernberg, supra note 2.
11 Unlike the Internet, intranets are networks that connect computers in more limited environments. For example, close circuit networks that connect computers within an enterprise, or between enterprises doing business with each other, are called intranets. Intranets may also be connected to the Internet. However, access to intranets over the Internet is usually subject to restrictions (e.g. username, password requirements).
12 Abrams & Doernberg, supra note 2, at 1574.
13 There are also some other tools, which are less known by most of the Internet users. For example, LYNX is a tool to access only text based information over the Internet; FTP is a tool used for direct file transfer from one server to a user’s computer.
14 Netscape Navigator, Microsoft Internet Explorer, Opera, and Neoplanet are some examples of frequently used web browsing software.
15 Abrams & Doernberg, supra note 2, at 1574.
prefer to lease disk space on servers of an Internet service provider (ISP). A server is computer equipment connected to the Internet that has large data storage and data processing abilities. A server can be located anywhere in the world because the location does not affect its functioning. All the data (including digitalized products) of an enterprise necessary for its business must be stored on servers. Enterprises, especially the ones that sell and deliver digitalized products over the Internet, usually prefer to have several servers at different locations to provide faster access to their customers. Usually mirror copies of same information are stored on those servers, but it is possible to store different information on different servers (e.g. product descriptions and customer information on one server and digitalized products on another server). Customers can be directed from one server to another in microseconds.

When a customer living at some place in the world starts up a web browser and enters the enterprise’s website address into the browser’s address bar, the browser communicates with one of the enterprise’s servers over the Internet using a special protocol called HTTP (Hyper-text Transfer Protocol), and makes a request to view its web pages. A requested web page (a document usually in text and graphic format) is temporarily stored in the random access memory (RAM) of the customer’s computer. It is not stored in any permanent fashion on the hard drive of customer’s computer, and is usually deleted from the computer’s memory when the customer moves to another web page.

A web browser’s only function is to send the user’s requests to a server over the Internet, and to display the responses send by the server on the user’s computer screen. A software agent operating on the server receives the request signals sent by the user waiting on the other end of the Internet, analyses, and then sends a respond to those signals.

Distinguishing Features

Comparing and contrasting a purchase of goods over the Internet to a purchase through a mail order catalogue can be a good point to start an explanation of distinctive features of electronic commerce. Usually when one orders something over a mail order catalogue, she talks with an operator, who probably uses a computer to check on the availability of the items ordered. In case of online shopping, operator is eliminated; the customer

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16 The Internet service provider (ISP) is the term used to define companies whose business is to provide the Internet access to their customers in return for a subscription fee.

17 “A company’s or individual’s collected Web documents are usually referred to as a ‘website’.” Treasury Report, supra note 5, at 7 para. 3.1.2.
connects to the seller’s website, searches out the databases (catalogues) on seller’s server(s) for the goods that she is interested in. Online shopping is not very different from purchases through a mail order catalogue using a phone. In both cases, telecommunication lines, and mechanic and electronic equipment are used. The main difference between those two types of commerce is that mail order transactions are concluded between two humans, while electronic commerce transactions are usually concluded between a human and an “intelligent” software agent that offers sufficient guidance to conclude the transaction.\(^{18}\)

The goods mentioned in the comparison can have either tangible or physical presence or can be purely intangible or digital that never manifest themselves outside of a computer. While mail order sales can cover only tangible products, sales through the Internet cover both tangible and intangible goods.

Electronic commerce over the Internet currently includes a wide variety of tangible and intangible offerings. Books, computers, and flowers are examples of popular tangible merchandise offered over the Internet. After the sales stage, concluded electronically, those products are delivered by ordinary methods like postal services or couriers. This type of commerce can be called ‘indirect electronic commerce’.\(^{19}\)

Computer software, digitalized music and digitalized art are examples of intangible products (digitalized products) offered over the Internet. Services like consultancy services, travel services, and banking are also available on the Internet.\(^{20}\) "The distinguishing feature of this type of commerce is that all communication-advertising, selecting, purchasing (including payment), and especially delivery of the product occurs (or can occur) on-line, perhaps in real time."\(^{21}\) This type of commerce can be called

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\(^{18}\) In detail, it is possible to find out many differences between mail order sales and electronic commerce. See Reuven S. Avi-Yonah, International Taxation of Electronic Commerce, 52 Tax L. Rev. 507, 507-517 (1997).


\(^{20}\) Some examples of the services offered over the Internet are electronic publishing, website design and management, customer call centers, medical record management, hotel and rental car reservations, credit card authorizations, remote secretarial services, technical online support, research and technical writing, and indexing and abstracting services. For definitions of several types of transactions that might be concluded over the Internet, see Treaty Characterisation Issues Arising from E-Commerce, <http://www.oecd.org/daf/fa/e_com/ec_2_TREATY_CHAR_Eng.pdf> (last visited on 7/10/2001).

'direct electronic commerce'\textsuperscript{22} since the intangible goods and services are delivered directly over the Internet.

Although the most familiar examples of electronic commerce are transactions between businesses and customers, the largest amounts of profits are actually made in business-to-business commerce, where corporations buy and sell among themselves.\textsuperscript{23}

**FRAMEWORK OF INTERNATIONAL TAXATION**

In this part of the article, we will outline the existing international system that deals with the jurisdictional conflicts of taxation. In the following part, we will focus on the impact of cross-border (multi jurisdictional) electronic commerce on this system.

**Jurisdictional Approaches**

Business income is usually taxable somewhere. Under traditional principles of taxation, when a business is conducted within a country, normally that country has jurisdiction to tax the business’ income. For income from international transactions, the ability to tax requires some extra steps of analysis. Countries generally follow two approaches: ‘source-based taxation’ (also referred as ‘territorial taxation principle’)\textsuperscript{24} and ‘residence-based taxation’.\textsuperscript{25}

**Source-based taxation**

Income derived by a person may be taxed by a country because of a connection between the country and the income derived by that person (source jurisdiction). Examples of such connection are a business carried on in that country, real property located in that country, or employees working

\textsuperscript{22} Cockfield, supra note 19, at 151.

\textsuperscript{23} Clayton W. Chan, Taxation Of Global E-Commerce On The Internet: The Underlying Issues And Proposed Plans, 9 Minn. J. Global Trade 233, 238 (2000). See also, John Peet, Survey Of E-Commerce: Shopping around the web, The Economist (February 26, 2000) (stating that according to Forrester Research, an Internet consulting firm, business-to-business transactions account for as much as 80% of all e-commerce). Christopher Anderson, Survey of Electronic Commerce: In search of the perfect market: The Internet, The Economist (May 10, 1997).


\textsuperscript{25} Other criteria such as citizenship, domicile, center of economic interest, may also be used as a basis for tax liability.
in that country. The 'source' concept in taxation refers to the (normally geographical) origin, rather than the fund from which the income is derived. Source-based taxation entitles the source country to tax any income that arises within its boundaries, regardless of whether the recipient is a resident of that country or has a permanent establishment there. The basic policy idea behind source-based taxation is that income should be sourced, and therefore taxed in the country with which it has substantial economic connection. Income may have substantial connections with more than one country, in which case it may be appropriate to determine the source by apportioning the income between countries.

**Residence-based taxation**

Countries may also tax income (wherever derived) because the person earning the income is a resident of that country (residence jurisdiction). A country's justification for residence-based taxation may be seen to rest on the need to finance its public goods and social infrastructure and the nexus between consumption of such public goods and social infrastructure by persons who are residents having an over-all capacity to pay.

Residence-based taxation entitles the country of residence to assert tax on the worldwide income of its residents without regard to the source of income. Residence establishes a relationship between a country and a taxpayer and this relationship provides the jurisdiction to impose tax to that taxpayer. A person is a resident of a country if the person has close economic and personal ties to the country. It is possible for a person to be a resident of more than one country and therefore to be subject to taxes in several countries under residence-based taxation approach.

