International Taxation of Electronic Commerce:
Recognition of Permanent Establishment in E-commerce

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I. Introduction

Electronic commerce (hereinafter referred to as E-commerce) is a newly emerged transaction tool of business, where all transactions are done within a computer system through the internet. E-commerce transactions consist of sales of tangible goods from the website as well as sales of digital goods such as software and music. It has enabled even a small-size business to reach a global market. It is expected that its annual transaction amount will be hundreds billion U.S. dollars soon.
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In taxation on business profits derived by foreign corporations of non-residents in the source country, the conventional international taxation rule provides that the profits are taxable as far as there is a “permanent establishment” and the profits are attributable to the permanent establishment, which is defined as “a fixed place of business through which the business of an enterprise is wholly or partly carried on” (OECD Model Tax Treaty Article 5, para. 1). Typical examples of permanent establishments are branch, factory and mine. This conventional principle presumes that it is hard to conduct business or trade in foreign countries, on a permanent base, without establishing permanent establishments therein with conventional trade or business tools.

With E-commerce, however, business can be easily conducted in foreign countries, on a permanent base, through website, server, and ISP without the presence of branches. Then it becomes an issue of international taxation what can be an effective benchmark in determining whether profits derived from non-residents or foreign companies through e-commerce, replacing the conventional taxing rule on business profits.

If profits from international e-commerce are not taxable in source countries just because there are no permanent establishments under conventional international tax principles, it will be not only unfair to conventional business but also it will lead to a dramatic reduction of government revenue of source countries in the future. On the other hand, if different tax rules are adopted in different countries it may also cause double taxation or under taxation on profits from international e-commerce transactions.

Amazon.com is an international world’s largest electronic commerce company which sells everything from books, to electronics product like DVDs, VHSs, CDs, video, software, video games, to furniture, cosmetics, food, jewelry and so on. The company starts as an online retailer in 1994 with headquartered in Seattle. Amazon firstly started the company as an online bookstore, and soon it notably expanded to all consumable and electronic products and goods. In 2007, Amazon introduced the e-book hardware industry of Kindle reader that represent the most advance e-reader.

Amazon has speedily grown in 2010 the company’s net sales reached $34.20 billion, increased 40% compared with $24.51 billion in 2009. Kindle books currently sell three times more than those of paperback books. As already explained above, the internet enables an enterprise to conduct borderless business electronically. An Amazon Kindle’s case can raise several tax issues whether or not the income from Kindle books considered as sale income, royalties, or rental income. In case, a customer A resides in country B access to Amazon and orders a book and the book is to be delivered to him. In addition, he also downloads an
e-book to this Kindle which takes a few minutes and he gets it in hand immediately. Issues to be addressed in these two cases is (1) where is the source of income? (2) Whether the income is categorized as sale, royalties, or services? (3) Which government has a taxing right over this income?

As clearly seen in this case, the global E-commerce has grown tremendously and expected to rise even more in the future. E-commerce gives many challenges to current international tax administration. Current international rule is based on residence taxation and source taxation by identifying the physical presence and place of business. However, it’s not easy to apply the current rule to cross-border transaction like E-commerce since E-commerce is borderless and business can be done from any part of the world. According to Article 7 of the OECD, the business income is taxed in a country only if a taxpayer has a permanent establishment. Otherwise it should be taxed only in a resident country. Under the current tax treaty, income is taxed according to the category. The income source of royalty is where that intangible property right is being used, stated in Article 12. Source income from services is where the service is performed. Hence, it’s questionable whether this classifying category could raise another uncertainty in taxing income from E-commerce.

Thus, a new international tax rule is required on business profits derived from international E-commerce transactions in accordance with kinds of transactions, which replaces the conventional tax rule or is added to it. This research is to explore the new international tax rule by redefining the “permanent establishment” concept as a benchmark in the taxation of business profits by taking into consideration international e-commerce transactions. Whether or not, it’s necessary to construct a new principle of international taxation applicable to international trade of digital products and services. This paper will only focus on identifying “permanent establishment” concept on the E-commerce part.

