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The OECD's Flawed and Dated Approach to Computer Servers Creating Permanent Establishments

*Monica Gianni**

ABSTRACT

As the digital economy changes the way that we do business, tax laws have been challenged to adapt appropriately to this nontraditional business method. International tax rules were developed in a different technological era. To accommodate electronic commerce, existing tax rules either have to be applied to electronic-commerce transactions, or new rules have to be developed. The Organisation for Economic Co-operation and Development (OECD) has taken the lead in studying and recommending appropriate international taxation rules for electronic commerce. This Article focuses on the original central tax issue that the OECD considered—jurisdiction to tax income from electronic commerce based on the presence of a server in a country. In pre-electronic commerce days, a sale normally could not be consummated without an enterprise having some physical presence at the locale of the customer. Income taxation rights of a country are currently premised on this model, such that an enterprise is not taxed in a country unless it has a sufficient physical presence within a country for that country to exert taxing rights over the income generated by the presence. Since the early days of electronic commerce, it has been argued that tax nexus based on geographical fixedness might no longer be applicable or relevant. Various alternatives have been proposed to tax electronic transactions.

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Projects of the European Union and the OECD Base Erosion and Profit Shifting are steps in the right direction to consider these and other options to resolve an untenable situation, which was built on a cautious strategy by the OECD that includes a now-dated and fundamentally flawed focus on computer servers.

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I. INTRODUCTION

Today we live in an economy that has been taken over by electronic commerce.¹ We download music and images, buy whatever

1. Electronic commerce has been defined as “the ability to perform transactions involving the exchange of goods or services between two or more parties using electronic tools and techniques.” OFFICE OF TAX POLICY, U.S. DEPT OF THE TREASURY, SELECTED TAX POLICY IMPLICATIONS OF GLOBAL ELECTRONIC COMMERCE § 3.2.1 (1996), available at <http://www.treasury.gov/resource-center/tax-policy/Documents/Internet.pdf> [hereinafter TREASURY REPORT], (quoting XIWT CROSS-INDUSTRY WORKING TEAM, ELECTRONIC COMMERCE IN THE NII § 1.0 (1995)). Electronic commerce has also been defined as “the use of computer networks to facilitate transactions involving the production, distribution, sale, and delivery of goods and services in the marketplace.” Howard E. Abrams & Richard L. Doernberg, *How Electronic Commerce Works*, 14 TAX NOTES INT’L 1573, 1573 (1997). Although somewhat out of

we want, trade securities, watch television programs and movies, play games, and more, all from the comfort of our homes, using our laptops, tablets, and smartphones. This scenario did not exist in the 1990s. In all likelihood, the current state of electronic commerce will look puerile ten years from now, as ever-developing technological advances take us to places we never thought possible.

As the digital economy changes the way that we do business, tax laws have been challenged to adapt appropriately to this nontraditional business method. International tax rules were developed in a different technological era. To accommodate electronic commerce, existing tax rules either have to be applied to electronic-commerce transactions, or new rules have to be developed. Income tax issues raised by electronic commerce include determining the country that has the jurisdiction to tax the income, classifying income from computer-generated transactions,² allocating income and deductions among entities of a multinational enterprise in accordance with transfer pricing rules, sourcing income generated from electronic commerce, and establishing principles for tax enforcement.³ The Organisation for Economic Co-operation and Development (OECD)⁴ has taken the lead in studying and recommending appropriate international taxation rules for electronic commerce.⁵

This Article focuses on the original central tax issue that the OECD considered—jurisdiction to tax income from electronic commerce based on the presence of a server in a country. In pre-electronic commerce days, a sale normally could not be consummated without an enterprise having some physical presence at the locale of the customer. Income taxation rights of a country are currently

date, the aforementioned article describes the workings of a system based on electronic commerce. Another article, again somewhat out of date, contains an excellent description of the basic structure of the Internet. See Kyrie E. Thorpe, *International Taxation of Electronic Commerce: Is the Internet Age Rendering the Concept of Permanent Establishment Obsolete?*, 11 EMORY INT'L L. REV. 633, 639–46 (1997).

2. The characterization of income as sales, royalties, or services can result in significantly different tax consequences.

3. See Abrams & Doernberg, *supra* note 1, at 1573; Reuven S. Avi-Yonah, *International Taxation of Electronic Commerce*, 52 TAX L. REV. 507, 516 (1997); Rifat Azam, *E-Commerce Taxation and Cyberspace Law: The Integrative Adaptation Model*, 12 VA. J.L. & TECH. 5, at 1 (2007).

4. The OECD was founded in 1961 to promote policies to improve the economic and social well-being of people around the world. The Paris-based organization provides a forum in which governments can work together to share experiences and seek solutions to common problems, including setting international standards on tax. There are currently thirty-four member countries of the OECD, primarily economically developed countries, but also including Mexico, Chile, and Turkey. See *History*, OECD, <http://www.oecd.org/about/history/> (last visited Nov. 14, 2014).

5. See discussion *infra* Part IV.

premised on this model, such that an enterprise is not taxed in a country unless it has a sufficient physical presence within a given country for that country to exert taxing rights over the income generated by the presence. The standard for exerting taxing rights over income based on presence is that an enterprise must have a sufficient nexus with a country. The technical term for such a nexus is “permanent establishment” when a tax treaty applies, or other analogous concept under local law.⁶ A tax nexus generally does not exist where the physical presence in a country is for preparatory or auxiliary activities. Further, even if a permanent establishment exists in a country, only the profits “attributable to” the permanent establishment are subject to tax. The current requirements for taxable presence are discussed in Part II, including both rules in the United States and rules applicable when an income tax treaty applies. Part III discusses generally whether a computer server can create the necessary taxable presence.

A permanent establishment requires some type of physical presence in a country in order for the country to exert taxing jurisdiction. In an electronic commerce environment, however, an enterprise does not necessarily have to have a physical presence in order to enter into a transaction with a customer. This scenario presents a conundrum in applying existing taxation standards to electronic commerce. Servers are a necessary component of an electronic commerce transaction and have a physical presence as a tangible object. The OECD and various countries have therefore considered whether, applying traditional income tax rules, a computer server is a presence sufficient to constitute a taxable presence. The OECD has, in fact, taken a firm position on this issue and has determined that, in certain cases, a server can supply the necessary physical presence. The OECD position on computer servers and permanent establishments is set forth in Part IV, the position of the United States is explained in Part V, and positions of several select countries are discussed in Part VI.

The OECD’s position on tax nexus based on computer servers has been the predominant principle used by countries in interpreting tax treaties with respect to electronic commerce. Part VII critiques the OECD position. The OECD maintains that, in determining whether a server creates a permanent establishment, the server’s functions are paramount. If the functions performed are merely preparatory or auxiliary, the presence of the server will not create a permanent establishment. If the activities that the server performs, however, are those typically performed in a sales transaction, a server

6. See discussion of US law’s standard of “US trade or business” *infra* Part II.A.

processing the transaction will create a permanent establishment. This reasoning conflicts with prior OECD guidance on preparatory or auxiliary activities outside the context of server permanent establishments. In other contexts, the OECD maintains that, in determining if an activity is, in fact, preparatory or auxiliary, the activity “in itself” must be an essential and significant part of the activity of the enterprise as a whole. But a server is merely a machine that processes a set of instructions, and thus, a computer server “in itself” cannot be an essential and significant part of an enterprise’s activity. Human beings write the programming instructions that the server automatically implements when a transaction with a customer takes place. The server does not think or exercise any business judgment. The world does not yet have computers that possess artificial intelligence, such as “HAL 9000” in the movie *2001: A Space Odyssey*. Until we have advanced to the point of “HAL,” a computer’s mere following of programmed instructions should not constitute an activity that is more than preparatory or auxiliary.

Two different groups within the OECD issued conflicting sets of guidance on the creation of a server permanent establishment and the attribution of profits to a server permanent establishment. The OECD’s position is that a server can create a permanent establishment if the functions processed by the server are those typically related to a sale. In such a case, the enterprise would be taxable on income attributable to that server permanent establishment. OECD guidance on what income is attributable to a server permanent establishment, however, states that the activities of a server are not those of a normal retail function. According to the OECD guidance, the lack of human or artificial intelligence precludes any ability to make the key decisions required in a normal sales function. If the lack of human or artificial intelligence precludes a finding that a server performs a normal sales function, then the logical conclusion is that a server cannot create a permanent establishment. After issuing its guidance that a server can create a permanent establishment, the OECD may have realized that its position that a server can constitute a permanent establishment was wrong. Another possible explanation for the conflicting guidance is that each of the working groups involved with the guidance had its own frame-of-reference and agenda. Nevertheless, the positions of the two working groups on computer server permanent establishments are seemingly irreconcilable.

The Article concludes in Part VIII that the OECD guidance on servers and permanent establishments is, at best, out of date, and at worst, flawed from its inception. The OECD’s position on server permanent establishments should be withdrawn, such that a server

can never constitute a permanent establishment at this present stage of technological development. The server permanent establishment issue is just one small piece of the many income tax issues that need to be addressed in our current age of electronic commerce. The tax laws for electronic commerce have been slowly developing, but questions remain. The OECD is addressing numerous important tax issues under its Base Erosion and Profit Shifting (BEPS) project, which it began in 2012. One study in this project involves developing detailed options to address tax difficulties in a digital economy. Although the BEPS project is well underway, much work remains to be done in the digital economy area. As part of this work, the OECD should focus on a larger solution for taxable presence for electronic commerce and revoke its guidance on computer servers creating permanent establishments, laying to rest the notion that a computer server can create a taxable presence.

II. TAXATION OF BUSINESS INCOME OF FOREIGN PERSONS

A company or individual that is not a resident of a country is taxable in that country according to its laws, or under an applicable income tax treaty. Local laws and tax treaties specify what degree of presence of a foreign person constitutes a sufficient nexus for the country to impose taxes on the foreign person's business income. The rules for taxable presence under US law and general principles under most income tax treaties are discussed below.

A. *United States*

For a non-US person performing business activities in the United States, US federal income tax is imposed at regular income tax rates on such person's business income only if the foreign person has income that is "effectively connected" with a "trade or business within the United States."⁷ Neither the Internal Revenue Code nor any Treasury Regulations define what constitutes a US trade or business—instead, it is a question of facts and circumstances.⁸ As a general rule, the foreign person's activity in the United States must be substantial, regular, and continuous, in order to constitute a US trade or business.⁹ For instance, if employees of a foreign company are

7. I.R.C. §§ 871(b)(1), 882(a)(1) (2012).

8. See, e.g., *Higgins v. Comm'r*, 312 U.S. 212, 217 (1941); *Spermacet Whaling & Shipping Co. v. Comm'r*, 30 T.C. 618, 631 (1958), *aff'd*, 281 F.2d 646 (6th Cir. 1960); *Treas. Reg. § 1.864-2(e)* (1968).