The residency concept applies to both legal entities and natural persons for taxation purposes. In case individuals, domestic laws usually adopt one or more of three tests. First, there is a facts and circumstances test where all the facts are weighed to determine residence. The problem with this test is its uncertainty, which may be balanced by combining with one of the other tests. Second, domestic tax laws can follow rules for residence that are used for other purposes in the civil law of the country concerned (such as

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28 Id. at 3.
29 Vann, supra note 26 at 729.
entitlement to work or remain in the country indefinitely under immigration laws, domicile, or citizenship). The problem with this test is that the determination of residency under civil law rules may not be appropriate for tax purposes, but the advantage of this method is certain than the facts and circumstances approach.\(^{30}\) Third, a number of days that a person spends in the country during either a taxable year or a moving 12-month period may be determinative for residence. The usual period is half a year (183 days or more).\(^{31}\) Most countries use some variation of this test balanced by the other approaches.\(^{32}\)

The determination of residency for corporations and other legal entities is also a problematic issue. Hence, a number of tests are used: Under a place of incorporation test, a legal entity is resident in a country under whose laws it came to existence. Under place of management (central management and control) test, which is a facts and circumstances test, the head office (where the board of directors meets) is the place of residence of that legal entity.

**Problems**

If all of the countries have followed one approach, for example source-based taxation approach, most of the problems that the taxpayers and the tax authorities encounter today would not exist. However, countries tax on the basis of both source and residence.

**Double taxation**

‘Double taxation’ has been defined as “the imposition of comparable taxes in two (or more) states on the same taxpayer in respect of the same subject matter and for identical periods.”\(^{33}\) Double taxation can arise from dual residence conflicts between countries using different tests of residence under their domestic laws. Two countries may each consider the same person to be resident for tax purposes. Dual residence creates double taxation.

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\(^{30}\) Id. at 729-30.

\(^{31}\) E.g., I.R.C. § 7701(b)(3)(A).

\(^{32}\) Vann, supra note 26, at 730.

\(^{33}\) Organization of Economic Cooperation and Development (OECD) Model Convention for Avoidance of Double Taxation with Respect to Taxes on Income and Capital, 1-1 (updated as 29 April 2000) [hereinafter OECD Model Treaty]. For a very similar definition see UN Model Double Taxation Convention Between Developed and Developing Countries, 1 (1980) [hereinafter UN Model Treaty].
taxation if each country taxes the worldwide income of its residents. This is also called residence–residence double taxation.\(^{34}\)

Similarly, but less likely, double taxation may arise from overlapping source claims. This is called as source-source double taxation, and it can arise when a same item of income qualifies as domestic source income in more than one country.\(^{35}\)

Most countries tax income on both source and residence bases.\(^{36}\) A resident is usually taxed on worldwide income, whilst non-residents are only taxed on domestic source income.\(^{37}\) In cases where a resident of a country derives income from sources in another country, double taxation may arise because of residence-source jurisdictional conflicts.

**Tax avoidance and evasion**

While international business operations face the risk of being subject to double (or even multiple) taxation, such activities may also present opportunities for tax avoidance or evasion. In broad terms, they involve a reduction or elimination of tax liability through either legal ways (avoidance) or through illegal ways (evasion).

Until recent years, much attention in this area has focused on the transfer pricing issues and the use of tax havens.\(^{38}\) Today electronic commerce stands as a third issue of international tax avoidance and evasion.\(^{39}\) The concepts of tax avoidance and tax evasion are complicated, and can be a subject of a new study; therefore not analyzed in the rest of this article. Nevertheless, following characteristics of electronic commerce

\(^{34}\) Since it is difficult for a country to solve this problem on its own, tax treaties provide a tiebreaker mechanism to allocate the residence of the individual to one country for the purposes of the treaty. In case of legal entities, it is more difficult to provide a tiebreaker rule by treaties because there is no real international consensus on this topic as a main because of U.S.A.'s position. Nevertheless, OECD Model Treaty uses effective management test as a tiebreaker rule. OECD Model Treaty, art.4(2), (3); Vana, supra note 26, at 733; Place of Effective Management Report, supra note 27.


\(^{36}\) Treasury Report, supra note 5, at 22, para. 7.1.5.

\(^{37}\) Place of Effective Management Report, supra note 27, at 3.

\(^{38}\) "A tax heaven is generally understood to be a country with a nil or low rate on all or particular categories of income and which usually offers a degree of banking or commercial secrecy." David R. Davies. Principles of International Double Taxation Relief, 9 (1985).

\(^{39}\) "According to the OECD, the Internet may become a prime conduit for business tax avoidance." Chan, supra note 23, at 250-51.
should be mentioned to highlight the tax avoidance and evasion possibilities by the use of the Internet:

Electronic commerce has a more anonymous character than the traditional ways of commerce because it is carried out without papers and pens, offices and warehouses, and even without employees. In such an environment, tax authorities may not easily keep track of the identity or location of the parties to a transaction concluded over the Internet.

With the present technology, digitalized products cannot be stopped and checked at the customs, while they are transferred from one country to another over the networks. In other words, “it is more difficult to apply customs laws of countries to direct electronic commerce. Since digitalized products can easily be reproduced, and are not stored in warehouses, it is more difficult to check the reality of production, inventory and sale records.”

Moreover, enterprises carrying on business in multi-jurisdictions have the ability move their businesses from one country to another in a matter of hours. They can locate their business in a country beyond the reach of other countries tax authorities (for example, in a country which is not a party to tax treaties) because the Internet servers can be located anywhere in the world, and the location does not effect their functioning. The Internet enables enterprises to conclude transactions with any person in the world, at that person’s premises, without having any presence there. It may be impossible for tax authorities to audit the enterprises, and levy taxes on the income derived from electronic commerce. In other words, the Internet provides a perfect environment for the entrepreneurs who do not want to pay taxes on their business income.

Solutions

Domestic law solutions

There are three basic methods with variations, which are adopted by domestic laws to provide unilateral relief to their residents with respect of foreign taxes on foreign source income. Under the first method, the 'territorial/exemption system', a country imposes taxes only on the income of its residents derived from sources within the country, therefore residence-
source double taxation is avoided. Pure application of exemption system invites tax avoidance through the moving of income to low tax jurisdictions. Hence, countries do not follow this method in a pure sense. Most countries applying exemption system prefer to exclude all or some of foreign-source income from the taxable (net amount of) income, while including it to determine the applicable progressive tax rate. Additionally most countries provide exemption for business income from foreign sources, while imposing taxes on other types of income (passive income), with credit being allowed for foreign taxes (hybrid approach).

The second method is the ‘foreign tax credit system’. Under this method, while taxpayer is taxed on his worldwide income, a credit is given for foreign taxes paid on foreign source income. The main difference between foreign source credit and exemption systems is when the source country’s tax rate is lower than the residence country’s tax rate credit system allows the residence country to impose tax equal to the difference. As a part of foreign tax credit system, countries also provide indirect credit for the foreign taxes paid by the foreign subsidiaries of their residents at the time of receiving dividends from the subsidiaries.

A third method allows a deduction for foreign income taxes in the calculation of gross income. This method is usually used as a reserve for situations where foreign tax credit may not be of use to the taxpayer.

**International solutions**

Since the end of First World War, the world’s nations have been agreed on how income tax claims from international transactions should be divided. This consensus is based on certain principles of international taxation that were developed over 75 years ago and are enriched today in

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42 This method is used in some Latin America countries, and Hong Kong. Vann, supra note 26, at 756 n. 77.
43 This approach is similar to (or maybe a result of) the system established by bilateral tax treaties.
44 E.g., I.R.C. § 901-908.
45 E.g., I.R.C. 164(a).
over 1,000 substantially similar bilateral income tax treaties. The OECD Model Treaty, the United States Model Treaty and the United Nations Model Treaty are the most influential model tax treaties.

