

ARTICLE

INTERNATIONAL TAXATION OF INCOME DERIVED FROM ELECTRONIC COMMERCE: CURRENT PROBLEMS AND POSSIBLE SOLUTIONS

OLEKSANDR PASTUKHOV*

TABLE OF CONTENTS

I.	INTRODUCTION	
II.	E-COMMERCE AND THE CURRENT INTERNATIONAL TAX REGIME	
	A. <i>What Electronic Commerce Is and How It Generates Income</i>	
	B. <i>An Overview of the Current Regime of International Income Taxation</i>	
	C. <i>The Current International Tax Regime's Failure to Accommodate Electronic Commerce</i>	
	D. <i>The Tax Competition Problem</i>	
III.	ANALYZING PROPOSALS FOR CHANGING THE SYSTEM OF INTERNATIONAL INCOME TAXATION TO RESPOND TO THE RISE OF ELECTRONIC COMMERCE	
	A. <i>The Conservative Approach: Preserving the Current Mix of Residence- and Source-Based Taxation</i>	
	B. <i>The Evolutionary Approach: Switching to Residence-Based Taxation</i>	
	C. <i>Revolutionary Approaches: Switching the Emphasis to Consumption-Based Taxation, Changing Transfer Pricing Rules, Sui Generis Taxes</i>	
	1. <i>Shifting to Consumption-Based Taxation</i>	
	2. <i>Capturing Internet Tax Revenues Through Transfer Pricing Rules</i>	
	3. <i>Introducing a New Internet-Specific Tax</i>	
IV.	CONCLUSION	

* Associate Researcher and Ph.D. Candidate at the Interdisciplinary Centre for Law & Information Technology, Katolieke Universiteit Leuven (Belgium). LL.M., Northwestern University. BA, JD, Kiev National University.

My sincere thanks go to Ms. Irena Zolotova, the Managing Editor of this Volume, for her thoughtful and provocative comments made while preparing this article for publication.

I. INTRODUCTION

The advance of information technology has dramatically changed the landscape of commerce. Computers interconnected via intranets and the Internet allow businesses that once were limited to local operations to reach out to customers all over the world and tap into an almost unlimited revenue potential. Recent studies predict that online retail sales in the U.S. alone will reach \$230 billion by 2008,¹ up from overall sales of \$22 billion in 1998.²

As more and more businesses and individuals rely on the Internet as their primary source of revenue, tax authorities around the world are looking for ways to tax this electronic commerce effectively. Several features of the Internet distinguish it from any previous means of communication and trade, and complicate the application of the current international tax principles.³ Electronic commerce on the Internet is decentralized and doesn't take place at any physical location. The Internet eliminates the need for sellers to have any direct contact with consumers or use a middleman. E-mail addresses and Internet domain names can hide the identity of the parties; and the location of a party may be wholly undetectable.

The lack of a connection to a physical location is particularly problematic when it comes to taxation. According to the rules of the existing international tax regime, the right of a jurisdiction to tax usually does not arise unless and until a taxpayer has some physical connection with that jurisdiction.⁴ However, because an electronic transaction does not necessarily require a connection with a physical place, businesses can avoid taxation under the current international tax principles.

As a result of these dynamics tax authorities worldwide are seeking a uniform solution for taxing electronic commerce. Unfortunately, the debate on the issue unavoidably reflects the political agendas of each country, despite their representatives' attempts to cloak their ambitions with declarations of adherence to international consensus and the goal of promoting free trade and universal welfare.⁵

¹ See Alison Diana, *E-Commerce vs. T-Commerce: Who Will Buy?*, E-Commerce Times, Aug. 27, 2003, <http://www.ecommercetimes.com/story/31435.html> (last visited Dec. 10, 2006).

² See Peter Coy, *You Ain't Seen Nothin' Yet*, Business Week, June 22, 1999, available at <http://www.businessweek.com/1998/25/b3583007.htm> (last visited Dec. 10, 2006).