9. See, e.g., *Pinchot v. Comm'r*, 113 F.2d 718, 719 (2d Cir. 1940); *Linen Thread Co. v. Comm'r*, 14 T.C. 725, 736–37 (1950).

engaged in sales activities in the United States, the company will normally have a US trade or business.¹⁰ If the foreign company makes sales in the United States without the presence of any employees, however, the company will normally not have a US trade or business, although the activities of an agent can create a US trade or business for the foreign principal.¹¹ Further, if a foreign person's only presence in the United States is the ownership of property, this generally will not create a US trade or business.¹²

Even if a foreign person has a US trade or business, only income that is effectively connected with that US trade or business is taxed.¹³ US-source capital gains and US-source fixed or determinable annual or periodical income¹⁴ are considered effectively connected income if either: (1) the income is derived from assets used in the trade or business, or (2) the activities of the trade or business were a material factor in the realization of the income.¹⁵ All other US-source income of the foreign person is automatically effectively connected income under a limited force-of-attraction rule.¹⁶

For inventory sales, the source of the income is generally the place where title passes.¹⁷ Thus, if title passes on a sale of goods in the United States by a foreign person, the income is considered US source and effectively connected if the foreign company has a US trade or business. Certain types of foreign-source income are also effectively connected income if the foreign person has an office or other fixed place of business in the United States in limited circumstances.¹⁸ For

10. See Rev. Rul. 56-165, 1956-1 C.B. 849.

11. See, e.g., *Handfield v. Comm'r*, 23 T.C. 633, 638 (1955); *Lewenhaupt v. Comm'r*, 20 T.C. 151, 162 (1953), *aff'd per curiam*, 221 F.2d 227 (9th Cir. 1955). Although generally a dependent agent more easily creates a US trade or business for the principal, an independent agent in certain circumstances can also create a US trade or business for the foreign person. See, e.g., Rev. Rul. 80-225, 1980-2 C.B. 318. For the definition of dependent and independent agents, see *infra* notes 27–29 and accompanying text.

12. See *Herbert v. Comm'r*, 30 T.C. 26, 33 (1958).

13. See I.R.C. §§ 871(b)(1), 882(a)(1) (2012).

14. Fixed or determinable annual or periodical income (FDAPI) includes interest, dividends, rents, royalties, and service fees. § 871(a)(1)(A); Treas. Reg. § 1.871-7(b) (1999).

15. See I.R.C. § 864(c)(2) (2012).

16. See § 864(c)(3). Under force-of-attraction principles, income is “attracted” to the location where the enterprise has a permanent establishment, even though the attracted income is not earned by the permanent establishment. See *id.*

17. See I.R.C. § 861(a)(6) (2012); Treas. Reg. § 1.861-7 (1960). If the inventory sold was manufactured by the taxpayer, the income source is split between the place of manufacture and the place of sale. See I.R.C. § 863(b)(3) (2012).

18. Income from foreign-source inventory sales that are attributable to an office or other fixed place of business in the United States will generally be effectively connected income. See I.R.C. §§ 864(c)(4)(B)(iii), 865(e)(2) (2012). An office or other fixed place of business exists in the United States if there is a “fixed facility,” and the foreign person engages in a trade or business through the fixed facility. Treas. Reg. § 1.864-7(b) (1972). If there is an office, the foreign-source

a foreign person's sale of inventory, the income is US source if the sale is attributable to an office or other fixed place of business of the foreign person in the United States, even if title passes in a foreign country.¹⁹

B. Income Tax Treaty

If an income tax treaty is in effect between two countries, income of the resident of one treaty partner generally is subject to taxation only if such resident has income "attributable to" a permanent establishment in the other treaty country.²⁰ Thus, for a foreign company that qualifies for benefits under a tax treaty with the United States, the business income of the foreign person would be taxed in the United States only if the income is attributable to a US permanent establishment. That is, unlike the discussion above, the analysis would not turn on whether the income was effectively connected to a US trade or business. A taxable presence under the permanent establishment treaty standard generally requires a higher level of activity by a foreign enterprise than the US trade or business standard.

A permanent establishment is a fixed place of business through which the business of an enterprise is wholly or partly carried on,²¹ such as an office, branch, or place of management.²² Certain types of

income is attributable to the office only if the office is a material factor in the production of the income. See § 1.864-6(b)(2). "Material factor" is met by actively participating in soliciting the order, negotiating the contract of sale, or performing other significant services necessary for the consummation of the sale that are not the subject of a separate agreement between the seller and the buyer." See § 1.864-6(b)(2)(iii). The office of a dependent agent can also create an office of a foreign person if the agent either: (1) has the authority to negotiate and conclude contracts in the name of the foreign taxpayer and regularly exercises that authority, or (2) has a stock of merchandise from which it regularly fills orders. See § 864(c)(5)(A). In fact, I.R.C. § 865(e) makes otherwise foreign-source inventory income US source if the income is attributable to a US office or other fixed place of business under the same rules for determining that foreign-source inventory income is effectively connected income.

19. See §865(e)(2). See *supra* note 18 regarding when income is attributable to an office or other fixed place of business in the United States.

20. See, e.g., U.S. DEPT OF THE TREASURY, UNITED STATES MODEL INCOME TAX CONVENTION OF NOVEMBER 15, 2006 at art. 5 § 1, art. 7 § 1 (2006) [hereinafter US MODEL TREATY]; COMM. ON FISCAL AFFAIRS, OECD, *Model Convention, in* MODEL TAX CONVENTION ON INCOME AND ON CAPITAL art. 5(1), art. 7(1) (2012) [hereinafter OECD MODEL TREATY]. For a discussion of the differences between the two model treaties, see Reuven S. Avi-Yonah & Martin B. Tittle, *The New United States Model Income Tax Convention*, 61 BULL. FOR INT'L TAX'N 224, 227-233 (2007). The US Model Treaty closely follows the OECD Model Treaty, with the main difference being the inclusion of a comprehensive Limitation on Benefits provision in Article 22 of the US Model Treaty. See *id.* at 231. The OECD Model Treaty will be the basis for treaty discussions in this Article.

21. OECD MODEL TREATY, *supra* note 20, art. 5(1).

22. *Id.* art. 5(2).

activities are specifically listed in treaties as not creating permanent establishments, including storage, purchasing, and preparatory or auxiliary activities.²³ Preparatory or auxiliary activities are activities that may contribute to the productivity of the enterprise, but the services provided are so remote from the actual realization of profits that it is difficult to allocate any profit.²⁴ The decisive criterion is whether the activity “in itself” forms an essential and significant part of the activity of the enterprise as a whole.²⁵

Even if an enterprise does not have a fixed place of business in a country, it can have a permanent establishment there through an agent.²⁶ A dependent agent who acts on behalf of an enterprise creates a permanent establishment if the agent has, and habitually exercises, contracting authority in the name of the enterprise.²⁷ A dependent agent is an agent that is not within the definition of an independent agent.²⁸ An independent agent is an agent that is both legally and economically independent, and acts in the ordinary course of its business when acting on behalf of an enterprise.²⁹ An independent agent does not create a permanent establishment if it is acting in the ordinary course of its business.³⁰

If an enterprise has a permanent establishment in a country, only income attributable to the permanent establishment is taxed in that country.³¹ The amount of “attributable to” income is determined as if the enterprise and the permanent establishment are independent entities, engaged in the same or similar activities under the same or similar conditions, taking into account the functions performed, assets used and risks assumed by the enterprise through both the permanent establishment and through the other parts of the enterprise.³² The

23. *Id.* art. 5(4).

24. COMM. ON FISCAL AFFAIRS, OECD, *Commentary on Article 5 Concerning the Definition of Permanent Establishment*, in MODEL TAX CONVENTION ON INCOME AND ON CAPITAL ¶ 23 (2012) [hereinafter OECD Article 5 Commentary].

25. *Id.* ¶ 24.

26. OECD MODEL TREATY, *supra* note 20, art. 5(5), (6).

27. *Id.* art. 5(5).

28. *Id.* ¶ 32.

29. OECD Article 5 Commentary, *supra* note 24, ¶ 37. Whether an agent is independent of the enterprise represented depends on the extent of the obligations the agent has for the enterprise. *Id.* ¶ 38. Important considerations in determining the independent or dependent status of an agent include whether the agent is subject to detailed instructions from, and comprehensive control by, the enterprise, and whether the agent or the enterprise bears the entrepreneurial risk. For further discussion as to what constitutes an independent agent see *id.* ¶¶ 38, 38.1–8.

30. OECD MODEL TREATY, *supra* note 20, art. 5(6).

31. *Id.* art. 7(1).

32. *Id.* art. 7 (2). In 2008, the OECD issued a Report on the Attribution of Profits to Permanent Establishments, which was approved by the OECD Committee on Fiscal Affairs

arm's-length principle of the transfer pricing rules of Article 9 of the OECD Model Treaty is applied in determining the amount attributed to the permanent establishment.³³ To apply the principle, profits are attributed to a permanent establishment in a two-step process: (1) a functional and factual analysis that identifies risks attributable to the permanent establishment,³⁴ and (2) application of the OECD Transfer Pricing Guidelines³⁵ by analogy to dealings between the permanent establishment and the enterprise.³⁶

III. CAN A COMPUTER SERVER CREATE A TAXABLE PRESENCE?

The rules described above in Part II on the taxation of business income to foreign persons were developed before the advent of electronic commerce. When these rules first came into force, it was generally important to the consummation of a sale that an enterprise have a physical presence where the customer was located. Thus, both the US concept of US trade or business, and the treaty concept of permanent establishment, require a physical presence before a country can tax an enterprise's income.³⁷

With technological advances allowing an enterprise to engage in sales to customers through electronic commerce without any physical presence at the locale of the customer, how to apply the existing US trade or business or permanent establishment rules—which both require a physical presence—becomes increasingly

(CFA) as a "better approach to attributing profits to permanent establishments than has previously been available." OECD, REPORT ON THE ATTRIBUTION OF PROFITS TO PERMANENT ESTABLISHMENTS 7 (2008), available at <http://www.oecd.org/tax/transfer-pricing/41031455.pdf> [hereinafter OECD 2008 PROFITS REPORT]. Article 7 and the Article 7 Commentary were thereafter amended in the OECD Model Treaty as of July 22, 2010. The OECD issued the 2010 Report on the Attribution of Profits to Permanent Establishments to update the OECD 2008 Profits Report to refer to the new Article 7 provisions without changing the conclusions of the original report. OECD, 2010 REPORT ON THE ATTRIBUTION OF PROFITS TO PERMANENT ESTABLISHMENTS 9 (2010), available at <http://www.oecd.org/ctp/transfer-pricing/45689524.pdf> [hereinafter OECD 2010 PROFITS REPORT]. The initial discussion draft that preceded the OECD 2008 Profits Report and the OECD 2010 Profits Report was published in 2001. See OECD, DISCUSSION DRAFT ON THE ATTRIBUTION OF PROFITS TO PERMANENT ESTABLISHMENT (2001), available at <http://www.oecd.org/ctp/transfer-pricing/1923028.pdf> [hereinafter OECD 2001 PROFITS DRAFT].

33. COMM. ON FISCAL AFFAIRS, OECD, *Commentary on Article 7 Concerning the Taxation of Business Profits*, in MODEL TAX CONVENTION ON INCOME AND ON CAPITAL ¶ 22 (2012) [hereinafter OECD Article 7 Commentary].

34. *Id.* ¶ 21.

35. OECD, OECD TRANSFER PRICING GUIDELINES FOR MULTINATIONAL ENTERPRISES AND TAX ADMINISTRATIONS (2010).

36. See OECD Article 7 Commentary, *supra* note 33, ¶ 22.

37. An agent can also create a taxable presence. See *supra* notes 11, 26–30 and accompanying text.

difficult. Further, one must ask whether a US trade or business or permanent establishment basis for taxation is even relevant any more in an age of electronic commerce.³⁸ Computer servers are necessary for an enterprise to make a sale through electronic commerce, and, as tangible objects, they necessarily possess a physical presence somewhere. Whether this physical presence should create a nexus for income taxation is the issue at hand.