This paper is organized into six parts. First part explains the current newly emerged transaction of E-commerce and new challenges to tax authorities. Second part addresses the features of E-commerce; discusses how E-commerce is different from the conventional type of transaction, and describes recent rapid increase of amount of E-commerce in many countries. Part three describes the current international tax rules on allocation of taxing rights of business profits between a source country and a resident country, including the principle of source rule as well as the concrete source rules in the United States. In accordance with an important role of tax treaty in E-commerce and permanent establishment concept are also discussed. Part four provides current issues related to permanent establishment and examine the existing problem altogether with in depth analysis of past research. Last part reviews and argues with possible suggestions.
II. Features of Electronic Commerce and Differences from Conventional Transactions

1. Typical E-commerce transaction

Electronic Commerce is commonly known as all kinds of business online by using internet. The definition provided by the OECD is “An electronic transaction is the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organizations, conducted over computer-mediated networks. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the good or service may be conducted on or off-line.”

The U.N. definition defines it as “commercial activities conducted through an exchange of information generated, store or communicated by electronic, optical, or analogous means.” Before explaining the issue and tax policy, it’s important to start from explaining the basic features of E-commerce; category, how it works, and its growth.

E-commerce can be categorized into four main categories: Business to Business (B2B), Business to Consumer (B2C), Business to Government (B2G), and Consumer to Consumer (C2C).

**Business to Business (B2B)**

B2B simply means the business between companies such as manufacturers, distributors, wholesalers, and retailers. Most of the E-commerce is B2B type and it greatly occupies more than 80%. Most experts predict it will grow even more in the future.

**Business to Consumer (B2C)**

B2C is a business selling a product to consumer through internet and it holds the second largest place. It includes tangible product, for example books, consumable goods, cosmetics, and clothes or it also covers digitized goods such as downloadable software, music, books, which are intangible. Examples of B2C are online shopping like Amazon.com, Rakuten.com, and Yahoo.com.

**Business to Government (B2G)**

Business to Government is a commerce that involves public sector companies and government such as procedure of registration, licensing, advertising, web-based communications and other related to government matters.
Consumer to Consumer (C2C)

Consumer to consumer also known as citizen to citizen is defined as a transaction between individuals whereby they can easily sell; buy through an online auction like eBay. The amount generated through this auction reaches million dollars a day which is not a small amount.\(^{15}\)

Among these four categories, the political debate mostly focused on the B2B and B2C type of activities. Most Multinational enterprises use the internet to get access to the rest of the world in a same way as small and medium size of enterprise.\(^{16}\) According to the survey on the National small business of the United States conducted by Arthur Anderson, 85% mainly uses internet for e-mail and research, 53% own a website or plan to have it soon, and 23% use internet as a tool to do a business like selling goods.\(^{17}\) At the same time, professional services from different fields also use internet to advertise and promote their services.\(^{18}\)

2. Feature of E-commerce in comparison with Conventional transactions

E-commerce relies on so called intelligent software to run the business from advertises, take orders, payment, to customer care\(^{19}\) by using “internet”\(^ {20}\). The internet makes it possible to use “world wide web” which information including “color, graphics, audio and video” can be accessed through the websites.\(^ {21}\)

Traditionally, a business conducts as regard to “physical exchanges, face-to face meetings, and payment with a check, cash or barter.” It requires “physical events” to complete the traditional business.\(^ {22}\) On the contrary, E-commerce differs from traditional business in that it enable all kinds of business to reach millions of people around the world without any physical presence in other countries or territories connected.\(^ {23}\) Along with the new development of technology, a manner to conduct business has changed. The question arising here is how to tax the transaction through new technology according to existing tax treaty and what modification is necessary.\(^ {24}\)

3. Growth of E-commerce

From the beginning of 1990, E-commerce has been growing tremendously and progressively. According to the survey made by Japanese Ministry of Economy, the E-commerce sale of B2C in 2009 was amount of ¥6.7 trillion increase 10% from the previous year.\(^ {25}\) The B2C market scale holds a tremendous
amount of sales ¥131 trillion with the expectation to continually grow in the future.26