³ See OFFICE OF TAX POLICY, TREASURY DEP'T, SELECTED TAX POLICY IMPLICATIONS OF GLOBAL ELECTRONIC COMMERCE (1996), available at <http://www.ustreas.gov/offices/tax-policy/library/internet.pdf> (last visited Dec. 10, 2006) [hereinafter "TREASURY'S WHITE PAPER"].

⁴ See David L. Forst, *The Continuing Vitality of Source-Based Taxation in the Electronic Age*, 15 TAX NOTES INT'L 1455, 1467-71 (Nov. 3, 1997).

⁵ See, e.g., Jeffrey Owens *Discusses Details of OECD Harmful Tax Practices Report*, 21

The current regime of international taxation is a historical compromise among the developed nations,⁶ which have the greatest resources and bargaining power to influence the world trade negotiations. It was first shaped in the mid-1920s by the League of Nations⁷ and then by the Organization for Economic Cooperation and Development (OECD).⁸ Over time it has proven effective in advancing economic and political interests of developed nations, though often at the expense of developing ones.⁹ Because developed nations, who are exporters of electronic commerce, benefit from under-taxation of Internet transactions in compliance with the existing international tax regime, they strive to protect it against any radical revisions.¹⁰

This article endeavors to defend the thesis that the developed countries' refusal to change the existing tax rules may prove short-sighted: the near-absolute mobility of capital in cyberspace allows businesses to relocate to another jurisdiction at little cost, and more and more developing countries, as well as some rather developed ones, are turning into "tax havens"¹¹ to attract more businesses.¹² Countries start competing with each other for shares in tax revenues by lowering their effective tax rates or creating special tax regimes to preserve their tax bases. In the long run, such a "race to the bottom" will reduce the tax revenues of all nations and thus undermine the declared goal of promoting global welfare.¹³

This article focuses on sales in goods and services on the Internet. Internet advertising, software sales and licensing, electronic banking, and other types of electronic commerce that create tax problems are beyond its scope. Furthermore, this article only addresses income taxes on electronic commerce and not

TAX NOTES INT'L 94, 95 (July 10, 2000).

⁶ For detailed review of the history of international tax treaties, see Michael J. Graetz & Michael M. O'Hear, *The "Original Intent" of U.S. International Taxation*, 46 DUKE L.J. 1021 (1997).

⁷ *See id.*

⁸ Members of the League of Nations and 30 current OECD members represent mostly developed countries. For the OECD membership, see http://www.oecd.org/document/58/0,2340,en_2649_201185_1889402_1_1_1_1,00.html. For the League of Nations membership, see <http://www.answers.com/topic/league-of-nations-members>.

⁹ *See* Chang Hee Lee, *Impact of E-Commerce on Allocation of Tax Revenue Between Developed and Developing Countries*, 18 TAX NOTES INT'L 2569, 2576 (June 21, 1999).

¹⁰ *See id.* at 2575-76.

¹¹ "Tax haven" is a term of art that usually refers to countries with low tax rates, no taxes at all, or taxes only on certain categories of income. *See* RICHARD D. DOERNBERG, LUC HINNEKENS, WALTER HELLERSTEIN & JINYAN LI, *ELECTRONIC COMMERCE AND MULTIJURISDICTIONAL TAXATION* 90 (Kluwer Law Int'l, 2001).

¹² *See* <http://lowtax.net/>, Jurisdiction Home Pages.

¹³ *Infra* Part II.D.

consumption or sales taxes. This article analyzes the merits and disadvantages of various proposals for changes to the system of international income taxation of electronic commerce, ultimately concluding that only the most revolutionary proposals will be effective solutions to the problem of tax competition among nations.