Before proceeding with an examination of this issue, it is important to understand what a server does. A server has been variously defined as:

- “[A] computer that stores information for access by users of a network”;³⁹
- “[A] computer networked to the Internet that enables businesses, inter alia, to post websites and to sell goods or services over the Internet”;⁴⁰
- “A computer or device on a network that manages network resources”;⁴¹ and
- “[A] computer that shares resources with other computers on the network and which is used to accept a customer’s calls.”⁴²

In all of these definitions, a server is a computer. A computer is a “programmable machine” that “responds to a specific set of instructions . . . and it can execute a prerecorded list of instructions . . . called software.”⁴³ At this point in the development of computers, a server cannot make decisions, except to the extent that it follows programmed instructions that give formulaic or other set guidelines. This aspect makes a server different from a computer that has artificial intelligence, i.e., that behaves like a human being in making decisions in real-life situations.⁴⁴ Currently, no computers can simulate human behavior such that they could be said to have artificial intelligence.⁴⁵

38. See, e.g., Azam, *supra* note 3, at 20; Thorpe, *supra* note 1, at 644–45.

39. TREASURY REPORT, *supra* note 1, at 45.

40. Arthur Cockfield, *Should We Really Tax Profits From Computer Servers? A Case Study in E-Commerce Taxation*, 21 TAX NOTES INT’L 2407, 2407 (2000).

41. Vangie Beal, *Server*, WEBOPEDIA, <http://www.webopedia.com/TERM/S/server.html> (last visited Nov. 11, 2014).

42. Ine Lejeune et al., *Does Cyber-Commerce Necessitate a Revision of International Tax Concepts?*, 38 EUR. TAX’N 2, 2 (1998).

43. Vangie Beal, *Computer*, WEBOPEDIA, <http://www.webopedia.com/TERM/C/computer.html> (last visited Nov. 11, 2014).

44. Vangie Beal, *AI-artificial intelligence*, WEBOPEDIA, http://www.webopedia.com/TERM/A/artificial_intelligence.html (last visited Nov. 11, 2014).

45. See Marcus du Sautoy, *Can Computers Have True Artificial Intelligence?*, BBC (Apr. 2, 2012), <http://www.bbc.com/news/technology-17547694>.

Following this background on business income taxation based on physical presence and issues raised in connection with these taxation principles in a digital economy, the discussion below details the OECD's and various countries' views on whether computer servers can create a taxable presence.

IV. OECD APPROACH

A. *OECD General*

The OECD is a leading global body for determining international standards for taxation.⁴⁶ The OECD's Committee on Fiscal Affairs (CFA) sets international standards for tax and oversees the creation and maintenance of the OECD Model Treaty.⁴⁷ The OECD Model Treaty was initially published in 1963 and is used mainly as a means of settling the most common problems that arise in the field of international double taxation on a uniform basis.⁴⁸ Member countries are expected to conform their tax treaties to the OECD Model Treaty, and tax authorities are expected to follow commentaries to the OECD Model Treaty.⁴⁹

The OECD took the lead in addressing tax issues related to electronic commerce at the Ministerial Conference on Electronic Commerce, held in October 1998 in Ottawa, Canada (the Ottawa Conference), entitled "A Borderless World—Realising the Potential of Electronic Commerce."⁵⁰ At this conference, the OECD's CFA published the "Taxation Framework Conditions."⁵¹ The Taxation Framework Conditions set forth the tension that exists regarding taxation of electronic commerce—governments must provide for an environment in which electronic commerce can flourish while operating a fair and predictable taxation system.⁵² The broad taxation principles that should apply to electronic commerce are neutrality,

46. See *supra* note 4 and accompanying text for a general description of the OECD.

47. COMM. ON FISCAL AFFAIRS, OECD, *Introduction*, in MODEL TAX CONVENTION ON INCOME AND ON CAPITAL ¶ 8 (2012) [hereinafter OECD, *Introduction*].

48. *Id.* ¶ 3.

49. *Id.*; The Commentary to the OECD MODEL TREATY, *supra* note 20, has been recognized by US federal courts as "helpful," *N. W. Life Assurance Co. of Can. v. Comm'r*, 107 T.C. 363, 378 (1996), and as "persuasive in resolving disputed interpretations," *Nat'l Westminster Bank, PLC v. United States*, 44 Fed. Cl. 120, 125 (1999).

50. See COMM. ON FISCAL AFFAIRS, OECD, ELECTRONIC COMMERCE: TAXATION FRAMEWORK CONDITIONS (1998). The OECD earlier held an informal discussion on electronic commerce in Turku, Finland, in November 1997 and identified issues regarding permanent establishments, including whether a website or a server could constitute a permanent establishment. *Id.* ¶ 15.

51. *Id.* ¶ 15.

52. See *id.* ¶ 2.

efficiency, certainty and simplicity, effectiveness and fairness, and flexibility.⁵³ The CFA determined that, for electronic commerce taxation, established international tax rules could implement these principles, even if new administrative or legislative measures would be needed.⁵⁴ In a 2001 report on the progress made in implementing the Taxation Framework Conditions,⁵⁵ the OECD stated that these conditions had been generally accepted by most countries as providing a sound basis for ongoing work on the taxation of electronic commerce.⁵⁶

B. Server Permanent Establishment

One of the first areas that the OECD addressed following the Ottawa Conference was the effect of electronic commerce on the concept of permanent establishment. An OECD Working Party⁵⁷ issued a draft report in October 1999,⁵⁸ subsequently revised in March 2000,⁵⁹ which studied the application of the definition of permanent establishment to electronic commerce. The Working Party concluded that the permanent establishment language of Article 5 of the OECD Model Treaty did not have to be changed to accommodate electronic commerce. It did, however, recommend that the Article 5 Commentary be revised to address electronic commerce issues regarding permanent establishments. The CFA adopted this recommendation on December 20, 2000,⁶⁰ by issuing a new chapter in the Article 5 Commentary (E-Commerce Chapter).⁶¹

53. See *id.* ¶ 9.

54. *Id.* ¶¶ 4, 5.

55. OECD, TAXATION AND ELECTRONIC COMMERCE—IMPLEMENTING THE OTTAWA TAXATION FRAMEWORK CONDITIONS (2001) [hereinafter OECD FRAMEWORK REPORT].

56. *Id.* at 10.

57. The Working Party No. 1 on Tax Conventions and Related Questions (Working Party No. 1) is a subsidiary body of the CFA.

58. WORKING PARTY NO. 1, OECD, DRAFT ON THE APPLICATION OF THE PERMANENT ESTABLISHMENT DEFINITION IN THE CONTEXT OF ELECTRONIC COMMERCE: PROPOSED CLARIFICATION OF THE COMMENTARY ON ARTICLE 5 OF THE OECD MODEL TAX CONVENTION (1999).

59. WORKING PARTY NO. 1, OECD, REVISED DRAFT ON THE APPLICATION OF THE PERMANENT ESTABLISHMENT DEFINITION IN THE CONTEXT OF ELECTRONIC COMMERCE: PROPOSED CLARIFICATION OF THE COMMENTARY ON ARTICLE 5 OF THE OECD MODEL TAX CONVENTION (2000).

60. COMM. ON FISCAL AFFAIRS, OECD, CLARIFICATION ON THE APPLICATION OF THE PERMANENT ESTABLISHMENT DEFINITION IN E-COMMERCE: CHANGES TO THE COMMENTARY ON THE MODEL TAX CONVENTION ON ARTICLE 5 (2000) [hereinafter OECD ARTICLE 5 CLARIFICATION]. The changes to the OECD *Article 5 Commentary*, *supra* note 24, are also set forth in the OECD FRAMEWORK REPORT, *supra* note 55, at 82–85.

61. See OECD *Article 5 Commentary*, *supra* note 24, ¶¶ 42.1–42.10.

The E-Commerce Chapter discusses whether the presence of a computer server can create a permanent establishment.⁶² A server can create a permanent establishment only if it overcomes several hurdles. First, the server must be a fixed place of business.⁶³ In certain cases, machinery and equipment can constitute a fixed place of business.⁶⁴ In order to be fixed, the server must be located at a particular place for a period of time.⁶⁵ If the server remains at a physical location long enough to be considered fixed, it potentially can be a permanent establishment.⁶⁶ If a server owned by an Internet Service Provider (ISP) hosts a website, this will not result in a permanent establishment for the website company because a website has no physical presence.⁶⁷ Further, the ISP will not create a permanent establishment of the website company as an agent.⁶⁸ If the enterprise, carrying on the business through a website, has a computer server at its disposal (e.g., it owns or leases the server on which the website is stored and used), however, the location of the server could constitute a permanent establishment.⁶⁹

Second, if a server is a fixed place of business, then the business of the enterprise must be carried on through the server, a determination that is made on a case-by-case basis.⁷⁰ Carrying on a business through a server does not require that any personnel of the enterprise be at the location of the server. This position is consistent with the OECD Article 5 Commentary, which recognizes that automatic pumping equipment can create a permanent establishment.⁷¹ The OECD also has previously recognized that a gaming or vending machine (“and the like”) can constitute a permanent establishment if the enterprise sets up the machine, and

62. *Id.*

63. OECD MODEL TREATY, *supra* note 20, art. 5(1).

64. OECD Article 5 Commentary, *supra* note 24, ¶ 2.

65. *Id.* ¶ 42.4. The US Internal Revenue Service has ruled that ten weeks is not sufficient to constitute “fixed” under the permanent establishment definition, although six months is sufficient. Rev. Rul. 67-322, 1967-2 C.B. 469; Rev. Rul. 67-321, 1967-2 C.B. 470.

66. OECD Article 5 Commentary, *supra* note 24, ¶ 42.2.

67. *Id.* ¶ 42.3.

68. *Id.* ¶ 42.9; OECD MODEL TREATY, *supra* note 20, art. 5(5), (6). The activities of the ISP, however, will constitute a permanent establishment for the ISP, because the operation of the ISP’s servers is an essential part of its commercial activity. OECD Article 5 Commentary, *supra* note 24, ¶ 42.10.

69. OECD Article 5 Commentary, *supra* note 24, ¶ 42.10.

70. *Id.* ¶ 42.5.

71. *Id.* ¶¶ 10, 42.6.

operates and maintains the machine itself or through a dependent agent for its own account.⁷²

Third, even if a server is a fixed place of business through which business is carried on, the server will constitute a permanent establishment only if the activities performed by the server do not constitute preparatory or auxiliary activities.⁷³ It is therefore necessary to analyze what activities the server is performing. If the server is merely providing information or advertising, for example, then the server will not create a permanent establishment. On the other hand, if the server is performing functions that are an essential and significant part of the business activity of the enterprise, the server will constitute a permanent establishment.⁷⁴ For example, assume a server concludes contracts with customers, processes payments, and delivers the product automatically through the server. These activities comprise functions that are both essential and significant, and exceed activities that are merely preparatory or auxiliary. They would therefore constitute a permanent establishment.⁷⁵

C. Profits Attributable to a Server Permanent Establishment

With the issue of whether a server can create a permanent establishment settled by the E-Commerce Chapter, the OECD moved on to the question of what profits can be attributed to a server permanent establishment. As described above,⁷⁶ business profits are taxable to an enterprise when an income tax treaty applies only if the profits are attributable to a permanent establishment.⁷⁷ The OECD Technical Advisory Group on Monitoring the Application of Existing Treaty Norms for the Taxation of Business Profits (Business Profits TAG) issued a discussion paper in 2001 on the attribution of profits to a permanent establishment for electronic commerce.⁷⁸ The purpose of

72. See *id.* ¶ 10. See *supra* notes 27–29 and accompanying text for the definition of dependent agent.

73. See discussion regarding preparatory or auxiliary activities *supra* Part II.B; see also, OECD Article 5 Commentary, *supra* note 24, ¶ 42.7.