The provisions of these tax treaties reflect the compromises of contracting countries to resolve issues such as the elimination of discriminatory tax treatment, the prevention of tax evasion through the promotion of information exchanges between administrative authorities, fair allocation of tax revenues and elimination of international double taxation. These purposes are typically expressed in the preambles of the bilateral tax treaties as "the avoidance of double taxation and the prevention of fiscal evasion."

One may state that capital exporting countries - mainly developed countries - generally prefer residence-based taxation; others - capital importing countries that are mainly undeveloped or developing countries - generally prefer international tax rules that strengthen their ability to tax business activities within their borders. Tax treaties arguably provide a balance between these two views by allocating taxing jurisdiction between source and residence countries.

An active/passive income taxation distinction is made in the treaties

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49 United States Model Income Tax Convention [hereinafter U.S. Model Treaty]. The United States employs its own model treaty but it is similar in most respects to the OECD Model Treaty.
50 The model conventions of the OECD and the United States are oriented toward negotiations between two countries with roughly equal flows of capital and income. However, income and capital flows between developed and lesser developed countries are generally unequal, if not unidirectional. In recognition of this, United Nations also developed a model treaty (1980), which is based on 1977 OECD Model Treaty, but designed to take into account special interests of capital-importing countries and developing countries. Willem Wijnen & Marco Magenta, The UN Model in Practice, 51 Bull. Int'l Fiscal Doc. 574 (1997).
51 The OECD and UN Model Treaties leave the contents of the preamble to be dealt with in accordance with the constitutional procedure of negotiating states. The U.S. Model Treaty uses this common formulation, Vann, supra note 26, at 725 n. 13.
52 Cockfield, supra note 19, at 136 n. 4.
53 Model Treaties, arts. 7, 10, 11 (providing that interest and dividends may be taxed by the residence country while business profits are taxed in the source country).
54 "... Source rules have traditionally used differing concepts for active and passive income. In broad terms, active income is usually sourced by a place-of-taxpayer-activity test, while
by defining what constitutes an active business operation in a given country (a ‘permanent establishment’) and giving the source country the primary right to tax the profits from that operation.\(^{55}\) The residence country is required to provide relief to its taxpayers for taxes paid in the source country on the income derived by the active business operations, either by exemption method or foreign tax credit method.\(^{56}\) If no permanent establishment exists within the source country, business profits derived from that country are subject to tax solely in the residence country.\(^{57}\)

Tax treaties based on OECD or U.S. Models strictly limit\(^{58}\) the taxes imposed by the source country on passive income (such as income from dividends, interest, and royalties), leaving the primary right to tax that income to the residence country.\(^{59}\) Treaties based on UN Model partially depart from this approach. UN Model Treaty’s limitation on a source country’s taxation right on passive income is more relaxed.\(^{60}\) Nevertheless, the language of the UN Model Treaty also seems to leave primary the right to tax that income to the residence country as the OECD and the U.S. Model do.\(^{61}\)

THE IMPACT OF ELECTRONIC COMMERCE ON THE JURISDICTIONAL ISSUES OF INTERNATIONAL TAXATION AND THE PERMANENT ESTABLISHMENT CONCEPT

As stated above, and examined in detail below, countries resolved their jurisdictional conflicts by creating a concept called ‘permanent establishment’. If a non-resident enterprise carries on business in a country by establishing a permanent establishment there, that country is given the right to impose taxes on the income derived through that permanent establishment.


\(^{56}\) Model Treaties, art. 23.

\(^{57}\) Model Treaties, art. 7(2).

\(^{58}\) For example, the 1992 OECD Model Treaty recommends tax rates of 5% to 15% on dividends, 10% on interest, and 0% on royalties; the 1981 United States Model Treaty recommends tax rates of 5% to 15% on dividends, and 0% on interest and royalties. See OECD Model Treaty, arts. 10-12; U.S. Model Treaty, arts. 10-12.

\(^{59}\) OECD and U.S. Model Treaties, arts. 10-12; see also Avi-Yonah, supra note 55, at. 1307.

\(^{60}\) For example, UN Model Treaty does not recommend tax rates for source country taxation on dividends, interest, and royalties.

\(^{61}\) UN Model Treaty, arts. 10-12.
With respect to electronic commerce, appropriateness of this concept is a major question. Is it appropriate to continue using permanent establishment concept to provide a balance for the conflicting jurisdiction claims of residence and source countries on the electronic commerce profits of the enterprises? If the first question is answered in a positive manner, a second question is how will the determination of permanent establishment be in a source country in relation to electronic commerce. In this part, we will focus on this second question.

With regard to international taxation of electronic commerce, the OECD takes an important role as the leading international organization in the area of taxation, with long standing expertise in developing rules and policies for international taxation. OECD organized two tax conferences to shape a framework for taxation of electronic commerce: “The Challenges to Tax Authorities and Taxpayers,” in Turku, Finland (1997) and “A Borderless World: Realizing the Potential of Global Electronic Commerce”, in Ottawa, Canada (1998). At the Ottawa Conference, member countries of the OECD agreed that existing international tax regime, which guide governments in relation to conventional commerce, should also guide them in relation to electronic commerce, based on the belief that at this state of development in the technological and commercial environment, existing taxation rules can implement their functions. With this respect, importance of the following fundamental principles of taxation is underlined: 1) neutrality, 2) efficiency, 3) certainty and simplicity, 4) effectiveness and fairness, and 5) flexibility.

Later on, the OECD stated that it would clarify the Commentary to its Model Tax Convention to take into account certain issues related to electronic commerce, such as how the current definition of permanent establishment should be interpreted in the context of electronic commerce.

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52 Ministers of Member countries also agreed that any new forms of taxation, such as bit tax, would be discriminatory to electronic commerce and should not be adopted. Electronic Commerce: Taxation Framework Conditions, <http://www.oecd.org/daf/ta/e_com/framewke.pdf> (last visited on 7/10/2001) [hereinafter Taxation Framework].

53 Id.

54 Under the ‘neutrality’ principle, goods and services should be taxed the same regardless of the mechanism through which they are sold; in other words, electronic commerce should be treated same as the traditional forms of commerce for the tax purposes.

55 Under the ‘efficiency’ principle, compliance costs for taxpayers, governments, and other parties of a taxable event should be kept as low as possible.

56 Under the ‘certainty’ and ‘simplicity’ principles, taxpayers should know, and be able to easily interpret tax compliance obligations.

57 Under the ‘effectiveness’ and ‘fairness’ principles, taxes should be levied at the appropriate point of sale, and the potential for evasion and avoidance should be minimized.

58 Under the ‘flexibility’ principle, tax systems should be able to keep pace with technical and commercial development.
establishment applies where electronic commerce transactions are conducted through a website on a server located in a given country.\textsuperscript{69}

It is important to mention that OECD is an organization of mostly developed countries.\textsuperscript{70} Keeping in mind that developed countries generally prefer residence-based taxation, at the first sight one can argue that the logic behind the OECD members' decision (preference) is based on their anticipation that under the existing principles of international taxation, when a resident of those countries carries on business in other countries over the Internet, it might be very difficult, if not impossible, to determine permanent establishments which allocate the right to tax to the source country; so that they could impose taxes on the world wide income of that resident without providing double taxation relief.

However, on the contrary, the OECD members have extended their efforts to establish rules for taxation of electronic commerce to participation of the global community as widely as possible. The OECD's work in electronic commerce is carried out in a cooperative and complementary fashion with work of other international and regional organizations,\textsuperscript{71} non-OECD-member countries,\textsuperscript{72} labor and consumer organizations, social interests, and the private sector.\textsuperscript{73}

**Permanent Establishment Concept**

As noted above, international consensus, which is arguably established by the bilateral treaties, allows source country to tax the business profits of

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\textsuperscript{70} OECD members include Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.