The data of U.S. Census Bureau has stated that E-commerce retail sales from, 2000-2009 is $27.6 billion to $143.3 billion at the growth rate of 20.11%.27 As reported by Forrester Research in 2011, U.S E-commerce sales will grow at 10% annually. It reached $289 billion in 2012; estimated that it will reach $327 billion in 2017.28

According to European E-commerce press release, sale of goods and services Europe reached €311.6 billion in 2012 which grew at 19% from the previous year and occupied the largest B2C market in the world with 35.1% share of global market. Wijnand Jongen, vice-president of E-commerce Europe stated about the rapid growth of E-commerce related to the “internet usage and mobile devices” in those Scandinavian countries and that 70% to 80% of internet users shop online. The amount of B2C market in Europe is estimated to double by the end of 2016 at the amount of € 625 billion.29

As stated in eMarketer research, the total sales of global E-commerce reached $1.22 trillion this year with 21.1% growth for the first time. It's also anticipated that the sale will grow at 18.3% globally this year with the estimation, E-commerce in Asia-Pacific market would become the first place overstep the North America marketplace.30 Unsurprisingly, with an excessive number of 220 million Chinese online buyers, China market alone grew 65% from $110 billion in 2012 to $181 billion this year. The numbers of online buyers are expected double during year 2012-2016.31

III. Current International Tax Rules on Allocation of taxing rights on business profits between Source country and Resident country

1. Source Rule

International tax principles define as “the taxation of cross-border transaction.”32 It generally has two applications; resident taxation and source taxation. Resident taxation refers that a country has a right to tax its resident income on their worldwide income. The second one is Source taxation in which the state has the primary right to tax the income that originates in their jurisdiction.33 These two taxations sometimes overlap of jurisdiction and result in double taxation.34 For example, source country and resident country may claim to tax over one income of one person because the jurisdiction of the territory and the resident.35 As stated in the OECD, double taxation “has harmful effects on the international exchange of goods and services
and cross-border movements of capital, technology and persons.”

**U.S. Source Rules for income of Non-resident**

Generally, the Source rule simply means where the incomes are generated. They are significant as to determine which income subjects to U.S. tax. Source rule for non-resident of U.S. is explained under section 861-865 of the Internal Revenue Code. The government can tax non-resident if it has its source within U.S. therefore “source rule” are important to tax international income. In fact, source rule differs according to the kinds of income such as interest, dividends, personal services, rents or royalties.

An income that effectively connected with a U.S. trade or business is subject to regular graduated income tax rates after the deductions and exemption provided. The factors to be considered whether or not the income has sources within the U.S. are (1) “the income, gain, or loss is derived from assets used in or held for use in the conduct of such trade or business, or (2) the activities of such trade or business were a material factor in the realization of the income, gain, or loss.” This law applies whether or not there is a connection between the income and business that is carried on in the U.S.

Additional terms for tax on non-resident alien individuals provides in section 871 which explains “the income not connected with U.S. business.” Those named passive income consist of incomes other than capital gains, interest, gains described in section 631 (b). Furthermore, an income generates in the U.S. but is not effectively connected with a trade or business within the United States normally subject to withholding tax with a flat rate without allowance of deductions.

As a summarization, for a non-resident alien and foreign corporations to be taxable in U.S. source income, there must be determined of “effectively connected with the conduct of a trade or business within the United States” and “income not connected with United States business.”