74. OECD Article 5 Commentary, *supra* note 24, ¶ 42.8.

75. See *id.* ¶ 42.9.

76. See discussion *supra* Part II.B.

77. OECD MODEL TREATY, *supra* note 20, art. 7.

78. TECHNICAL ADVISORY GROUP ON MONITORING THE APPLICATION OF EXISTING TREATY NORMS FOR THE TAXATION OF BUSINESS PROFITS, OECD, ATTRIBUTION OF PROFIT TO A PERMANENT ESTABLISHMENT INVOLVED IN ELECTRONIC COMMERCE TRANSACTIONS (2001), available at <http://www.oecd.org/tax/treaties/1923312.pdf> [hereinafter OECD PROFITS ATTRIBUTION PAPER]. The Business Profits TAG was established to help implement the Taxation Framework Conditions. See discussion of the Taxation Framework Conditions *supra* Part IV.A.

the Business Profits TAG was to determine how the treaty rules for attribution of business profits to a permanent establishment apply for electronic commerce,⁷⁹ with particular emphasis on the attribution of profits to a server permanent establishment.⁸⁰

The OECD Profits Attribution Paper illustrates the steps required to attribute profits to an enterprise distributing products via the Internet through the use of a fictitious enterprise, Starco, under several variations.⁸¹ Starco distributes music and movies through orders placed on a website hosted on a server owned by Starco. In the first variation, the server is run without the assistance of any personnel, and, under the E-Commerce Chapter, the server constitutes a permanent establishment. The website enables customers to choose the products to purchase, place orders, and receive order confirmation. The enterprise fulfills orders placed through its website either by the server sending a message to a distribution center located outside of country B, or by the server allowing the customer to download directly from its website.⁸²

In order to determine the profits attributable to the server permanent establishment, one must perform the two-step Article 7 analysis.⁸³ The first step is a functional and factual analysis to determine which activities, including any risks, are associated with the server.⁸⁴ The functions performed by the server permanent establishment are described in the immediately preceding paragraph, using Starco's hardware, software, and marketing intangibles.⁸⁵ The OECD Profits Attribution Paper examined these functions and compared them to the functions that a retail outlet normally performs.⁸⁶ The OECD determined that the server did not perform most of the functions of a traditional retail business, stating: "The lack of human or artificial intelligence in the permanent establishment precludes any ability to bargain, make key decisions or carry out many of these elements of a normal sales or distribution function."⁸⁷ Regarding the risks assumed by the server permanent establishment,

79. See OECD PROFITS ATTRIBUTION PAPER, *supra* note 78, ¶¶ 3, 12.

80. See *id.* ¶¶ 40–100. The OECD Profits Attribution Paper was issued several months after the OECD issued a general discussion paper on the attribution of profits to a permanent establishment. See OECD 2001 PROFITS DRAFT, *supra* note 32. The "Working Hypothesis" of the OECD 2001 Profits Draft is reflected in the current revised Article 7 and OECD Article 7 Commentary, *supra* note 33.

81. See OECD PROFITS ATTRIBUTION PAPER, *supra* note 78, ¶ 40–100.

82. See *id.* ¶¶ 41–46.

83. *Id.* ¶ 47; see *supra* notes 34–36 and accompanying text.

84. OECD PROFITS ATTRIBUTION PAPER, *supra* note 78, ¶¶ 28–31.

85. See *id.* ¶¶ 49–51.

86. See *id.* ¶ 62.

87. *Id.* ¶ 63.

the OECD found that the lack of personnel at the server site resulted in the assumption of only routine risks directly related to the automated functions the server performed.⁸⁸ Further, the OECD concluded that the server's functions were more like a sales support function, and the permanent establishment should therefore be considered a service provider and not a retailer.⁸⁹

The second step of the "attributable to" analysis involves using the OECD transfer pricing rules to determine the appropriate compensation that the permanent establishment should receive if it were a separate enterprise.⁹⁰ The server permanent establishment should be entitled to a cost-plus service fee for the support services it provides under a contract service provider model,⁹¹ and a comparable uncontrolled price compensation for an independent service provider model.⁹² This fee would be "insignificant relative to either the value of transactions processed through the permanent establishment or the arm's length cost of securing the use of the hardware and software required to ensure the continuous operation of the server without human intervention."⁹³ The OECD recognized that:

[T]he [server] permanent establishment is only performing low-level automated functions that make up only a small proportion of the functions necessary to act as a full function retail outlet/distributor or as a full function service provider. The level of profit earned is likely to be commensurately low and be very significantly less than that earned by full function retail outlet/distributors or full function service providers.⁹⁴

The OECD Profits Attribution Paper next considers a variation of the single server issues initially examined⁹⁵ in which personnel are present in country B to maintain the server, perform repairs, and address any problems affecting the website, including troubleshooting

88. See *id.* ¶ 70.

89. See *id.* ¶¶ 64, 70. The server permanent establishment would be a "contract service provider," if the enterprise's head office retains ownership of hardware, software and other tangible and intangible property. Alternatively, the server permanent establishment could be an "independent service provider" if the tangible and intangible assets used by the server had been acquired by the server permanent establishment. *Id.* ¶¶ 74–76.

90. *Id.* ¶¶ 72–73; see *supra* notes 31–36 and accompanying text.

91. OECD PROFITS ATTRIBUTION PAPER, *supra* note 78, ¶ 104. In an independent service provider model, the service fee to which the server permanent establishment is entitled should be reduced by an arm's-length charge to the head office for the use of tangible and intangible property. *Id.* ¶ 102.

92. *Id.* ¶¶ 95–96.

93. *Id.* ¶ 105.

94. *Id.*

95. The second variation involves the use of several servers in different countries, such that the volume of transactions is shared among the servers. *Id.* ¶¶ 111–17. The OECD Profits Attribution Paper reaches the same conclusion as in the first variation, i.e., that minimal profits would be attributed to the servers, while recognizing that administrative and compliance issues may be more difficult. See *id.* ¶ 115.

with website visitors. In the variation, the personnel also provide post-sales services and support to customers, generally online.⁹⁶ Little changes from the stand-alone server analysis, i.e., a cost-plus service fee would be required to be paid to a contract service provider, and a comparable uncontrolled price to an independent service provider.⁹⁷ The permanent establishment does not rise to the level of a full retail operation, and significant risks remain with the head office.⁹⁸

In a further variation, the enterprise has personnel in country B that developed the website used on the server, incurring significant development costs.⁹⁹ The permanent establishment is thus the “owner” of the intangible property, although the text concedes that this is somewhat unrealistic, as this would mean that the intangibles were developed to provide a long-term benefit to the permanent establishment, not for other parts of Starco.¹⁰⁰ Thus, in this variation, the permanent establishment would need to have additional profit attributed to it as the economic owner of the intangibles under a comparable uncontrolled price method.¹⁰¹

D. Other Guidance

In 2005, the Business Profits TAG published its final report on whether current rules for taxing business profits could be applied to electronic commerce.¹⁰² The OECD Business Profits Report examined alternatives to the current treaty rules for taxing business profits and specifically addressed several issues related to computer servers creating permanent establishments.¹⁰³ One change considered was a modification of the permanent establishment definition to exclude activities that do not involve human intervention by personnel.¹⁰⁴ Proponents of this option argued that the lack of human intervention implies that only limited functions are performed with restricted risks, and thus only limited profits should be attributed to any such permanent establishment.¹⁰⁵ From a practical point of view, a specific

96. *Id.* ¶ 118.

97. *Id.* ¶¶ 127–28.

98. *Id.* ¶¶ 124–26.

99. *Id.* ¶ 129.

100. *See id.* ¶ 131.

101. *Id.* ¶¶ 132–38.

102. *See* TECHNICAL ADVISORY GRP. ON MONITORING THE APPLICATION OF EXISTING TREATY NORMS FOR THE TAXATION OF BUS. PROFITS, OECD, ARE THE CURRENT TREATY RULES FOR TAXING BUSINESS PROFITS APPROPRIATE FOR E-COMMERCE?: FINAL REPORT (2005), available at <http://www.oecd.org/tax/treaties/35869032.pdf> [hereinafter OECD BUSINESS PROFITS REPORT].

103. *See id.*

104. *Id.* ¶¶ 129–45.

105. *Id.* ¶ 132.

exclusion in such a case would have significant advantages in terms of certainty, compliance burden, and administrative costs.¹⁰⁶ Other OECD members, however, felt that the proposed exception would make an unjustified distinction between activities performed through automated equipment and those performed by personnel.¹⁰⁷ Furthermore, the exception would exclude situations in which an enterprise made use of assets located in a country.¹⁰⁸ The OECD concluded that this alternative would, in all likelihood, not be adopted and did not need further consideration.¹⁰⁹

The OECD also considered a modification that would preclude the existence of a permanent establishment from a server alone.¹¹⁰ Proponents of this position claimed that this would obviate the need to register permanent establishments in multiple countries, where arbitrary and minimal profits would be attributed to server permanent establishments that only perform a communication function.¹¹¹ Other OECD members took the opposite position, maintaining that servers had to constitute permanent establishments in order to uphold basic principles of permanent establishments.¹¹² Another alternative considered was that software should be excluded when applying the preparatory or auxiliary exception.¹¹³ The OECD concluded that neither the server nor software option should be pursued; however, it felt the rules regarding servers and software should be monitored to determine whether they raise practical difficulties or concerns, which could lead to further study.¹¹⁴

The OECD Business Profits Report also considered a number of other proposals that relate to the server permanent establishment issue. One proposal would modify existing rules to add a force-of-attraction rule¹¹⁵ for sales via electronic commerce in a location where an enterprise otherwise has a permanent establishment.¹¹⁶ The OECD determined that they would not pursue this option.¹¹⁷ Another proposal was an electronic virtual permanent

106. *Id.*

107. *Id.* ¶ 134.

108. *Id.*

109. *Id.* ¶ 353.

110. *Id.* ¶¶ 146–61.

111. *Id.* ¶ 157.

112. *Id.*

113. *Id.* ¶¶ 162–77.

114. *Id.* ¶ 353.