II. E-COMMERCE AND THE CURRENT INTERNATIONAL TAX REGIME

A. *What Electronic Commerce Is and How It Generates Income*

“Electronic commerce” is usually defined as the whole body of “transactions involving the exchange of goods and services between two or more parties using electronic tools and techniques.”¹⁴ The essential characteristic of electronic commerce is its reliance on electronic means. These means are many and varied, including electronic data interchange (EDI), electronic mail (e-mail), electronic fund transfers, and many others.¹⁵

While the concept of communicating through electronic means for business purposes is not new,¹⁶ the Internet has expanded the potential reach of these transactions, providing the infrastructure to link millions of computers together and allowing information to easily and instantly travel throughout the world.¹⁷ Thus, though the commercial transactions facilitated by the Internet often resemble traditional business transactions, several features of the Internet alter the taxable character of these commercial transactions.

First, electronic communications via computer networks are much faster than all previously known means of communication. Second, electronic communications can be instantly interactive. Third, the Internet is decentralized, has no physical location, and is largely unconstrained by national boundaries.¹⁸ Fourth, in a phenomenon known as “disintermediation,” the Internet allows sellers to have direct contact with consumers without the use of a middleman.¹⁹ In fact, as the system of electronic payments and electronic money

¹⁴ TREASURY’S WHITE PAPER, *supra* note 3, at 7.

¹⁵ See Arvind Panagariya, *E-commerce, WTO and Developing countries, Policy Issues in International Trade and Commodities*, 1, <http://www.bsos.umd.edu/econ/panagariya/apecon/Policy%20Papers/e-commerce-3.pdf>.

¹⁶ Communication by electronic means has existed since at least the invention of the telegraph in the 1830s.

¹⁷ See Howard E. Abrams & Richard L. Doernberg, *How Electronic Commerce Works*, 14 TAX NOTES INT’L 1573, 1574 (May 12, 1997).

¹⁸ See Christopher Anderson, *A Survey of The Internet: The accidental superhighway*, *The Economist*, July 1, 1995, at 6. See also M. Meeker & C. Depuy, *The Internet Report 1-9* (1996).

¹⁹ See TREASURY’S WHITE PAPER, *supra* note 3, § 6.3.2 (1996). See also Webopedia,

develops, the middleman in the financial world may become obsolete altogether.²⁰ Fifth, Internet domain names are not necessarily tied to a physical location.²¹ Even country suffixes do not always correlate with the location of a physical computer carrying the address. Finally, it can be impossible to detect the physical location of an Internet user if he or she is using an Internet site from a remote location.²²

Currently, there are two major sources of Internet-generated revenues: advertisements and direct provision of goods and services.²³ Revenue from advertisements is earned by the providers of information, or “content.”²⁴ Some of these companies provide content only available on the Internet; others use the Internet as an alternative medium to offer already-existing content.²⁵ Content providers generally earn their advertising revenue from paid ads that they post on their websites in the same manner that newspapers or magazines post paid ads on their printed pages.

Sale of goods and services is a rapidly growing source of Internet revenues. The degree of electronic interaction in these transactions can vary, with different tax consequences. A piano player seeking to purchase sheet music of Chopin’s nocturnes has several options. She may browse a seller’s website to check for availability of her selection; then place an order over the telephone and arrange for mail delivery of the desired item. In this instance, she can pay using a credit card over the telephone or send a check to the seller’s physical address. Here, the key commercial transaction occurs via personal contact between two identifiable parties with physical locations. The Internet merely facilitates the marketing of the product sold.

Alternatively, the piano player may place an order and have her order accepted by electronic means, then arrange for delivery of her sheet music through regular post mail. If she pays for the product by calling the seller with her credit information, the transaction is characterized by both electronic and physical interaction. If she pays by providing her credit information online

<http://www.webopedia.com/TERM/d/disintermediation.html>.

²⁰ While electronic payment is still fairly rarely used, it appears likely that it will be increasingly popular method of payment. For a detailed discussion, see David G. Oedel, *The Electronic Future of Cash: Why Regulate Cybermoney?*, 46 AM. U. L. REV. 1075 (1997). See also Jane Kaufman Winn, *Clash of the Titans: Regulating the Competition between Established and Emerging Electronic Payment Systems*, 14 BERKELEY TECH. L.J. 675 (1999).

²¹ See David R. Johnson & David G. Post, *The Rise of Law on the Global Network*, in BORDERS IN CYBERSPACE 3, 7 (Brian Kahin & Charles Nesson, eds., 1997).