**2. Role of Tax Treaty**

To deal with double taxation, countries enter into a Tax Treaty. Tax Treaty prevents double taxation and allocates the taxing right between the contracting states. Currently, there are two Tax Treaty Models. United Nations Model Tax Conventions deals with the tax matters between developed country and developing countries. OECD Model Tax Convention treats Income and on Capital between developed. The primary aim of OECD Model tax Convention is “to clarify, standardize, and confirm the fiscal situation of taxpayers who are engaged in commercial, industrial, financial, or any other activities in other countries through the
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application of common solutions by all countries to identical cases of double taxation.” OECD plays an important role in international taxation set with many expertises while continuously developing rules and policy. Two tax conferences have been held to deal with the tax issues related to E-commerce Taxation. “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). Based on the OECD model, non-resident is taxable in a source country if the business profits are attributable to a permanent establishment situated in the source country; otherwise the income is not taxable in a source country. When two countries enter into a treaty, it covers a clause of double residency to assure that the taxpayer will be considered of one country’s resident only. When the conflict of dual residency arrives, the resident country is decided by the where the place of effective management is located.

3. Permanent Establishment

Under Article 7 of the OECD, the business profit provides that “the profits of an enterprise of a Contracting State shall be taxable only in that State unless the enterprise carries on business in the other Contracting State through a permanent establishment situated therein.” Further, to be taxable in other state, most of the profit should be attributable to that permanent establishment.

A permanent Establishment (hereinafter referred to as “PE”) concept is fundamental in a tax treaty by which the source country has taxing right over the business income of non-resident situated therein. The definition provided by the OCED, the term “permanent establishment means a fixed place of business through which the business of an enterprise is wholly or partly carried on.” It includes especially “a place of management, a branch, an office, a factory, a workshop and a mine, oil or gas, a quarry or any other place of extraction of natural resources.”

The definition requires a geographical requirement such as a fixed place of physical location and time requirement. In addition, the place must be at a disposal of the enterprise to conduct the business. The place should not be regarded as PE if the activity is merely for the purpose of a preparatory or auxiliary nature. In case of an agent, only if the agent has an authority to conclude a contract on behalf of an enterprise, the PE can be regarded; otherwise there should not be PE. Namely, general requirements for PE are; (1) a place of business (2) it must be fixed (3) business must be carried on through that fixed place.
IV. Current issues related to Permanent Establishment

Permanent Establishment for E-commerce

Currently, even under OECD model, there is no article to deal with the E-commerce yet, only the commentary was added in 2003 for determining under what condition PE can be constituted related to E-commerce matters. In spite of that, there are many new tax challenges arising in respect to taxation of E-commerce. At the Ottawa conclusion, OECD emphasized that E-commerce should be taxed in the same manner as conventional business income. The same principle of “neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility” should be applied. OECD mainly focuses on the four elements to enforce current tax rules to E-commerce:

“a) The “place of effective management”

b) The concept of a Permanent Establishment (PE)

c) The attribution of profit to a server PE

d) Transfer pricing.”

Discussions have been made by OECD members and many experts about taxation of E-commerce whether or not the common use of the computer equipment in a country can create a PE. A lot of questions occur due to this issue related to the Article.

1. A server

A server may be regarded as a PE because it is computer equipment with a physical location to constitute a “fixed place of business.” The data is stored in computer server which can be regarded as a physical location. Consequently, for a server to constitute a PE there must be a fixed place of business, and it must be wholly or partly carried on business through that equipment.

2. A Website

According to the OECD, an internet is seen as an intangible asset, “which is between software and electronic data” thus it cannot be regarded as a PE. It lacks “location” as a “place of business.” As stated in
the commentary, there is no “facility such as premise or, in certain instances, machinery or equipment” to constitute PE.

3. Hosting Arrangement

The important issue is to distinguish between an enterprise that provide a server and an enterprise that carries on business through the website hosted in the server. Commonly the hosted server provides Internet Service Provider (ISP) to an enterprise to carry on business for receiving fees according to the space used. The enterprise can request where the information should be located and website should be hosted. Nonetheless, that enterprise cannot be regarded as having a PE because the website is intangible, lack of physical presence and control. Only if the enterprise operates stores and has its own server, then it can be regarded as having a PE required by the Article. If the core function of the enterprise is “in the business of hosting websites or other applications for other enterprises” then it should be considered that the activities cannot be seen as a preparatory or auxiliary stage therefore the PE should be regarded.