115. For an explanation of force-of-attraction principles, see *supra* note 16.

116. OECD BUSINESS PROFITS REPORT, *supra* note 102, ¶¶ 215–33.

117. *Id.* ¶ 353.

establishment,¹¹⁸ which could be constituted by a website on a server located in a jurisdiction,¹¹⁹ the conclusion of contracts on a website even though the website is not located in the jurisdiction,¹²⁰ or simply an economic presence regardless of any physical presence.¹²¹ The OECD found there was no support for this proposal.¹²²

Outside of examining specific proposals, the OECD noted the difficulty in tracing the location from which electronic commerce transactions originate. Specifically, the OECD recognized tax avoidance opportunities with servers—opportunities such as locating a server in a low-tax jurisdiction, splitting business functions for commercial transactions between different servers, and having websites hosted by ISPs.¹²³ Nevertheless, the OECD recognizes that such planning would have little effect on tax revenues, as very little profits would be attributed to functions performed through a server or website.¹²⁴ The OECD has subsequently confirmed that, if no personnel are associated with a server, little or no profit would be attributable to a server permanent establishment.¹²⁵

V. UNITED STATES APPROACH

A. Guidance

Prior to the OECD's Ottawa Conference in 1998,¹²⁶ the US Department of the Treasury issued the Treasury Report in November 1996 that addressed tax policy implications of global electronic commerce.¹²⁷ The Treasury Report was intended to be the first step in determining how principles of international tax policy should be reexamined in light of electronic commerce. The Treasury Report's goal was "to develop a framework for analysis that would not impede electronic commerce."¹²⁸ The US Department of the Treasury determined that, in most cases, existing tax principles would need to

118. *Id.* ¶¶ 322–48.

119. *Id.* ¶ 323.

120. *Id.* ¶ 324.

121. *Id.* ¶ 325.

122. *Id.* ¶ 352.

123. *Id.* ¶ 78; see discussion *supra* Part IV.B, in reference to OECD *Article 5 Commentary*, *supra* note 24, ¶ 42.3 (stating that a website hosted by an ISP does not create a permanent establishment for the enterprise whose website is being hosted).

124. OECD BUSINESS PROFITS REPORT, *supra* note 102, ¶ 78.

125. OECD 2010 PROFITS REPORT, *supra* note 32, ¶ 66; OECD 2008 PROFITS REPORT, *supra* note 32, ¶ 95.

126. See discussion *supra* Part IV.A.

127. See TREASURY REPORT, *supra* note 1.

128. *Id.* § 1.

be adapted and reinterpreted in order to accommodate technological developments, with new concepts needed only in extreme cases.¹²⁹ The Treasury Report reached no conclusions as to how to adapt or create new tax rules to technology.

The US Department of the Treasury did, however, determine that neutrality should be a “fundamental guiding principle,” such “that the tax system treats economically similar income equally,” regardless of whether earned through traditional or electronic commerce.¹³⁰ The starting point for examining tax rules for electronic commerce, therefore, had to be existing tax principles.¹³¹ A subsequent US government report in 1997 from the White House confirmed that existing taxation concepts and principles should be looked to whenever feasible.¹³²

The Treasury Report recognized that it is possible for a foreign person to engage in electronic commerce transactions with US customers while having no physical presence in the United States.¹³³ In fact, electronic commerce does not require any physical location and instead can occur in cyberspace.¹³⁴ Because of this new way of conducting business, the Treasury Report concluded that the US trade or business and treaty permanent establishment concepts needed to be clarified when addressing electronic commerce.¹³⁵

Specifically with regard to computer servers, the Treasury Report discussed whether the physical presence of a server in the United States could create a US taxable presence.¹³⁶ The Treasury Report states that “[i]t is possible that such a server, or similar equipment, is not a sufficiently significant element in the creation of certain types of income to be taken into account for purposes of determining whether a US trade or business exists.”¹³⁷ The Treasury Report recognized that, if a server does create a taxable presence, such a rule could result in tax manipulation by simply locating a server outside the United States.¹³⁸ Of particular note is the Treasury

129. *See id.*

130. *Id.* § 6.2.

131. *See id.* §§ 7.1.1–7.2.3.

132. *See* THE WHITE HOUSE, A FRAMEWORK FOR GLOBAL ELECTRONIC COMMERCE 8 (1997).

133. *See* TREASURY REPORT, *supra* note 1, § 7.2.3.1.

134. *Id.*

135. *See id.*

136. *See id.*

137. *Id.*

138. *See id.*

Report's categorical statement that: "The location of a server is irrelevant since it can be accessed by users around the world."¹³⁹

Following the publication of the Treasury Report and the White House Report, the OECD held the Ottawa Conference in 1998.¹⁴⁰ Two years later, the Advisory Commission on Electronic Commerce (the Commission) issued a report to the US Congress.¹⁴¹ Congress had created the Commission to produce recommendations on electronic commerce and tax policy.¹⁴² In its report, the Commission proposed that, with respect to international taxes on goods and services, the United States should

Recognize the OECD's leadership role in coordinating international dialogue concerning the taxation of e-commerce, affirm support for the principles of the OECD's framework conditions for taxation of e-commerce, and support the OECD's continued role as the appropriate forum for . . . fostering effective international dialogues concerning these issues¹⁴³

Furthermore, the Commission suggested that the United States should work to build international consensus that existing taxation principles should be applied to accommodate changing forms of business activity, with clarifications as needed.¹⁴⁴ It further recommended that all countries should delay modifying their tax systems in order to develop an international consensus on electronic commerce taxation, and the United States should refrain from adopting legislation that is inconsistent with these principles.¹⁴⁵ This report was issued before the OECD Article 5 Clarification,¹⁴⁶ the OECD Profits Attribution Paper,¹⁴⁷ and the OECD Business Profits Report.¹⁴⁸ Besides the Treasury Report and the Advisory Commission Report,¹⁴⁹ the United States has issued no further guidance.

139. *Id.* § 3.1.2.

140. *See* discussion *supra* Part IV.A.

141. *See* ADVISORY COMM'N ON ELEC. COMMERCE, REPORT TO CONGRESS (2000), available at http://govinfo.library.unt.edu/e-commerce/acec_report.pdf.

142. *See id.* at 3.

143. *Id.* at 42.

144. *See id.*

145. *See id.* at 43.

146. *See* OECD ARTICLE 5 CLARIFICATION, *supra* note 60.

147. *See* OECD PROFITS ATTRIBUTION PAPER, *supra* note 78.

148. *See* OECD BUSINESS PROFITS REPORT, *supra* note 102.

149. *See* ADVISORY COMM'N ON ELEC. COMMERCE, *supra* note 141; TREASURY REPORT, *supra* note 1.

B. Application to US Law

1. US Trade or Business

Under the Internal Revenue Code, a necessary requirement for the United States to exercise taxing jurisdiction over a foreign person's business income is that the foreign person have a US trade or business.¹⁵⁰ The Treasury Report states that the presence of a server by itself may not be a sufficiently significant element in making a determination whether there is a US trade or business.¹⁵¹ Conceivably, however, it could be a sufficiently significant element.

One case of potential relevance is *Piedras Negras Broadcasting Co. v. Commissioner*.¹⁵² In this case, the taxpayer was a Mexican corporation that operated a radio station from facilities in Mexico. Ninety-five percent of its income came from advertisers in the United States and 90 percent of its listeners were located in the United States. All services were provided in Mexico.¹⁵³ The court held that the company did not have a US trade or business because all broadcast facilities were outside the United States and all services were performed outside the United States, even though the advertising was aimed at US listeners.¹⁵⁴

This case suggests that web advertising on servers located outside the United States does not create a US trade or business for a foreign company. Further, if a foreign company has no presence in the United States but makes electronic sales to US customers through servers located outside the United States, the foreign company should have no US trade or business. What is not clear, however, is whether the mere presence of equipment in the United States (i.e., the broadcast facilities in the *Piedras* case and a server in the case of electronic commerce), with all services performed outside the United States, would result in a finding that a foreign company has a US trade or business. Courts have held that the mere ownership of real property and the performance of minimal acts incident to the ownership of that real property do not rise to the level of a US trade or business.¹⁵⁵ By analogy, this concept could apply to servers as well,

150. See discussion *supra* Part II.A.

151. See TREASURY REPORT, *supra* note 1, § 7.2.3.1.

152. See *Piedras Negras Broad. Co. v. Comm'r.*, 43 B.T.A. 297 (1941), *aff'd*, 127 F.2d 260 (5th Cir. 1942).

153. See *id.* at 301–03.

154. See *id.* at 307.

155. See, e.g., *Herbert v. Comm'r.*, *supra* note 12 at 33.; *Neill v. Comm'r.*, 46 B.T.A. 197, 198 (1942).

such that the mere presence of a server would not create a US trade or business.¹⁵⁶

According to the Advisory Commission Report, the United States should support the OECD's leadership role concerning the taxation of electronic commerce.¹⁵⁷ As discussed above,¹⁵⁸ the OECD has determined that a server can create a permanent establishment in certain circumstances. The Advisory Commission Report further states that the United States should refrain from taking contrary positions to the international consensus on electronic commerce taxation.¹⁵⁹ Since the level of activity required for creating a US trade or business is generally less than that required to create a permanent establishment, it would be a contrary position if the United States took the position that a server cannot create a US trade or business. The United States has taken no official position, nor enacted any law, that would cause a server to create a US trade or business. The US government has apparently been mindful of the warning in the Treasury Report that if a server does create a US trade or business, then foreign persons will simply locate servers outside of the United States.¹⁶⁰

2. Effectively Connected Income

If a server can, by itself, create a US trade or business, the income from electronic-commerce sales made through the server would need to be effectively connected with the US trade or business in order to be taxable business income of a foreign person in the United States.¹⁶¹ Income from sales of a foreign person would be effectively connected with a server trade or business if title passed in the United States on the sale. If title passed outside the United States, the income from the sales would additionally have to be

156. As part of the Tax Reform Act of 1986, Pub. L. No. 99-514, 10 Stat. 2085, a sourcing provision was added to the Internal Revenue Code for international communications income. Under this provision, a non-US person's international communications income is considered to be foreign source if the non-US person has no office or other fixed place of business in the United States. I.R.C. § 863(e)(1)(B) (2012). If the income is attributable to a US office or other fixed place of business in the United States, the income is US source. *Id.*; Treas. Reg. § 1.863-9(b)(2)(iii) (1960). This statute does not, however, address the issue of what would constitute a US trade or business for international communications activities.

157. See ADVISORY COMM'N ON ELEC. COMMERCE, *supra* note 141, at 42.

158. See discussion *supra* Part IV.B.

159. See ADVISORY COMM'N ON ELEC. COMMERCE, *supra* note 141, at 43.

160. See TREASURY REPORT, *supra* note 1, § 7.2.3.1. The OECD has also recognized that it is easy to locate a server in a low-tax jurisdiction. See OECD BUSINESS PROFITS REPORT, *supra* note 102, ¶ 78. The OECD, however, notes that little profits would be allocated to a server and hence planning involving the locations of servers would have little effect on tax revenues. See *id.*

161. See discussion *supra* Part II.A; *supra* note 18 and accompanying text.

attributable to a US office in order to be effectively connected. A server potentially could constitute a fixed facility in the United States that would be a US office to which sales of inventory by a foreign person could be attributed. The office would result in US taxation, however, only if the foreign person has a US trade or business through the server and only if the foreign person is considered as doing business through the server.¹⁶² Further, even if a server creates a US office, the income would be attributable to the server only if the server office materially participated in the order solicitation, negotiation of the contract of sale, or the active performance of other significant services necessary for the consummation of the sale.¹⁶³ The United States has issued no guidance as to whether orders processed by a foreign person's server located in the United States can constitute the required material participation that would result in effectively connected income.