²² See CHRIS REED, *INTERNET LAW: TEXT AND MATERIALS* 5 (Cambridge U. Press, 2d ed., 2004).

²³ See Forst, *supra* note 4, at 1455-56.

²⁴ *Id.* at 1456.

²⁵ *Id.*

while placing the order, the transaction takes on an increasingly electronic nature. Nonetheless, as long as our piano player receives her sheet music through the post mail, the commercial transaction has a physical component, namely, the nature of the goods traded.

Any form of intellectual property can also be delivered online. In this case, the customer can not only place the order and pay electronically, but also arrange for delivery of the product to be made electronically, by downloading it to her computer.²⁶ Information is an increasingly popular commodity on the Internet, where companies charge subscribers (or advertisers) for access to content varying from culinary recipes²⁷ to legal and financial information.²⁸ These fully-electronic transactions are most troublesome from the viewpoint of the tax collector, because the location and even identity of the seller may be undetectable. In all three main types of commercial transaction just described, the seller could be a conventional retailer that uses its Internet website as an additional outlet to sell its products,²⁹ an exclusively electronic retailer with no physical stores,³⁰ or even a private individual using a commercial platform developed by online auction companies,³¹ or some other form of e-commerce software.

Beyond the typical vendor-consumer transactions, trade on the Internet can take many forms. For instance, business-to-business (B2B) electronic commerce is becoming a popular means of maintaining relationships with suppliers, distributors, and customers.³² Services are also increasingly provided over the Internet. Many professional service firms use the Internet to sell their services to new clients and to interact with existing ones.³³ It is even possible to sell and buy securities³⁴ or manage an offshore bank account online.³⁵ As a result of the Internet, it is entirely possible for services to be provided in one place yet consumed simultaneously in another.³⁶

²⁶ *Id.*

²⁷ See, e.g., Ukrainian Heritage Festival, Festival Menu, http://www.brama.com/yonkersukrainianfest/food_recipes.html.

²⁸ See, e.g., Reed Elsevier Group plc, Lexis Nexis, <http://www.lexisnexis.com>.

²⁹ See, e.g., Barnes & Noble, Inc., <http://www.barnesandnoble.com>.

³⁰ See, e.g., Amazon.com, Inc., <http://www.amazon.com>.

³¹ See, e.g., eBay, Inc., <http://www.ebay.com>.

³² See Forst, *supra* note 4, at 1456-57.

³³ See, e.g., Deloitte Development, LLC, <http://www.deloitte.com>.

³⁴ See, e.g., Charles Schwab & Co, Inc., Active Trader, <http://www.schwabat.com>.

³⁵ See, e.g., VP Bank (BVI) Ltd., http://www.vpbank.vg/vg_eba.htm.

³⁶ See Jeffrey Owens, *The Tax Man Cometh to Cyberspace*, 14 Tax Notes Int'l 1833, 1837 (June 2, 1997).

B. An Overview of the Current Regime of International Income Taxation

The central issue in international income taxation concerns the division of tax revenues among taxing jurisdictions for the purpose of avoiding double taxation of cross-border income streams.³⁷ The current international taxation regime incorporates several express and implicit historical compromises among states. It embodies a network of over 1,000 bilateral double tax treaties, most of which were fashioned after the model treaty developed first by the League of Nations in the 1920-30s and later by the OECD after the World War II.³⁸ Bilateral double tax treaties set forth the ground rules for allocating the right to tax a particular stream of income between the countries,³⁹ usually overriding any domestic legislation.⁴⁰ Only once the authority to tax has been established by a tax treaty do the domestic tax rules of the taxing country apply.⁴¹

Most countries use one of two methods to create a tax base: source-based taxation and residence-based taxation.⁴² Source-based taxation refers to a state's taxing of income resulting from economic activity within its territory.⁴³ Residence-based taxation refers to a state's taxing of income of parties residing within the territory of a state, regardless of where the income is actually earned.⁴⁴ The risk of double taxation exists, however, whenever one state applies one method and another state the other.⁴⁵ In addition, double taxation may arise whenever more than one country asserts jurisdiction over a party based on disparate definitions of residency.⁴⁶