\textsuperscript{72} For example, the following non-OECD-member countries were invited to Ottawa Ministerial Conference (1998) and the Paris Forum on Electronic Commerce (1999): Argentina, Brazil, Chile, China, Chinese Taipei, Hong Kong-China, Israel, Malaysia, Russia, Singapore, the Slovak Republic and South Africa. Id.

\textsuperscript{73} Taxation framework, supra note 62. See also Working Paper, supra note 71.
an enterprise to the extent that those profits are attributable to a permanent establishment within its borders. In other words, under a typical treaty, the source country gives up its right to tax business profits earned within its borders, unless those profits are attributable to a permanent establishment located in that country.

Article 5(1) of the OECD Model Treaty defines ‘permanent establishment’ as a “fixed place of business through which the business of an enterprise is wholly or partly carried on.” In article 5(5) of the Model Treaty, the definition of permanent establishment is extended to cover the activities of a dependent agent, if the dependent agent is acting in the source country on behalf of an enterprise and has, and habitually exercises an authority to conclude contracts.

At the first look, we can realize that both of the definitions of permanent establishment concept above rely on physical appearances of presence. However, the main characteristic of electronic commerce is that it greatly expands the ability of companies to sell goods or provide services to consumers resident in countries where the company has little or no presence. One might immediately argue that a concept developed to address tax issues in a predominantly physical economy is worthless in the age of electronic commerce. After members of the OECD announced their preference as to tax electronic commerce under the current international tax regime, presuming that this is an accurate determination, in this technical analysis of the permanent establishment definition with respect to electronic commerce we may to disregard that opinion. After completing technical analysis, we can address it again, and discuss whether permanent establishment concept is suitable to provide a balance between the taxation claims of source and residence countries on electronic commerce proceeds.

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74 OECD Model Treaty, art. 7(1).
76 As noted before, the definition of 'permanent establishment' slightly differs in each model treaty. In the rest of this article I follow the OECD Model Treaty and the accompanying commentary.
78 On this issue, the U.S. Treasury states its view as, "In most cases, this will require that existing principles be adapted and reinterpreted in the context of developments in technology. In extreme cases, it may be necessary to develop new concepts." Treasury Report, supra note 5, at 4.
Permanent establishment by fixed place of business

Definition

Article 5(1) of the Model Treaty defines 'permanent establishment'\(^{79}\) as a "fixed place of business through which the business of an enterprise is wholly or partly carried on."\(^{80}\) Examples of permanent establishment are "a place of management, a branch, an office, a factory, a workshop, a mine, an oil or gas well, a quarry, or any other place of extraction of natural resources."\(^{81}\)

The definition excludes some activities, including "the use of facilities solely for the purpose of storage, display or delivery of goods or merchandise belonging to the enterprise" and "the maintenance of a fixed place of business solely for the purpose of purchasing goods or merchandise, or of collecting information, for the enterprise."\(^{82}\)

Analysis

The permanent establishment concept can be analyzed under three main categories: the 'objective conditions' of permanent establishment, the 'subjective conditions' of permanent establishment, and the 'functional conditions' of the permanent establishment.\(^{83}\) Some of these tests are significantly important with respect to electronic commerce.

\(^{79}\) The permanent establishment concept was derived from the concept of an enterprise's principal establishment used in some European double tax treaties in the years before and after the World War I. This evolved into the permanent establishment concept, which was used in League of Nations Draft Convention for the Prevention of Double Taxation 1928. Michael B. Carroll, International Tax Law Benefits for American Investors and Enterprises Abroad, Int'l Tax Law 692, 699-701 (1968).

\(^{80}\) The definition of 'permanent establishment' slightly differs in each model treaty, and each double taxation treaty may have differences in permanent establishment definition.

\(^{81}\) Model Treaties, art. 5(2).

\(^{82}\) Model Treaties, art. 5(4). These are preparatory or auxiliary activities that limit the scope of permanent establishment definition. UN Model Treaty, different from the OECD and U.S. Model Treaties, does accept the 'delivery' as a preparatory or auxiliary activity. This difference, as we will see later, may have a significant effect on the determination of permanent establishment for the electronic commerce.

\(^{83}\) For a more detailed analysis of permanent establishment concept see Klaus Vogel (Chair). The OECD Model Convention 1997 and Beyond (1997).
Objective conditions

The starting point for permanent establishment is the requirement of a ‘fixed place of business’ in the country where the business activity is conducted. This condition is composed of two objective elements: First, there must be a ‘place of business’. Second, the place of business must be ‘fixed’ in terms of the location of the place of business.

Place of business test

The stress in the place of business test is on the ‘place’ term. The Model Treaty and its commentary do not provide a definition for it. A dictionary defines the word ‘place’ as physical surroundings, a physical environment, a building or locality used for a special purpose, or a particular part of a surface.\footnote{See Merriam-Webster’s Collegiate Dictionary <http://www.britannica.com/dictionary?book=Dictionary&va=place> (last visited on 7/10/2001).}

Under literal reading of the Article 5(1) of the treaty, it is clear that a place of business can consist of only tangible (physical) objects that are commercially suitable to serve as the basis for a business activity. A place of management, branch, office, factory, workshop, and a mine, oil gas well, quarry or other place of extraction of natural resources are examples of a permanent establishment if the other conditions for a permanent establishment are met.\footnote{OECD Model Treaty, art. 5(2).} However, securities, bank accounts, and intangibles cannot be places of business. Tax treaties generally contain a list of places of business that \textit{prima facie} constitute a permanent establishment.

The U.S. Tax Court\footnote{Consolidated Premium Iron Ores Ltd. v. C.I.R., 28 T.C. 127 (1957).} held that a Canadian company, which had only a mailing address in the United States but nothing else (no office, facilities, installations etc.) did not have a permanent establishment in the United States.

The term ‘permanent establishment’ normally interpreted suggests something more substantial than a license, a letterhead, and isolated activities. It implies the existence of an office staffed and capable of carrying on the day-to-day business of the corporation and its use for such purpose, or it suggests the existence of a plant or facilities equipped to carry on the ordinary routine of such business activity.\footnote{Id., at 152.}
Electronic commerce usually does not require offices, factories or other physical locations in the country of the customers residence. None of the business place examples provided in the Model Treaty is necessary for, and most of the time, present in the electronic commerce practice. This new way of commerce is conducted through servers and the websites stored on those servers. A server is a tangible object, a piece of machinery (computer). Can it be a place of business?

The language of the Model Treaty on place of business does not provide sufficient guidance since it only refers to facilities such as premises. However, the commentary accompanying it provides that a permanent establishment can be, in certain cases, machinery or equipment. The only examples of machinery and equipment, which can be permanent establishments, are vending and gaming machines. Nevertheless, these two examples are sufficient to argue that servers may also be permanent establishments.

Recently the OECD announced a document that clarifies and amends the existing commentary on Article 5 of the Model Treaty in respect to the application of the permanent establishment definition to electronic commerce. That document clarifies that servers are suitable to be counted as a place of business.

...the server on which the website is stored and through which it is accessible is a piece of equipment having a physical location and such location may thus constitute a “fixed place of business” of the enterprise that operates that server...

The language of the OECD Commentary usually requires an additional existence of persons that perform business activities in the country where the equipment is located.

...the carrying on of the business of [an] enterprise through [a]fixed place of business ... means usually that persons who, in one way or another, are

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88 OECD Model Treaty Commentary, C(5)-2, para. 10.
89 Peter A. Glicklich, et al., Internet Sales Pose International Tax Challenges, 84 J. Tax’n 325, 326-27 (1996); Benjamin & Nathanson, supra note 25, at 31; Sweet, supra note 36, at 1974.
91 Clarification Document, supra note 90, at 5, para. 42.2
dependent on the enterprise conduct the business of the enterprise in the State in which the fixed place is situated... 