3. Income Tax Treaties

If a US tax treaty applies, instead of the US trade or business analysis discussed immediately above, the foreign person would be taxable in the United States only if it has income attributable to a US permanent establishment.¹⁶⁴ The United States has provided no guidance as to when a server located in the United States would constitute a US permanent establishment. Additionally, no US authorities give guidance on how profits would be attributed to a server permanent establishment.

Several US income tax treaties contain provisions that provide that a permanent establishment exists where a taxpayer's business is carried on through equipment.¹⁶⁵ For instance, the maintenance of substantial equipment or machinery for a certain time period creates a permanent establishment under the Barbados Treaty and the Israel

162. See discussion *supra* Part II.A; *supra* note 18 and accompanying text.

163. See discussion *supra* Part II.A; *supra* note 18 and accompanying text.

164. See discussion *supra* Part II.B.

165. See, e.g., Convention for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, U.S.-Austl., art. 5(4)(b), Aug. 6, 1982, 35 U.S.T. 1999 [hereinafter Australia Treaty]; Convention for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, with Exchange of Notes, U.S.-Barb., art. 5(2)(l), Dec. 31, 1984, T.I.A.S. 11090 [hereinafter Barbados Treaty]; Convention with Respect to Taxes on Income, U.S.-Isr., art. 5(2)(l), Nov. 20, 1975, available at <http://www.irs.gov/pub/irs-trty/israel.pdf> [hereinafter Israel Treaty] (entered into force Dec. 30, 1994); Convention for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, with Related Notes, U.S.-Morocco, art. 4(4), Aug. 1, 1977, 33 U.S.T. 2545 [hereinafter Morocco Treaty].

Treaty.¹⁶⁶ The Morocco Treaty limits the creation of a permanent establishment for the presence of equipment to substantial equipment for rental for a period of more than six months. The Australia Treaty also limits the type of equipment to substantial equipment for rental or other purposes for a period of more than twelve months. The “Technical Explanations” provide little additional information, except that the Israel Treaty does list a drilling rig as an example of substantial equipment or machinery.¹⁶⁷ These treaties were all entered into force before the advent of substantial electronic commerce (from 1977 to 1995). It was clearly not envisaged that a computer server was included in treaty provisions that create a permanent establishment from the presence of machinery or equipment. Despite this lack of intent to include servers within these provisions, it is nevertheless possible that the presence of a server in the United States by a resident of Australia, Barbados, or Israel could potentially fall within these treaty provisions and create a permanent establishment through the server. A server should not create a permanent establishment in Morocco, however, because the provision of the treaty that addresses equipment is limited to equipment used for leasing.

Although the United States has not taken any official position on whether a server can create a permanent establishment, the United States would, in general, be expected to follow the OECD position.¹⁶⁸ Further, the Advisory Commission Report recommended that the United States recognize the leadership role of the OECD regarding electronic commerce transactions.¹⁶⁹ In addition, when the OECD issued the OECD Article 5 Clarification recognizing that a server could create a permanent establishment, the United States did not officially object to this position.¹⁷⁰ Consequently, the logical conclusion is that the United States could find that a server creates a

166. Barbados Treaty, *supra* note 165, art. 5(2)(1) (requiring more than 120 days); Israel Treaty, *supra* note 165, art. 5(2)(1) (requiring more than six months).

167. Technical Explanation of the Convention Between the Government of the United States of America and the Government of the State of Israel with Respect to Taxes on Income, Signed at Washington, D.C. on November 20, 1975, as Amended by a Protocol Signed at Washington, D.C. on May 30, 1980, at 8, available at <http://www.irs.gov/pub/irs-trty/israeltech.pdf>.

168. According to Joseph Guttentag, a former senior US Treasury official, “The [new server and PE] rules present a reasonable compromise . . .” Arthur J. Cockfield, *Reforming the Permanent Establishment Principle Through a Quantitative Economic Presence Test*, 38 CAN. BUS. L.J. 400, 406 (2003).

169. See ADVISORY COMM’N ON ELEC. COMMERCE, *supra* note 141, at 42.

170. In contrast, the United Kingdom did officially object to the position that a server can create a permanent establishment in an electronic commerce retailer context in OECD *Article 5 Commentary*, *supra* note 24, ¶ 45.5.

permanent establishment under its treaty network, and even more so under the Australia, Barbados, and Israel tax treaties that have specific provisions regarding equipment.

In summary, one can only conjecture what the US position might be regarding whether a computer server can create a US trade or business or permanent establishment. In the absence of any authorities on point, however, a foreign person locating a server in the United States would be at risk that the United States would exercise taxing jurisdiction based on the server's presence, whether or not a tax treaty applies.¹⁷¹

VI. APPROACHES OF SELECTED COUNTRIES

Although the United States has not taken an official position on servers creating a taxable presence in the United States, other countries have.¹⁷² At one extreme is the United Kingdom, which recognizes the strain on the permanent establishment definition where the server is located in one country without the presence of any personnel in that country.¹⁷³ The United Kingdom has taken the express position that a server that conducts electronic commerce through a website on the server cannot constitute a permanent establishment.¹⁷⁴ This position holds regardless of whether the server is owned, rented, or otherwise at the disposal of the business.¹⁷⁵ The United Kingdom's reservation to the OECD position on servers is noted in the Article 5 Commentary.¹⁷⁶

Other countries, including Singapore¹⁷⁷ and Hong Kong,¹⁷⁸ have also officially stated that a server by itself cannot create a

171. A 2013 article encouraged the United States to be at the forefront in determining tax rules for electronic commerce, beginning with the uncertain issue regarding servers as creating a taxable presence. The article notes in this regard that "any approach is better than none at all." Christopher Trester, *To Tax or Not to Tax, That Is the Question: A Critique of the United States' Policy on Taxation of Servers*, 9 HASTINGS BUS. L.J. 351, 372 (2013).

172. For discussion of the positions of other countries, see Randolph J. Buchanan, *The New-Millennium Dilemma: Does Reliance on the Use of Computer Servers and Websites in a Global Electronic Commerce Environment Necessitate a Revision to the Current Definition of a Permanent Establishment?*, 54 SMU L. REV. 2109, 2140-45 (2001), and Arthur J. Cockfield, *The Rise of the OECD as Informal 'World Tax Organization' Through National Responses to E-Commerce Tax Challenges*, 8 YALE J.L. & TECH. 136, 149-50 (2006).

173. See HM REVENUE & CUSTOMS, INTM266100, *E-commerce, E-tailers, Servers and Internet Trading*, INT'L MANUAL, available at <http://www.hmrc.gov.uk/manuals/intmanual/INTM266100.htm>.

174. See *id.*

175. *Id.*

176. OECD Article 5 Commentary, *supra* note 24, ¶ 45.5.

177. INLAND REVENUE AUTH. OF SING., INCOME TAX GUIDE ON E-COMMERCE § 12.1.1 (3d ed. 2001).

permanent establishment. Singapore takes the position that the mere presence of a server is not sufficient to constitute a permanent establishment. Instead, all of the business activities of a foreign person in Singapore must be considered together, including any server that would be regarded as a communication tool.¹⁷⁹ Hong Kong similarly considers all of a foreign person's operations in Hong Kong, in addition to the presence of a server. The mere presence of a server, "even if an intelligent one—i.e. capable of concluding contracts, processing payments or delivering digital goods"—would not create a permanent establishment if there are no human activities.¹⁸⁰

In 2013, the Canada Revenue Agency (CRA) issued a ruling¹⁸¹ regarding whether a data center operated by a Canadian member of a multinational group created a permanent establishment for the US parent company under the income tax treaty between the United States and Canada.¹⁸² Under the facts of this ruling, a Canadian affiliate of a US parent acquired assets to operate a data center in Canada, which hosted the group's website that stored user data, advertised, and processed transactions. Employees of the Canadian company were responsible for the operation and maintenance of the data center equipment while employees of the US parent company managed the data center from outside of Canada and visited the data center from time to time. The CRA determined that the US company did not have a permanent establishment in Canada. This ruling is the first time that a country has determined that management of applications and data of a server from outside of that country does not cause the parent to have a server at its disposal and, hence, a permanent establishment.

The other end of the spectrum includes countries that have determined that a server by itself can create a permanent establishment. In 2007, Italy issued a ruling for a French company that offers video game subscriptions to Italian customers using servers located in Italy but whose configuration and operation are carried out in France. The tax authorities confirmed that the OECD analysis would be used to determine if these particular servers created a permanent establishment, and concluded that where all the stages of

178. INLAND REVENUE DEPT H.K., DEPARTMENTAL INTERPRETATION AND PRACTICE NOTES NO. 39: PROFITS TAX TREATMENT OF ELEC. COMMERCE ¶ 11 (2001).

179. See INLAND REVENUE AUTH. OF SING., *supra* note 177, § 12.1.1.

180. INLAND REVENUE DEPT H.K., *supra* note 178, ¶ 11.

181. CAN. REVENUE AGENCY, CRA DOCUMENT NO. 2012-0432141R3, E-SERVER AS A PERMANENT ESTABLISHMENT (2012).

182. See Convention with Respect to Taxes on Income and on Capital, U.S.-Can., Sept. 26, 1980, T.I.A.S. 11087.

the business were carried out electronically via the servers, the servers would constitute a permanent establishment.¹⁸³

More recently, in 2013, the Supreme Administrative Court of Sweden annulled a ruling by the Tax Board for Advance Rulings, which had determined that a server did create a permanent establishment.¹⁸⁴ At issue was a foreign company X that owned a server in rented premises that was made available to foreign company Y, its parent, for storing software. The server was automated with maintenance carried on outside Sweden. The Tax Board ruled that company X had a permanent establishment, but company Y did not have a permanent establishment, as its business with the server was auxiliary or preparatory. The Swedish tax authorities did not agree that company X had a permanent establishment and appealed to the court. Unfortunately, the court did not rule on the merits and annulled the ruling due to lack of factual clarity. In making their decisions, both the Tax Board and the court referred to the E-Commerce Chapter, which the court noted is somewhat ambiguous. Sweden attempted to follow the OECD guidance in the OECD E-Commerce Chapter, but there is apparently a lack of consensus within the country as to what would constitute a server permanent establishment.

India, a country that is not a member of the OECD, has determined that a server alone can constitute a permanent establishment. A confidential settlement agreement under competent authority proceedings was reportedly reached in 2003 with a US multinational company that attributed profits to an Indian server permanent establishment.¹⁸⁵ Subsequently, in 2012, the India Authority for Advance Rulings determined that the server of a foreign company created a permanent establishment.¹⁸⁶ In that ruling, a French company intended to enter into an agreement to provide information technology services to its Indian subsidiary, with all services to be provided from France through servers owned by the French company located in India. The tax authorities ruled that the French company had a permanent establishment, relying on the

183. See Marco Rossi, *Tax Authorities Issue Ruling on Permanent Establishment*, 46 TAX NOTES INT'L 1006, 1007 (2007) (discussing Resolution 119 of May 28, 2007, of the Italian tax authorities).

184. See Marcus Hoy, *Swedish Court Annuls Ruling of PE Status for Server, Citing Insufficient Information*, 22 TAX MGMT. TRANSFER PRICING REP. 1065, 1065 (2014) (discussing court decision 4890-13).