Furthermore, it also states that to constitute a PE, the presence of personnel are not necessary if the nature of the business does not require personnel to operate. The ISP cannot be regarded as a dependent agent of an enterprise provided by paragraph 5 of the Article for the reason that it does not have an authority to conclude a contract on behalf of the enterprise. As commonly known, the ISP usually hosts the server website to other enterprises to store information in their server. In fact, the server hosts and provides ISP to many services, so that it’s impossible to conclude contracts on behalf of the other enterprise therefore the ISP cannot be regarded as an agent PE.

Under the conventional concept, PE must be a place of business, fixed place and the requirement to have some permanency depend on the nature of the business. For example, building site or construction should last at least six months or sometimes more than twelve months. Despite of that, the OECD does not mention about the time required in the commentary of E-commerce.

As a conclusion, to constitute a PE there must be a place of business, fixed place of business, and it must be wholly or partly carried on business through that equipment.
4. Problem with PE

As mentioned above, the traditional concept of PE was drafted in the old days when the physical presence was significant to conduct a business in another state.\(^{74}\) Under current treaty rules, the taxing right on non-resident business income is all dependent on the concept of “permanent establishment” and “attribution rule.”\(^{75}\)

In the conventional type of business, the PE concept provided by OECD can easily be applied but not in the case of E-commerce where the function of E-commerce as explained earlier according to the application like web page, server, computers and cable.\(^{76}\) In digital age, business can be conducted from any part of the world without a physical presence or establishing a PE in other states.\(^{77}\) Therefore E-commerce raises many fundamental issues and causes a number of problems to the tax authorities on how to apply existing tax rules to E-commerce, how to identify the fixed place of business, and the source of business.\(^{78}\)

The problem of geographic issue exits previously before E-commerce. Especially, it’s not easy to recognize the places of the income generated.\(^{79}\) As explained earlier, conventional type of business has created different tax rules for different types of income. For example, services income is taxed where the service was rendered while taxing right of royalty is in accordance with territorial right.\(^{80}\) Simon Woodside\(^{81}\) states that “for direct tax purposes, we’re clarifying how such concepts as ‘permanent establishment’ – that’s the rule which determines the right of a state to tax the profits of an enterprise of another state – should operate in the electronic world. Elsewhere, for indirect taxes (such as value-added tax, or VAT) we’re confirming how international transactions should be treated, and tackling such tricky issues as how you collect the tax on a product that is delivered online. E-commerce can and will be taxed – the important thing is that it be taxed fairly and efficiently (just like conventional commerce).”\(^{82}\)

Some scholars also argue that current ‘permanent establishment’ rule is ‘no longer viable’ because that rule was created in pre-digital age where physical present is inevitable to conduct a business in other state. Technology like internet makes it possible to run a business in a non-resident state even without the physical presence or establish a PE.\(^{83}\)

5. Researches in the past

An early response to the E-commerce is “Bit Tax” proposed by Arthur J. Cordell.\(^{84}\) Bit Tax simply
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mean “tax each digital bit of information flowing in global networks.” “Whether the digital bit is part of a foreign exchange transaction, a business teleconference, an Internet e-mail or file transfer, electronic check clearance or an ATM transaction, each bit is a physical manifestation of the new economy at work. Whether the tax is levied on the traffic carried by a fiber optic cable or on micro-wave or whether the tax is levied on interactive satellite traffic, the bit tax presents a way of accessing the new wealth being created by the New Economy.”

According to Professor Reuven Avi-Yonah, three proposals have been proposed to deal with the current international tax rules applicable only to E-commerce. In the first proposal, he recommended to change the concept of “permanent establishment” because this concept demands a physical presence at taxing jurisdiction. As already explained, E-commerce does not require a physical presence to conduct a business in another country. He proposed that E-commerce income should be taxed as withholding tax at demand jurisdiction where the consumer resides.