The literal reading of the Commentary may result that a server cannot be a permanent establishment in the absence of human intervention. Probably when the Commentary was drafted, there were not machines that fully substitute the functions of humans to carry on business operations. But today, "computers...are making the decisions that were formerly made by humans alone," and there is a growing expectation that and they will have even greater authority in the future.

A few years ago a German Tax Court ruled that a Dutch corporation that owned automatic equipment (pipe lines) in Germany constituted a German permanent establishment, despite the corporation's lack of a human presence in Germany. A Dutch corporation owned pipelines between the Netherlands and Germany, for transportation of oil to German oil companies. Computers remotely controlled the transportation process. The company did not have any employees in Germany, and independent contractors provided all of the maintenance and repair services for the pipelines in Germany. In its holding, the court explained that in case of fully automated equipment, there can be a permanent establishment without the existence of human presence:

... The deployment of persons (...) to the fixed place of business is not always required to constitute a permanent establishment; in the case of fully automated equipment, the exploitation of the fixed place of business for purposes of the taxpayer's business is sufficient.

The Clarification Document amending the current OECD Commentary also follows this approach with respect to servers. According to the OECD, although electronic commerce is developing rapidly, the requirement for personnel to conduct the business of an enterprise in the country in which

92 OECD Commentary C(1)-5, para. 2 (emphasis added).
94 James D. Cigler & Susan E. Stinnett, Treasury Seeks Cybertax Answers with Electronic Commerce Discussion Paper, 8 J. Int'l Tax'n 56, 95 (1997) (discussing the extent to which computers will continue to displace humans in the future of business decision-making). The ability of a computer to defeat the human chess champion provides one illustration of how far the technology related to artificial intelligence has advanced.
95 Sweet, supra note 35, at 1975.
96 The "Pipeline" case, Bundesfinanzhof [BFH] II R 12/92, Betriebsberater, 52 (1997), 138
97 Friedrich E.F. Hey, German Court Rules Remote-Controlled Pipeline Constitutes a PE, 14 Tax Notes Int'l 651.
98 Id., at 652.
the fixed place is situated is still generally accurate. However, "[t]he presence of personnel is not necessary to consider that an enterprise wholly or partly carries on its business at a location when no personnel are in fact required to carry on business activities at that location." The document expresses that this conclusion applies to the equipment both used in electronic commerce (e.g., servers) and traditional ways of commerce where equipment operates automatically (e.g. automatic pumping equipment used in the exploitation of natural resources).

The new interpretation of existing Commentary by the German Tax Court and explanations provided by the Clarification Document demonstrates the change in legal understanding because of technological developments. Probably, in the past, for an enterprise having equipment in a country was useless without having necessary personnel to operate it because machines were not capable to generate income alone. Therefore, it was not appropriate to accept source country's taxation right merely based on the view that the machinery or equipment was located in that country. Personnel were providing the essential link between equipment and the income generating activity, and therefore, the link between the income and the source country's jurisdiction. Since the equipment operates automatically, in other words, human intervention is not necessary anymore to generate income, and it is logical to disregard human element of place of business test.

A further question is whether a website constitutes a place of business, and therefore be a permanent establishment if other tests are also satisfied. Websites are digital documents that Internet users access to purchase goods or services. A website is not a tangible object, but a place of business test requires some physical existence in the source country. Since a website is intangible, it is difficult to defend that it may constitute a place of business, and therefore be a fixed place of business and so a permanent establishment.

The Clarification Document states that an intangible property cannot constitute a place of business, therefore a website cannot be a place of business.

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99 Clarification Document, supra note 90, at 2, para 12.
100 Clarification Document, supra note 90, at 6, para. 42.6.
101 Id.
102 See also p. 42 below for the definition of agent-permanent establishment concept, and the discussions on websites as an agent-permanent establishment.
103 Clarification Document, supra note 90, at 5, para. 42.2.
... a distinction needs to be made between computer equipment, which may be set up at a location so as to constitute a permanent establishment under certain circumstances, and the data and software which is used by, or stored on, that equipment. For instance, an Internet website, which is a combination of software and electronic data, does not in itself constitute tangible property. It therefore does not have a location that can constitute a “place of business” as there is no “facility such as premises or, in certain instances, machinery or equipment.”...

However, Spain and Portugal oppose to the view that place of business test requires some physical existence in the source country in the context of e-commerce. Those countries consider that, in some circumstances, an enterprise carrying on business in a country through a website could be treated as having a permanent establishment in that country with respect to that website. Spain and Portugal seem to suggest that intangible or ‘digital’ existence should be virtually enough to determine a place of business in relation to electronic commerce, and the term ‘place’ should be interpreted as including digital environments. I think those countries’ view is a realistic opinion, which aims to protect the link (nexus) between enterprises and the source countries’ taxation authority where physical presence requirement could allow many of enterprises that benefit economically from a country's market through the Internet to avoid paying their fair share of taxes to that country. But, I doubt the language of Article 5(1) of the Model Treaty is flexible enough to be interpreted as including digital presence. Without amending the texts of treaties, I believe, it is not possible to extend the scope of permanent establishment concept to websites by interpretation.

Location test

The location test requires the place of business to be ‘fixed”; in other words, to a certain extent the business must be linked to a particular geographical place in the source country and stay stable. Although the test seemingly excludes places of business that are mobile, there is a growing acceptance in some countries of such traveling ‘fixed’ places of business.

If a server is situated at a certain place in the source country, it satisfies the location test. The possibility of moving that server’s location from one

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104 Clarification Document, supra note 90, at 5, para. 6.
105 Clarification Document, supra note 90, at 3, para 6.
106 OECD Model Treaty Commentary C(5)-, para. 5
107 Klaus Vogel, supra note 83, at 23.
place to another does not affect this test unless it is in fact moved. The mobility of a server does not change its fixed character as long as it stays in the source country and has a determinable location.

Subjective conditions

A fixed place of business in a country is the objective condition for a permanent establishment, but it is not sufficient alone. There must be the non-resident enterprise's place of business (and not somebody else's place) in the source country for a substantial period. This condition requires satisfaction of two subjective tests: the 'right of use test', and the 'permanence test'.

Right of use test

The Commentary requires that an enterprise should have at its 'disposal' a fixed place of business; in other words, the taxpayer must have a right to use the place of business in the source country. This requirement tests an enterprise’s ability to control the use of its place of business in a given country.

It is common for enterprises (especially small and medium sized enterprises) to carry on business through websites hosted on the servers of Internet service providers (ISPs). Typically such an hosting agreement does not give a non-resident enterprise the control ability on a server’s location and its activities, even though the agreement might let the enterprise determine that its website is hosted on a particular server at a particular location. However, this is an issue, which needs to be examined on a case-by-case basis because there can be cases where a hosting agreement might result a server to be at disposal of a non-resident enterprise. For example when a non-resident enterprise carries on business through a server that it owns or leases, and operates the server on which the website is stored and

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108 Clarification Document, supra note 90, at 5, para. 42.4.
109 OECD Model Treaty Commentary, C(5)-2, para. 4.
110 In most countries and typically in the Anglo-American countries, the factual use of the place of business seems to be sufficient in order for the place of business to be at the taxpayer's disposal. However in some countries like Germany, the courts seem to interpret that the place of business to be at the taxpayer’s disposal requires a legal position to the extent that it cannot be removed from the place of business without taxpayer’s consent. Klaus Vogel, supra note 83, at 23.
111 Clarification Document, supra note 90, at 5, para. 42.3.; see also Jacqueline Klosek, Should A Web Server Constitute Permanent Establishment Under The OECD Model Tax Convention?, 1 Cyberspace Law. 2 (2000); Treasury Report, supra note 5, at 27, para. 7.2.5.
112 Clarification Document, supra note 90, at 5-6, para. 42.5.
used, it is clear that the server is at the enterprise's disposal, and could constitute a permanent establishment of the enterprise if the remaining tests are also satisfied.