185. See Jonathan Rickman, *Indian, U.S. Authorities Agree Server Constitutes PE*, 32 TAX NOTES INT'L 134, 134 (2003).

186. See AREVA T&D India Ltd., AAR/876/2010 (2012), ¶ 20 (India).

India-France income tax treaty,¹⁸⁷ which included machinery or equipment within its definition of permanent establishment. Reference was made to the commentary in the OECD Model Treaty, which states that a permanent establishment can exist through automatic equipment.¹⁸⁸

France has generally followed the position of the OECD regarding server permanent establishments. France has, however, made clear that the presence of a server alone will be an auxiliary activity and, hence, not constitute a permanent establishment unless there are people involved. In certain circumstances, however, the French position is that a server alone, which completely and autonomously performs an enterprise's core function, could be a permanent establishment.¹⁸⁹ France does not consider this position satisfactory and released a report in 2013 that proposes a virtual permanent establishment approach, wherein data uploaded by a consumer could by itself create a permanent establishment.¹⁹⁰ Under pressure from France, the European Union organized a working group to devise a new taxation framework to address electronic commerce.¹⁹¹ The European Union established a Commission High Level Expert Group on Taxation of the Digital Economy to pursue this study; its report is expected in the first half of 2014.¹⁹²

France is not the only country raising a virtual permanent establishment approach. In a 2012 case in Spain, the Spanish Central Economic-Administrative Court held that the Spanish subsidiary of the Dell Computer group constituted a permanent establishment for a Dell Irish sales company, Dell Products Ltd.¹⁹³ Dell Products Ltd.

187. Agreement for the Avoidance of Double Taxation in Respect of Taxes on Income, Fr.-India, Feb. 12, 1970.

188. See OECD Article 5 Commentary, *supra* note 24, ¶ 20.

189. See Marcellin N. Mbwa-Mboma, *France, OECD Take Different Views of Unstaffed Servers as Permanent Establishments*, 2002 WORLDWIDE TAX DAILY 102-5 (2002) (citing Ministerial Reply 56961, JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE [J.O.] [OFFICIAL GAZETTE OF FRANCE], Jan. 22, 2001).

190. See PIERRE COLLIN & NICOLAS COLIN, MINISTÈRE DE L'ÉCONOMIE ET DES FINANCES, MINISTÈRE DU REDRESSEMENT PRODUCTIF, MISSION D'EXPERTISE SUR LA FISCALITÉ DE L'ÉCONOMIE NUMÉRIQUE (2013) [hereinafter FRENCH REPORT], available at http://www.economie.gouv.fr/files/rapport-fiscalite-du-numerique_2013.pdf.

191. See Joe Kirwin, *EU Targets Digital Companies' Tax Evasion, Seeks Modern Framework to Protect Base*, E-COMMERCE TAX REP. (Oct. 23, 2013).

192. See *Expert Group on Taxation of the Digital Economy*, EUR. COMMISSION, http://ec.europa.eu/taxation_customs/taxation/gen_info/good_governance_matters/digital_economy/index_en.htm (last updated Nov. 19, 2014).

193. See Alistair M. Nevius, *Foreign Tax Collectors Threaten to Ensnare Internet Sellers with "Virtual" Nexus*, CGMA MAG. (Sept. 25, 2013), <http://www.cgma.org/magazine/news/pages/20138804.aspx?TestCookiesEnabled=redirect> (discussing Spanish Central Economic-Administrative Court decision R.G. 2107-07).

hosted a website outside of Spain, through which Spanish sales were effected, although it had no employees in Spain. Dell Products Ltd. had a Spanish subsidiary, whose employees translated the Web pages, reviewed content, and administered the Dell website. The court determined that, based on the E-Commerce Chapter, Dell Products Ltd. had a virtual permanent establishment in Spain.¹⁹⁴

VII. CRITIQUE OF OECD APPROACH

The OECD position on tax nexus based on computer servers has been the predominant principle used by countries in interpreting tax treaties and their own domestic laws. As described above in Parts V and VI, most countries follow the OECD approach to computer server permanent establishments (Italy and India), some countries make modifications to this approach (Hong Kong, Singapore, and France), at least one country formally rejects the OECD's position (the United Kingdom), some countries cannot reach an internal consensus (Sweden), and one country (the United States) remains silent.

The plurality of scholarly opinion on whether a server can create a permanent establishment, however, is against a server permanent establishment. Arthur J. Cockfield has written prolifically on computer servers creating permanent establishments,¹⁹⁵ and he takes the strong position that computer servers should never create permanent establishments for several reasons: (1) there are millions of computer servers that could create permanent establishments, making it very difficult for tax authorities to monitor or enforce; (2) there may be no connection between the software the server uses and the place where value is added or the good or service consumed; (3) income can be shifted to low-tax jurisdictions by moving the server; and (4) servers as permanent establishments depart from traditional international income tax notions of a fixed site that creates a permanent establishment and cannot be moved without significant

194. See *id.*; see also Gary D. Sprague, *Spanish Court Imposes Tax Nexus by Finding a "Virtual PE"*, 42 TAX MGMT. INT'L J. 48, 48 (2013) (concluding court's interpretation of E-Commerce Chapter "gravely flawed").

195. See generally Arthur J. Cockfield, *Balancing National Interests in the Taxation of Electronic Commerce Business Profits*, 74 TUL. L. REV. 133 (1999); Arthur J. Cockfield, *Designing Tax Policy for the Digital Biosphere: How the Internet Is Changing Tax Laws*, 34 CONN. L. REV. 333 (2002) [hereinafter Cockfield, *Designing Tax Policy*]; Cockfield, *supra* note 168; Cockfield, *supra* note 40; Cockfield, *supra* note 172; Arthur J. Cockfield, *Through the Looking Glass: Computer Servers and E-Commerce Profit Attribution*, 25 TAX NOTES INT'L 269 (2002) [hereinafter Cockfield, *Through the Looking Glass*]; Arthur J. Cockfield, *Transforming the Internet into a Taxable Forum: A Case Study in E-Commerce Taxation*, 85 MINN. L. REV. 1171 (2001).

costs.¹⁹⁶ The two main deficiencies with server permanent establishments are: (1) they do not effectively allocate taxing jurisdiction and revenue to source countries, and (2) the mobility of servers offers tax-planning opportunities for shifting income outside of residence countries.¹⁹⁷

Professor Cockfield is not alone in his position on servers. Other scholars have variously written that the “most consistent and correct solution consists in the exclusion of servers from the notion of permanent establishment,”¹⁹⁸ and the OECD approach “cannot lead to well-established taxation of e-commerce income.”¹⁹⁹ Further, a server permanent establishment is a “tax treaty fiction[],” is an “inappropriate approach,”²⁰⁰ and “does not work in a world of electronic commerce where information is transmitted in intangible form.”²⁰¹

Practitioners Gary Sprague and Rachel Hersey take a seemingly contrary position and maintain that the existing permanent establishment rules that require a physical presence are robust and flexible enough to adjust to electronic commerce, citing the OECD application of permanent establishment rules to servers as an example.²⁰² They also argue, however, that a dependent agent cannot conclude a contract,²⁰³ unless the agent exercises business judgment,²⁰⁴ specifically referencing call centers and electronic retail operations where software concludes the contract.²⁰⁵ Their position regarding dependent agents is equally applicable to a server

196. Cockfield, *supra* note 172, at 172.

197. *Id.*

198. Davide M. Parrilli, *Tax Treatment of Companies Providing Grid Services: Direct v. Indirect Taxation*, in VALUE ADDED TAX AND DIRECT TAXATION: SIMILARITIES AND DIFFERENCES 743, 757 (Michael Lang et al. eds., 2009); see David M. Parrilli, *Grid and Taxation: The Server as Permanent Establishment in International Grids*, GECON 2008, at 89, 100 (2008), available at <http://ssrn.com/abstract=1246582>.

199. Azam, *supra* note 3, at 29.

200. Aldo Forgiione, *Clicks and Mortars: Taxing Multinational Business Profits in the Digital Age*, 26 SEATTLE U. L. REV. 719, 731, 763 (2003).

201. Oleksandr Pastukhov, *International Taxation of Income Derived from Electronic Commerce: Current Problems and Possible Solutions*, 12 B.U. J. SCI. & TECH. L. 310, 319 (2006).

202. See Gary D. Sprague & Rachel Hersey, *Permanent Establishments and Internet-Enabled Enterprises: The Physical Presence and Contract Concluding Dependent Agent Tests*, 38 GA. L. REV. 299, 319–20 (2003). Gary Sprague has subsequently confirmed his position that such issues can be addressed by focusing on fundamental international tax concepts. See Michael Bologna, *BEPS Process Will Force Nations to Rethink Taxation of Cloud-Based Transactions*, E-COMMERCE TAX REP. (Nov. 12, 2013).

203. Under OECD MODEL TREATY, *supra* note 20, at art. 5(5), a dependent agent can create a permanent establishment if the agent has, and habitually exercises, contracting authority. See *supra* notes 26–30 and accompanying text.

204. See Sprague & Hersey, *supra* note 202, at 328–29.

205. See *id.* at 328–31.

permanent establishment analysis, i.e., servers should not be able to create a permanent establishment since servers cannot exercise business judgment: “[Business judgment] certainly is not exercised by the magnetic orientations which constitute the execution of the software program itself.”²⁰⁶

Applying a business judgment standard to determine whether a server can constitute a permanent establishment is consistent with OECD permanent establishment guidance. The OECD maintains in the E-Commerce Chapter that one must look at the functions performed by the server to determine if the activities are preparatory or auxiliary (and thus not a permanent establishment).²⁰⁷ If the activities performed by the server are those typically related to a sale—the conclusion of the contract, processing of payment, and delivery of products—then a server permanent establishment would be created.²⁰⁸ In spite of this statement in the E-Commerce Chapter, the OECD’s decisive criterion as to whether an activity is preparatory or auxiliary is whether the activity “in itself” forms an essential and significant part of the activity of the enterprise as a whole.²⁰⁹ Without the ability of a server to exercise business judgment, the server’s activity in itself cannot constitute an essential part of the activity of the enterprise as a whole. One should therefore conclude that the OECD’s own guidance on preparatory or auxiliary activities would require that a server that only processes electronic commerce transactions always be a preparatory or auxiliary activity and, hence, never a permanent establishment. Another commentator takes a similar approach, finding that a server interacting with consumers is acting more as a communications device than a place where business is carried on and, thus, is preparatory or auxiliary.²¹⁰ Maintaining that a server that concludes contracts is a permanent establishment is a step too far from the OECD’s own definition of preparatory or auxiliary activities.

In addition, the OECD’s Profits Attribution Paper²¹¹ supports a position that a server that concludes contracts cannot constitute a permanent establishment, as its activities are preparatory or auxiliary. When analyzing what profits are attributed to a server permanent establishment, the OECD Profits Attribution Paper states that the activities of the server permanent establishment are not

206. *Id.* at 341.

207. OECD *Article 5 Commentary*, *supra* note 24, ¶ 42.9.

208. *Id.*

209. *Id.* ¶ 24.

210. See Pamela Jensen, *Proposed Guidance on Selected Issues in Cross-Border Electronic Commerce Transactions*, *WORLDWIDE TAX DAILY* ¶ 76 (Sept. 26, 2001).