Second proposal is to categorize the type of “income from services, royalties, and sale of goods” because they are taxed differently under current rules. “For electronic commerce, royalties, income from services, an income from sales all be treated as active business income, without further distinctions.” The last proposal explained about the excessive difficulty to apply transfer pricing taxation to E-commerce. “Transfer pricing in the electronic commerce context by using global profit splits on the basis of a functional analysis of the related parties involved, with any residual profit allocated to the Demand Jurisdiction.”

Different proposal made by Azam Rifat to create a Global Tax Fund institution to levy tax on global E-commerce tax. The proposal is “the imposition of a global e-commerce tax on cross-border e-commerce income and designs the details of the tax. Institutionally, this tax shall be levied and administered by a supranational institution called the Global Tax Fund and the articles sets from a framework for the design of this institution to be established by the countries in new international tax treaty. The proposal adds that global e-commerce tax revenues shall be spent on funding global public goods, such as climate stability, global communication infrastructures, and so on.”

As stated in OECD report, a suggestion of change that does not need to modify definition of a PE is “to exclude activities that do not involve human intervention by personnel, including dependent agents” so that the existing rules can preserved.
V. Review of possible solutions

1. Introduction of “Bit Tax”, replacing income tax

A “Bit Tax” is to replace income tax on profits from E-commerce transactions.

   It is good in that a state where an internet server is located can administer taxation on E-commerce transactions in accordance with the volume of information exchanged denoted by digital bit, without knowing transaction amounts. Thus a certain portion of profits from E-commerce can be allocated to a country that furnished public service for E-commerce other than a resident country of taxpayers.

   On the other hand, it has some defects. First, if a state introduces the bit tax when the other states don’t have it, taxpayers will certainly avoid installing servers in such a country since taxpayer can easily find states or regions with no bit tax in the world. As a result, the state that introduced the bit tax cannot in fact collect taxes. Secondly, the bit tax is not based on profits generated by the exchange of information, so that it doesn’t reflect an ability to pay tax by the taxpayers. It can be a harsh tax for taxpayers, which hampers global trade by E-commerce. Thirdly internet networks can pass through various servers from taxpayers to buyers, so that multiple fold taxation on the same transactions can take place.

   With the reasons above, I think the bit tax is not a good solution.

2. Prof. Avi-Yonah Proposal: Creation of new income category for income from E-commerce

   Creation of a new category of income special for profits from E-commerce transactions seems to me an innovative solution to the problems on E-commerce taxation. It is a new income category combining royalty, income from rendering service business, and business income from sales through E-commerce. In this income category, two presumptions are applied: First the income is presumed to be sourced in a country where a demand was situated. It is a deviation from the conventional source rule principle. Secondly, there is no PE threshold in determining taxable or not, instead all the incomes are taxable in a source country and are subject to withholding tax when the transactions are B2B.

   It is an attractive solution as far as all the countries agree to the solution. In other words, if only some countries adopt this solution while the other countries don’t, a risk of double taxation by dual source
taxation becomes so high, and international tax disputes may take place so frequently that competent authorities cannot deal with them within their capacity. Therefore it is a real issue how to establish the agreements in the international tax society of sovereign countries.

3. Rifat Proposal: Creation of Global Tax Fund Institution

There are many questions on the idea of establishing a supranational institution which only deals with cross-border E-commerce tax. The first question is how the institution can obtain information on cross border commerce which is a base of taxation. Does the institution obtain information from a taxpayer, a customer, or governments? If a request to submit information is rejected, what kind of countermeasure can it have? If the countermeasure is voluntary, it cannot expect compliance of the request. If the countermeasure is compulsory, an issue of violation of sovereignty taxing right may come out.

Ultimately it is extremely hard to reach an agreement on how to allocate the pooled fund to international organizations because of conflict of interest among member countries. On the whole, it is not a realistic solution to the E-commerce issues.

4. OECD Approach: No taxation in demand jurisdiction

OECD currently insists to continue applying current international taxation rule on E-commerce because of no nexus for taxation in a demand country. It is true that there is no nexus in the demand country under the conventional international tax rule. But considering that recent development of technology has eliminated the need of physical presence for business activities, a new concept for “nexus” is required under the new environment of business. In the world of business where a provider and a customer are directly connected through internet channels, the fact that the presence of either of trade partners can be a “nexus” for generations the profits from the transactions.