**Permanence test**

Another subjective condition for permanent establishment is the 'permanence test'. The definition of the Model Treaty suggests that the activities of the nonresident enterprise should have a degree of permanence\(^{113}\) sufficient to be a regular economic presence in the source country.\(^{114}\) The term 'permanence' does not mean that the right to use the place of business must be everlasting (permanent). It refers to indefinitely continuing. The taxpayer's right of use to the place of business may also meet the permanence test if it lasts for a certain duration. For example, enterprises participating in a tradeshow in a country do not have a permanent establishment there because their presence in the source country does not reach to a sufficient period (and degree) of regular economic activities.

After a server is accepted as a fixed place of business at a non-resident enterprise's disposal, the permanence test requires it to continue its presence in the source country for a sufficient period. It is obvious that application of permanence test to servers needs to be examined on a case-by-case basis because the servers can be moved from one jurisdiction to another very quickly.

**Functional conditions**

The taxpayer may have a fixed place of business with the right of use in the source country for a certain period without giving the source country the right to impose tax on that taxpayer. The permanent establishment concept requires an income-generating activity of the non-resident enterprise, which is defined as 'business' in terms of domestic law of the source country and the tax treaty. In addition, the business activity must be connected to ('conducted through') the non-resident enterprise's fixed place of business.

\(^{113}\) OECD Model Treaty Commentary, C(5)-3, para. 6.

\(^{114}\) If a country applies the right of use test in the German sense (that the enterprise meets the requirements only when it cannot be removed from the place of business without its consent) the permanence test requires this legal position to be of either a certain duration or of an indefinite nature. Correspondingly, if the country applies the right of use test as the factual use of the place of business, then the permanence test will be related to the duration of the factual use.
Business activity test

Model Treaty requires that the activity performed through a place of business must be the business of the enterprise. A server may constitute a permanent establishment if the income generating activities conducted through that server fit in the definition of business activities.

Model Treaty does not contain an exhaustive definition of the term 'business', and according to Article 3(2) of the model, any term not defined therein should generally have the meaning, which it has under domestic law of the country to which the related rule applies. Therefore, for the determination of a permanent establishment, business activities have the meaning given by the source country.

First requirement of the business activity test is that the activity conducted by the enterprise must be business under the domestic law of the source country. Consequently, if the domestic law definition of what constitutes a ‘business’ has a limited scope, a server that performs activities that do not fit into that definition will not result a permanent establishment. Secondly, even if the activities of the server are ‘business’ under the domestic law, if they are not the core business activities, but the preparatory or auxiliary ones, the server may still be excluded from permanent establishment definition under the treaty provisions. Model Treaty states that no permanent establishment may be considered to exist where the business activities of the non-resident enterprise in the source country are restricted to the preparatory or auxiliary activities.

...the term "permanent establishment" shall be deemed not to include:

a) the use of facilities solely for the purpose of storage, display or delivery of goods or merchandise belonging to the enterprise;

b) the maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of storage, display or delivery;

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115 The explanation provided under Article 3(1)(h) of the OECD Model Treaty does not define the term; its function is just to ensure that the ‘business’ term includes the professional services and of other activities of an independent character. See OECD Model Treaty Commentary, C(3)-5, par. 10.2
116 Double taxation may arise if source and residence countries apply different definitions of ‘business’.
117 OECD Model Treaty, art. 5(4).
c) the maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of processing by another enterprise;

d) the maintenance of a fixed place of business solely for the purpose of purchasing goods or merchandise or of collecting information, for the enterprise;

e) the maintenance of a fixed place of business solely for the purpose of carrying on, for the enterprise, any other activity of a preparatory or auxiliary character;

f) the maintenance of a fixed place of business solely for any combination of activities mentioned in sub-paragraphs a) to e), provided that the overall activity of the fixed place of business resulting from this combination is of a preparatory or auxiliary character.\(^\text{118}\)

As the language of the provision clearly states, this is not an exhaustive list; therefore, any other activity of a preparatory or auxiliary nature is also excluded from the permanent establishment definition.

Thus, a non-resident enterprise does not have a permanent establishment in a country if it uses its server solely for the purpose of storage, display or delivery of goods.\(^\text{119}\) Additionally if servers are used solely for providing a communications link (much like a telephone line) between suppliers and customers, providing information on or advertising of goods or services, relaying information through a mirror server for security and efficiency purposes, gathering market data for the enterprise they do not constitute permanent establishment.\(^\text{120}\)

If an enterprise splits up its business activities between several servers in a country, such as advertising, order taking, processing, delivery etc., it can be said that each of partial activities has preparatory or auxiliary

\(^{118}\) OECD Model Treaty, art. 5(4).

\(^{119}\) Clarification document, supra note 90, at 6, para. 42.9. The U.S. Treasury also supports this view. Additionally Treasury states that "For a business which sells information instead of goods, a computer server might be considered the equivalent of a warehouse." Treasury Report, supra note 5, at 26, para. 7.2.4. This is a confusing statement. Probably Treasury means that in such a case server might be treated as a warehouse if it is used only for storage and delivery of information. Note that UN Model treaty does not accept 'delivery of goods' as preparatory and auxiliary activity. Therefore, for example if a servers function is delivery of digitalized while it will not constitute a permanent establishment under OECD and U.S. Model Treaties, it may still constitute a permanent establishment under UN Model Treaty perspective. Model Treaties 5(4).

\(^{120}\) Clarification document, supra note 90, at 6, para. 42.7.
character. However, if those activities performed by several servers achieve a complete business cycle, the servers together constitute a permanent establishment, and the exception of Article 5(4) is no longer applicable, since the nature of the activities as whole exceeds the preparatory or auxiliary character. However, if the enterprise splits up its business between servers located in different countries then neither each nor whole of the severers constitute a permanent establishment.

Business connection test

Finally, the text of the Model Treaties requires that the business activity of the enterprise must be connected to the place of business: the activity must be performed 'through' the place of business. The performance activity does not need to be permanent in the sense that there is no interruption of operation, but operation must be carried out on a regular basis. In case of electronic commerce, activities must be performed through a server.

Permanent establishment by agency

Definition

As we mentioned before, having a fixed place of business is not the only way of having a permanent establishment in the source country; a permanent establishment may also arise through an agency relationship ('agent-permanent establishment'). Article 5(5) of the Model Treaty defines this type of permanent establishment concept as:

... where a person — other than an agent of an independent status (...) — is acting on behalf of an enterprise and has, and habitually exercises, in a Contracting State an authority to conclude contracts in the name of the enterprise, that enterprise shall be deemed to have a permanent establishment in that State in respect of any activities which that person undertakes for the enterprise, unless the activities of such person are limited to (preparatory or auxiliary activities) which, if exercised through a fixed place of business, would not make this fixed place of business a permanent establishment under the provisions of that paragraph.

This provision extends the scope of the permanent establishment concept to dependent agents' activities. Even if an enterprise stays away from establishing a fixed place of business in the source country, still it can

121 OECD Model Treaty Commentary, C(5)-3, para. 7.
122 OECD Model Treaty, art. 5(5), (4) (emphasis added).
be deemed to have a permanent establishment with respect to a dependent agent's activities who is acting on behalf of that enterprise.