211. OECD PROFITS ATTRIBUTION PAPER, *supra* note 78.

those of a normal retail function, with the lack of human or artificial intelligence precluding any ability to make key decisions of a normal sales function.²¹² Further, the functions of the server are merely low-level, automated functions that represent only a small proportion of retail functions.²¹³ The OECD Profits Attribution Paper states that only a “quantum of profit that is insignificant relative to . . . the value of transactions processed through the permanent establishment” would be attributed to the server.²¹⁴ This is consistent with the Article 5 Commentary defining preparatory or auxiliary activities as those activities so removed from the actual realization of profits that it is difficult to allocate profits to the activity.²¹⁵

The E-Commerce Chapter and the OECD Profits Attribution Paper are directly at odds and seemingly irreconcilable.²¹⁶ If the activities of a server are only a small part of a retail electronic commerce operation, they necessarily will be preparatory or auxiliary activities and not a permanent establishment. With no ability to make business judgments, a server is simply a machine processing instructions from software developed elsewhere, regardless of what transactions the server is processing. If, in the future, a server becomes more than a machine acting on instructions and actually possesses artificial intelligence like HAL 9000 in the movie *2001: A Space Odyssey*, tax nexus rules would need to be re-examined. But we have not yet advanced to the point of HAL computers, and servers should be recognized for what they are today—machines doing what they have been programmed to do. Following programmed instructions is clearly a preparatory or auxiliary function, regardless of whether the software results in storage, advertising, or actual processing of a contract.

Another argument for a server to create a permanent establishment is by the mere fact that the server is a machine. The Article 5 Commentary²¹⁷ and certain income tax treaties²¹⁸ provide that equipment and machinery can create a permanent establishment. The OECD has specifically recognized several types of machines and equipment as creating permanent establishments—gaming machines,

212. See *id.* ¶¶ 63, 70.

213. *Id.* ¶ 105.

214. *Id.*

215. See OECD Article 5 Commentary, *supra* note 24, ¶ 23.

216. This contradiction is well said by Arthur Cockfield, who states that servers perform negligible profit-making activities so that little profit will be attributed to them, yet servers must perform important functions or they would not constitute permanent establishments. See Cockfield, *Designing Tax Policy*, *supra* note 195, at 292–93.

217. OECD Article 5 Commentary, *supra* note 24, ¶¶ 2, 10.

218. See *supra* notes 165–71 and accompanying text.

vending machines, and the like. It is, however, possible to distinguish a server from a gaming or vending machine, as a server does not process an entire transaction while the other machines do. Servers should therefore not fall in the catch-all category of “and the like.”²¹⁹ A server is also not like a pipeline, another machine that has been recognized as a permanent establishment.²²⁰ Unlike a pipeline, a server’s location does not require any connection with its income-producing activity. A server does not require links to the local community and economy, as other permanent establishments do.²²¹ The OECD Business Profits Report compared servers to other types of machines.²²² Proponents of the position that servers cannot in themselves constitute permanent establishments argued that the contribution of humans is much more important in the server context than for other machines. Therefore, “an activity that might have appeared as a core activity may be classified as preparatory or auxiliary in the case of automated business.”²²³ Because of these distinctions with other machines, a server should not be considered a permanent establishment due to its status as a machine.²²⁴

Besides the existing OECD guidance suggesting that servers do not constitute permanent establishments, the main argument for not having a server constitute a permanent establishment is the opportunity for tax manipulation.²²⁵ In fact, both the US Department of the Treasury and the OECD have recognized this possibility.²²⁶ If a server does create a permanent establishment, then it can be moved to a tax haven. Profits will be attributed to the server permanent establishment and thus either escape tax entirely or be taxed at a low tax rate. A server does not have to be located in any particular locality, a fact also recognized by the US Department of the

219. OECD *Article 5 Commentary*, *supra* note 24, ¶ 10; *see supra* note 70 and accompanying text.

220. OECD *Article 5 Commentary*, *supra* note 24, ¶ 42.5.

221. *See* Trester, *supra* note 171, at 364.

222. *See* OECD BUSINESS PROFITS REPORT, *supra* note 102, ¶¶ 146–54.

223. *Id.* ¶ 154.

224. If, however, a server were to be considered a permanent establishment, the particular software that it is acting upon should be considered irrelevant. The server permanent establishment would simply be considered a service provider, with appropriate profits allocated to it as a service provider. *Id.* ¶¶ 102–04.

225. Other scholars have recognized this potential tax strategy. *See, e.g.,* Azam, *supra* note 3; Buchanan, *supra* note 172; Cockfield, *Designing Tax Policy*, *supra* note 195; Cockfield, *Through the Looking Glass*, *supra* note 195; Pastukhov, *supra* note 201; *The Tax Man Cometh to Cyberspace*, 14 TAX NOTES INT’L 1833 (1997); Thorpe, *supra* note 1; Trester, *supra* note 171; Jensen, *supra* note 210.

226. *See* TREASURY REPORT, *supra* note 1, § 7.3.5; OECD BUSINESS PROFITS REPORT, *supra* note 102, ¶ 78.

Treasury.²²⁷ Thus, an enterprise could place a server at a tax advantageous locale, without regard to where its customers are located. The planning opportunities created by a server permanent establishment concept clearly outweigh the continuation of any position that servers should create permanent establishments.

Indeed, the situation with electronic commerce has evolved to the point where large multinational corporations are seemingly avoiding tax nexus in all but low- or no-tax jurisdictions. Several US companies have had damning headlines about their avoidance of income taxes in countries, particularly in Europe, where the US companies have customers, but pay little tax.²²⁸ Although the tax planning strategies of such companies go beyond the server's location, the erosion of the tax base in many countries led the OECD to take action, beginning a comprehensive project on BEPS in 2012.

The OECD released its first report under this project in February 2013, which contains a comprehensive review of existing international tax rules.²²⁹ The OECD BEPS Report specifically recognizes that developments from a digital economy are putting pressure on well-established international tax principles, including the concept of permanent establishment.²³⁰ Further, the report acknowledges that a company can be heavily involved in the economic life of another country without a physical presence or presence through an agent.²³¹ An action plan came several months after the OECD BEPS Report.²³² The Action Plan sets out fifteen actions to complete over a two-year period.²³³ Addressing tax challenges of the digital economy is Action 1 and involves identifying the main difficulties that the digital economy poses for applying existing international tax rules and developing detailed options to address these difficulties.²³⁴ This action also includes the issue of a company having a significant digital presence in the economy of another country without being liable to tax in that country because of lack of

227. See TREASURY REPORT, *supra* note 1, § 3.1.2.

228. See Ian Allison, *Europe Cracks Down on Google, Apple, Facebook and the Data-Driven Tax Black Hole*, INT'L BUS. TIMES (Dec. 12, 2013), <http://www.ibtimes.co.uk/tax-internet-ec-oecd-google-facebook-apple-529601>; Tom Bergin, *Special Report: How Big Tech Stays Offline on Tax*, REUTERS (July 23, 2013), <http://www.reuters.com/article/2013/07/23/us-tax-bigtech-idUSBRE96M08W20130723>.

229. See OECD, ADDRESSING BASE EROSION AND PROFIT SHIFTING (2013) [hereinafter OECD BEPS REPORT].

230. See *id.* at 35.

231. See *id.* at 36.

232. See OECD, ACTION PLAN ON BASE EROSION AND PROFIT SHIFTING (2013) [hereinafter OECD ACTION PLAN].

233. See *id.* at 24–25.

234. *Id.* at 14.

tax nexus.²³⁵ Rather than focusing on the narrow issue of a server creating a permanent establishment, the OECD is moving forward to develop a more comprehensive strategy.

VIII. CONCLUSION

The tax world is at a crossroads and must take concrete action to establish international tax rules that better align rights to tax with economic activity.²³⁶ The OECD initially followed a conservative strategy of relying on existing international tax principles in tackling commerce in the late 1990s.²³⁷ Although this method may have seemed appropriate, given the newness of a digital economy, this path was not always met with approval. While the current permanent establishment definition may provide uniformity and certainty, it is functionally inadequate for electronic-commerce transactions consummated by either a computer server or website.²³⁸ Since the early days of electronic commerce, it has been argued that tax nexus based on geographical fixedness might no longer be applicable or relevant.²³⁹ The process of implementing piecemeal changes should be stopped,²⁴⁰ and new rules that are specifically designed to handle the unique characteristics of electronic commerce transactions should be put in place.²⁴¹

Various alternatives have been proposed to tax electronic transactions.²⁴² These include residence-based taxation,²⁴³ source- or consumption-based taxation,²⁴⁴ a bit tax on digital data transmitted through the internet,²⁴⁵ and a virtual permanent establishment

235. *Id.*

236. *See id.* at 11.

237. This position found limited support among scholars and commentators. *See* Sprague & Hersey, *supra* note 202, at 342 (“None of this suggests, however, that a thoughtful application of accepted tax principles to the ‘new’ economy won’t continue to meet the goals of good tax policy.”).

238. *See* Buchanan, *supra* note 172, at 2151.

239. *See* Thorpe, *supra* note 1, at 655. Note that this was written by the author in 1997 and is even more on point at this time.

240. *See* Oleksandr Pastukhov, *Going Where No Taxman Has Gone Before: Preliminary Conclusions and Recommendations Drawn from a Decade of Debate on the International Taxation of E-Commerce*, 36 RUTGERS COMPUTER & TECH. L.J. 1, 12 (2009).

241. *See* Buchanan, *supra* note 172, at 2151.

242. *See, e.g.,* Pastukhov, *supra* note 240; Sprague & Hersey, *supra* note 202.

243. *See* TREASURY REPORT, *supra* note 1, § 7.1.5; Thorpe, *supra* note 1, at 690; Jensen, *supra* note 210, ¶ 81–82.

244. *See* Avi-Yonah, *supra* note 3, at 539; Trester, *supra* note 171.

245. *See* Luc Soete & Karin Kamp, *The Bit Tax: Taxing Value in the Emerging Information Society*, in *THE NEW WEALTH OF NATIONS: TAXING CYBERSPACE* 83, 85 (1997); FRENCH REPORT, *supra* note 190 (proposing such a tax as one alternative method of addressing tax issues in a digital economy).

concept.²⁴⁶ The European Union²⁴⁷ and OECD BEPS²⁴⁸ projects are steps in the right direction to consider these and other options to resolve an untenable situation, which was built on a cautious strategy that includes a now-dated and fundamentally flawed focus on computer servers. The OECD recognized early on that the current rules regarding servers should be monitored to determine whether they raise practical difficulties or concerns.²⁴⁹ As seen from the difficulties discussed herein, the OECD should focus on a larger solution for taxable presence for electronic commerce and revoke its guidance on computer servers creating permanent establishments, laying to rest the notion that a computer server can create a taxable presence. The time has come to move forward with another strategy at this “turning point in the history of international co-operation on taxation.”²⁵⁰

246. See *supra* notes 189–94 and accompanying text. The United States opposes the virtual permanent establishment concept to address the digital economy. See Alex M. Parker, *U.S. Officials Blast “Virtual PE” Concept, Saying VAT Could Capture Online Sales*, 22 TAX MGMT. TRANSFER PRICING REP. 720, 720 (2013) (quoting Brett York, Attorney Advisor with the Office of International Tax Counsel at the US Department of Treasury).

247. See *supra* notes 191–92 and accompanying notes.

248. See *supra* notes 228–35 and accompanying notes.

249. See OECD BUSINESS PROFITS REPORT, *supra* note 102, ¶ 353.

250. OECD ACTION PLAN, *supra* note 232, at 25.