The current international tax rules are not presuming a business environment as today. Namely it is already obsolete.

An issue of misallocation of taxing rights on income from E-commerce will get more and more serious as years go by.
IV. Conclusion

With the review above, I conclude that the proposal of Prof. Avi-Yonah should be explored furthermore to the direction to realize the international agreements.

For that purpose, international organization such as United Nations should play a major role to do so with support of developing member countries that are on the side of customers in most cases of E-commerce. Even developed countries may start thinking that solution more seriously when E-commerce taxpayers move their residence to tax haven countries with no or little income taxes in order to enjoy full exemption of income taxes.

When considering the above, the solution will be more realistic in the near future.

Endnote

2 Ibid.
3 Ibid.
5 Ibid.
11 Zorayda Ruth Andam, supra note 4, at 10.
12 http://www.rakuten.com/.
14 Zorayda Ruth Andam, supra note 4, at 12.
15 Ibid.
18 Ibid.
19 Richard Doernberg, Luc Hinnekens, Walter Hellerstein & Jinyan Li, supra note 1, at 9.
20 Internet - The global communication network that allows almost all computers worldwide to connect and exchange information.
21 Richard Doernberg, Luc Hinnekens, Walter Hellerstein & Jinyan Li, supra note 1, at 11.
22 Id. at 12.
27 U.S. Census Bureau, (http://www.census.gov/retail/). See also (http://dstevenwhite.com/2010/08/20/u-s-e-commerce-
growth-2000-2009/).
28 Forrester research, see also <http://www.internetretailer.com/trends/sales/ >.
31 Ibid.
33 Ibid.
34 Id. at 13.
38 I.R.C. 861 (a).
39 I.R.C. 873, 874.
40 I.R.C. 864 (c) (2) (A) (B).
41 I.R.C. 871.
42 I.R.C. 871.
43 Michael Kobetsky, supra note 25, at 13.
46 Id. at 7.
48 OECD Model Treaty, Art.5.
49 Ibid.
50 OCED Model Treaty, Art.7.
51 Ibid.
52 OCED Model Treaty, Art.5 (1).
53 OCED Model Treaty, Art.5 (2).
54 OCED Model Treaty, Art.5 (3).
55 Commentary on Art.5 par 5.2.
56 OCED Model Treaty, Art.5 (4).
57 Ibid.
58 Commentary on Art.5 Para 2.
62 Commentary on Art.5 Para 42.1.
63 Commentary on Art.5 Para 42.2.
64 Id. at Para 42.5.
65 Commentary on Art.5 Para 42.2.
66 Commentary on Art.5 Para 42.3.
67 Commentary on Art.5 Para 42.9.
68 Commentary on Art.5 Para 42.6.
69 Commentary on Art.5 Para 42.10.
70 Ibid.
71 Commentary on Art.5 Para 6.
72 Ibid.
73 Commentary on Art.5 Para 16.
75 OECD report, supra note 63, at 2. See also OECD, Art.7.
78 Barrett Schaefer, supra note 41, at 124.

80 Id. at 105.

81 Simon Woodside, Fiscal Affairs at OECD.


83 Benjamin Hoffart, supra note 73, at 107.

84 Arthur Cordell is Special Advisor in the Information Technology Policy Branch of the Canadian Department of Industry in Ottawa. This is the text of a speech delivered to the International Tax Program at the Harvard Law School on February 14, 1997.


86 Reuven S. Avi-Yonah, Professor of Law and director of the International Tax LL.M. Program, University of Michigan.


88 Id. at 510.

89 Ibid.

90 Ibid.

91 Azam Rifat, Radzyner School of Law, Interdisciplinary Center Herzliya.

92 Azam Rifat, supra note 6, at 639.

93 OECD report, supra note 63, at 30.