**General analysis**

The first requirement of Article 5(5) is the existence of a 'person' in the source country (objective condition). The term 'person' refers to an individual or an entity (such as a corporation) that is recognized by law as capable of rights and duties.\(^{123}\) Since treaty does not make a distinction between real persons (individuals) and legal entities, both an enterprise's employees, and other individuals or legal entities acting for that enterprise are suitable for agent status.\(^{124}\)

Secondly, that person must have a 'dependent' status (subjective condition). The Model Treaty provides that an enterprise does not have a permanent establishment in a source country if it "carries on business in that country through a broker, general commission agent or any other agent of an independent status, provided that such persons are acting in the ordinary course of their business."\(^{125}\) Whether an agent is dependent or independent is a mixed question of law and fact. According to the Commentary, a person has an independent status if he is independent of enterprise both legally and economically.\(^{126}\) The degree of control that is exercised over the agent by the enterprise and whether the agent has entrepreneurial risk are the two other conditions mentioned by the OECD Commentary to be able to determine dependent-independent status of an agent.\(^{127}\) For example, if an agent's commercial activities are subject to detailed instructions or comprehensive control by the enterprise on whose behalf it is acting, the agent cannot be regarded as independent of the enterprise. Entrepreneurial risk criterion indicates that the economic risks of the activities performed by the agent (such as credit risks, market risks, or even the technological risks) should be borne by (belong to) the enterprise rather than to the agent itself.

\(^{123}\) "So far as legal theory is concerned, a person is any being whom the law regards as capable of rights and duties. Any being that is so capable is a person, whether a human being or not, and no being that is not so capable is a person, even though he be a man. Persons are the substances of which rights and duties are the attributes. It is only in this respect that persons possess juridical significance, and this is the exclusive point of view from which personality receives legal recognition." Blacks Law Dictionary, 7th Ed. 1999, (quoting from John Salmond, Jurisprudence 318 (Glanville L. Williams ed., 10th ed. 1947)).

\(^{124}\) OECD Model Treaty, art. 3(1)(a).

\(^{125}\) OECD Model Treaty, art. 5(6).

\(^{126}\) OECD Model Treaty Commentary, C(5)-16, para. 38.

\(^{127}\) Id.
One last requirement for the agent-permanent establishment definition is that the activities of an agent must exceed the preparatory or auxiliary activities described in the Article 5(4), which are excluded from the permanent establishment definition. For example, if a dependent agent’s activities in the source country are limited to advertising or delivery of goods or merchandise belonging to the enterprise, or purchasing goods or merchandise or of collecting information, for the enterprise, the enterprise will not be deemed to have a permanent establishment in that country in respect of the activities performed by that agent. Model Treaty states that preparatory or auxiliary activities of a dependent agent, alone or combined with others, are exempted from the permanent establishment definition to the extent that the overall activity (combination of several activities) maintains its preparatory or auxiliary character.

Analysis with respect to electronic commerce

Following the review of the agent-permanent establishment definition of the Treaty, we can examine its application to electronic commerce. Since Article 5(1) “fixed place of business” definition primarily covers servers, servers are not subject to analysis of agent-permanent establishment concept. Conversely, with respect to websites and Internet service providers (ISPs) further discussions might be valuable.

Website as agent-permanent establishment

We know that a website does not satisfy the “fixed place of business” definition of the Model Treaty because of its intangible character. However, can a website still be a permanent establishment based “on the theory that it acts as a type of dependent agent that can conclude contracts on behalf of the company”? Current stage of artificial intelligence technology enables an enterprise to use “intelligent agent software” which is capable of interacting with the Internet users who visit the enterprise’s website, and accept and process orders. For policy reasons, one can argue that intelligent agent software

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128 OECD Model Treaty, art. 5(5), (4)(a), (4)(d).
129 OECD Model Treaty, art. 5(5), (4)(e), (4)(f).
131 An intelligent software agent can perform following functions: 1) send e-mail to specific target audiences; 2) provide detailed information on digitized products (or services) to customers; 3) provide for an electronic order form; 4) retrieve and transmit the requested product to the customer; 5) process the sale and the collection of electronic cash (or verify
can exercise very similar activities to those exercised by human agents therefore it should be treated similarly.\textsuperscript{132} However, from a technical viewpoint intelligent agent software does not satisfy the requirements of the agent-permanent establishment definition. As we stated above this concept covers persons only, and existing legal definition of ‘person’ does not include intelligent software or other forms of electronic objects (data). Since a website is not a person, it cannot be a dependent agent, and therefore, a permanent establishment.\textsuperscript{133}

If we presume that one-day legal systems of countries may recognize artificial intelligence as having legal personality, or at least disregard that requirement, then we can examine further details of agent-permanent establishment definition of the Model Treaty in relation to websites. When an Internet user connects to a server located in another country to visit an enterprise’s website (which is a combination of software and electronic data), usually only the electronic data (document) portion of the website is transferred to the user’s computer for a temporary period. Intelligent software portion of the website, which simulates the agent function of a person, resides on the server (or servers) outside of the user’s country. Since the agent software is not acting in the source country, the enterprise cannot be deemed to have a permanent establishment in that country.\textsuperscript{134}

There may be instances in which an intelligent-software (not website) is fully or partially stored on a user’s computer. For example, the software used by American Online (AOL) to provide online services is partially

\textsuperscript{132} Similarly (and in the absence of any contrary court ruling), it appears software agents too should be subjected to the [permanent establishment] requirements since they perform substantially the same tasks as human agents. Barrett Schaefer, International Taxation Of Electronic Commerce Income: A Proposal To Utilize Software Agents For Source-Based Taxation, 16 Santa Clara Computer & High Tech. L.J. 111, 130 (1999).

\textsuperscript{133} Clarification Document, supra note 90, at 7, para 42.10 last sentence; Sweet, supra note 35, 1981, Thorpe, supra note 131, at 666. "However, tax authorities may place less emphasis on actual human presence and argue that a "virtual" human presence is enough to invoke a PE based on a dependent-agency relationship." William Lee Andrews III, A Platform For International E-Commerce Tax Rules, 12 J. Int'l Tax'n 44, 50 (2001).

\textsuperscript{134} Id., at 50-51.
stored on the company's servers and partially on the customers' computers. In such a case, if the intelligent software performs agency functions on the customer's computer, we may claim the existence of an agent-permanent establishment in a source country. However, I would like to mention once again that this is an extreme situation based on the assumption that one-day artificial intelligence might be recognized as having legal personality, or the requirement for being 'person' might be disregarded.

**Internet service provider (ISP) as agent-permanent establishment**

A last question to be examined is whether the agent-permanent establishment definition of Article 5(5) of the Model Treaty may apply to deem an ISP to be a permanent establishment of a non-resident enterprise in a source country. Enterprises and ISPs usually sign website hosting agreements. Such an agreement results an ISP to provide services to the enterprise rather than to act on behalf of the enterprise as a dependent agent. For example, when a non-resident enterprise carries on electronic commerce in a source country through the servers owned and operated by a domestic ISP, the ISP will not constitute an agent, because website hosting agreements usually do not give an authority to the ISP to solicit orders, approach potential customers, or conclude contracts on behalf of the website's owner. Even if, under such an agreement an ISP is given an authority to conclude contracts in the name of the enterprise, for example ISP establishes and operates the website in the name of the enterprise, it will still not constitute a permanent establishment to the extent that ISP protects its independent status.\(^{135}\)

**Attribution of Profits to Permanent Establishment**

In the previous subpart, we found that only servers are suitable to form a permanent establishment in the source country without forcing the limits of interpretation of the permanent establishment definition.

Setting up a server in a country to carry on business there provides a sufficient economic allegiance of the nonresident business to the source country, which triggers and limits the application of source-based taxation approach (threshold question).\(^{136}\) In the Model Treaty this is stated as "(i)f

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\(^{135}\) Clarification Document, supra note 90, at 7, para 42.10.

\(^{136}\) "It has come to be accepted in international fiscal matters that until an enterprise of one State sets up a permanent establishment in another State it should not properly be regarded as participating in the economic life of that other State to such an extent that it comes within the jurisdiction of that other State's taxing rights." OECD Model Treaty Commentary, C(7)-3, para. 4.
the enterprise carries on business [in the other Contracting State (the source country) through a permanent establishment], the profits of the enterprise may be taxed in the other state but only so much of them as is attributable to that permanent establishment. In other words, source country’s authority to tax does not extend to profits that the enterprise may derive from the source country otherwise than through that server.

Model Treaty refers to the ‘profits’ of an enterprise without providing a definition. The definition or scope of profit concept may differ from country to country; and these differences may result double or non-taxation situations. Nevertheless, it can be broadly said that any form of income, including dividends, interests, royalties and other income of an enterprise derived through a permanent establishment in the source country may be taxed by the source country.

Attribution of profits to a permanent establishment is based on the assumption that permanent establishment is an independent entity dealing at arm’s length with its parent enterprise (and other permanent establishments of the enterprise). The Commentary states that Article 7(2) is a statement of the arm’s length principle provided Article 9 in the context of associated enterprises. The OECD has published guidelines that provide detailed explanations on how to apply the arm’s length principle under Article 9, which can also be helpful to apply the arm’s length principle in the context of permanent establishments. Guidelines require the determination of the functions undertaken, assets used, and risks assumed by the permanent establishment to be able to apply arm’s length principle. In theory, these guidelines might be applicable to the servers by analogy as well.

Exploration of the details of the guidelines and the analysis of their applicability to servers exceed the limits of this article. However at this point we may point out a discussion paper issued by the OECD’s Technical Advisory Group on Monitoring the Application of Existing Treaty Norms for the Taxation of Business Profits early this year, which is about the attribution of profits to a permanent establishment (server) involved in

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137 OECD Model Treat, art. 7(1)second sentence (emphasis added).
138 We should note that, Article 7 of the UN Model Treaty generally follows the OECD Model with respect to attribution issue. However, UN Model extends the source countries taxing rights on a non-resident enterprise’s other income from sales or similar kind as those sold through a permanent establishment in that country.
139 David R. Davies, supra note 38, at. 128.
140 OECD Treaty, art. 7(2).
electronic commerce transactions. In that paper, the group examined the application of the Model Treaty, the Commentary, and the guidelines to the profits of electronic commerce. The group focused on the attribution of profits under two possibilities with variations that constitute permanent establishment in a source country: 1) server creates a permanent establishment (stand-alone servers without human intervention), and 2) server as a part of an existing permanent establishment. Their analysis is based on many alternate hypotheses, and is not encouraging to pursue a solution to the attribution problem. In most of the variations analyzed, the group concluded that capability of Article 7 of the Model Treaty is questionable to attribute the profits fully consistent with the arm’s length principle.

Comments on Permanent Establishment Concept

Until this point, we have mainly focused on the technical analysis of the permanent establishment concept with respect to electronic commerce. Our analysis was based on the OECD’s inclination to tax electronic commerce under the current international tax regime. Here we can review our findings, criticize the OECD’s view and point out some alternatives suggested by commentators.

Both of the permanent establishment definitions, ‘fixed place of business’ and ‘dependent agent acting on behalf of an enterprise’ require some form of geographic and temporal presence within the source country. When we think about the traditional ways of commerce it’s easy to justify this requirement because non-resident enterprises that carry on traditionally ways of commerce need some type of physical presence within source countries to be able to engage in significant business activities in the country’s market. For example, sales offices are necessary to access to potential consumers within a source country to be able sell goods in a traditional way. Similarly, employees are needed to negotiate contracts, receive orders, deliver the goods sold, or perform services. Sales offices and employees are the examples of permanent establishment, which give the taxing right to the source country.

However, the development of electronic commerce has changed the methods of doing business. Today enterprises can access to customers all around the world without having offices or employees anywhere because

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142 Id. at 27 para. 110; at 33. para. 142.
physical presence in source countries is no longer required in order to engage in significant commercial activities.

Under existing principles of the treaties, countries may agree that the server constitutes a permanent establishment. However, this theoretical determination is not adequate to share tax revenues between source and residence countries. Since physical presence is not a requirement for engaging in business within a country, why would a foreign enterprise set up its servers in the source country? Probably newly created enterprises will never set up servers in source countries knowing that the source country is going to impose taxes on the profits derived through those servers. If it is a technical necessity (e.g., to provide faster access to customers) to set up servers in the source country, an enterprise can prefer to lease it from a local ISP. Alternatively, the enterprise can prefer to split up its activities between servers within and out of the source country, so that the activities performed by the servers within the source country do not exceed preparatory character.

Moreover, it is logical for existing enterprises to remove existing fixed place of businesses or dependent agents from the source countries and replace them with websites stored on servers as much as possible. For activities where human intervention is essential, enterprises can prefer to hire independent agents to fulfill dependent agents' functions.

It is clear that the growth of electronic commerce leads to the erosion of source country income tax revenues as long as international tax rules require a physical presence within source countries. The discussions that we have made above about the determination of permanent establishment with respect to electronic commerce, practically has a very little application area. The difficulty in attributing profits to permanent establishments (e.g., servers) also gives one more reason for exploring new alternatives.

However there are not many alternatives in fact. Once, the U.S. Treasury pointed out the possibility of replacing current regime with residence-based taxation rules. Professor Avi-Yonah suggested a VAT-

144 "The growth of new communications technologies and electronic commerce will likely require that principles of residence-based taxation assume even greater importance. In the world of cyberspace, it is often difficult, if not impossible, to apply traditional source concepts to link an item of income with a specific geographical location. Therefore, source based taxation could lose its rationale and be rendered obsolete by electronic commerce. By contrast, almost all taxpayers are resident somewhere. An individual is almost always a citizen or resident of a given country and, at least under U.S. law, all corporations must be
type withholding tax on the electronic commerce sales. David Forst discussed the liberalization of source rules.

CONCLUSION

The decentralized structure of the Internet and the development of new methods to conduct business over the Internet have weakened the established consensus on the taxation of international business. The main question is based on whether the permanent establishment concept is adequate or not to determine taxing jurisdiction in the world of electrons. The OECD countries, which have been very effective in shaping the international consensus on taxation issues since the end of World War I, seem insistent on sharing electronic commerce revenues under the existing taxing regime. Under existing regime, the source country is given the right to levy taxes on the business profits of an enterprise to the extent that those profits are attributable to a permanent establishment. Since the taxing right of the source country is bound with existence of a permanent establishment within its borders, the meaning of the permanent establishment concept and its applicability to electronic commerce constitute the main questions. This article mainly examined these two questions.

Very generally, a fixed place of business or a dependent agent exercising business activities constitutes a permanent establishment. An office, a branch, a factory, and a partner or an employee of an enterprise are common examples of permanent establishment. An enterprise engaged in electronic commerce does not require any of those to be able to carry on its business in other countries. Instead, servers, websites, and sometimes ISPs are required for that purpose.

A website cannot be a fixed place of business, and therefore a permanent establishment, because it is intangible. In addition, it cannot be a dependent agent because the agent provision of the treaties specifically refers to persons. Perhaps one day intelligent software may be recognized to have personality, but that is not so in today's world.

established under the laws of a given jurisdiction."; Treasury Report, supra note 5, at 23, para 7.1.5.

This proposal is based on three points: (1) the permanent establishment concept should be changed from a physical presence to gross income threshold, (2) the distinction between income from services, royalties, and sales of goods should be eliminated for electronic commerce, and (3) the rules for transfer pricing should be altered. Avi-Yonay, supra note 18. Compare to Stanley L. Katz, International Taxation of Electronic Commerce: Evolution Not Revolution, 52 Tax L. Rev. 655 (1997).

A server, simply a computer on which websites are installed, may be a fixed place of business and therefore permanent establishment of an enterprise. A server of an ISP, on which another enterprise’s website is stored, usually does not constitute a fixed place of business of the enterprise, and therefore a permanent establishment, because it is not at that enterprise’s disposal. However, permanent establishment determinations on servers are not as easy as they seem to be. In most instances, they require case-by-case analysis.

Can an ISP be a permanent establishment based on dependent agent definition? The answer to this question is usually no, because the relation between an ISP and an enterprise operating its website through ISP’s server does not affect ISP’s independent status.
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