Double tax treaties are therefore important both to resolve the potential clash between source- and residence-based taxation methods and to provide consistent thresholds for residence-based taxation. The OECD model treaty⁴⁷ reflects

³⁷ See OECD, COMMITTEE ON FISCAL AFFAIRS, MODEL DOUBLE TAXATION CONVENTION ON INCOME AND CAPITAL 7 (Paris, 1977).

³⁸ See Graetz & O'Hear, *supra* note 6, at 1023.

³⁹ See, e.g., Income and Capital Tax Convention, U.S.-Can., Sept. 26, 1980, art. VII(2).

⁴⁰ See, e.g., Income and Capital Tax Convention, U.S.-Can., Sept. 26, 1980, art. II.

⁴¹ Compare, e.g., Income and Capital Tax Convention, U.S.-Can., Sept. 26, 1980, art. VII(1) with art. VIII(1). See JOSEPH ISENBERGH, INTERNATIONAL TAXATION: TAXATION OF FOREIGN PERSONS AND FOREIGN INCOME ¶ 55.1 (2d ed. Supp., 1997).

⁴² Graetz & O'Hear, *supra* note 6, at 1034 (discussing the two basic prototype approaches to the taxation of international flows of income).

⁴³ See J. D. R. ADAMS & J. WHALLEY, THE INTERNATIONAL TAXATION OF MULTINATIONAL ENTERPRISES IN DEVELOPED COUNTRIES 11 (Greenwood Westport, 1977).

⁴⁴ See *id.* at 10.

⁴⁵ See ROY ROHATGI, BASIC INTERNATIONAL TAXATION 2 (Kluwer Law Int'l, 2002); U.S. TREASURY DEP'T, SELECTED TAX POLICY IMPLICATIONS OF GLOBAL ELECTRONIC COMMERCE, reprinted in BNA DAILY TAX REP., Nov. 22, 1996, at L-8.

⁴⁶ See ROHATGI, *supra* note 45, at 589.

⁴⁷ OECD, Articles of the Model Convention with respect to Taxes on Income and Capital

the international consensus that the right to tax passive (investment) income should be assigned under the residence principle to the country where the recipient resides, and the right to tax active (business) income should be assigned under the source principle to the country where the income originates.⁴⁸ This division is sometimes referred to as the Benefits Principle.⁴⁹ One of the justifications for such a division is that it is primarily individuals who earn investment income, and primarily corporations that earn business income. Residence-based taxation makes sense in case of individuals because it is easy to define and enforce. Also, since most individuals are part of only one society, that society should be entitled to address wealth distribution concerns of its residents. On the other hand, source-based taxation is preferable for corporations because the residence of corporations can be difficult to establish and is often meaningless.⁵⁰

Consequently, under a typical double tax treaty, each state is entitled to tax income derived from an activity taking place within the country, as well as any income derived by natural and legal persons residing within its territory, regardless of where the income was derived from.⁵¹ The state of residence also acknowledges the priority of the source country to tax certain passive income⁵² and agrees either to abstain from taxing the income subject to the source tax⁵³ or to reduce its own tax by the amount of the source tax.⁵⁴ In exchange, the source country promises to reduce its tax on passive income to a mutually agreed-upon level.⁵⁵ Thus, the process of determining whether a state may tax

[as they read on 15 July 2005], available at <http://www.oecd.org/dataoecd/50/49/35363840.pdf> [hereinafter "OECD Model Treaty"].

⁴⁸ See Reuven Avi-Yonah, *International Taxation of Electronic Commerce*, 52 TAX L. REV. 507, 509 (1997).

⁴⁹ See *id.*

⁵⁰ See Graetz & O'Hear, *supra* note 6, at 1036.

⁵¹ See U.S. Model Convention, Sept. 20, 1996, 1 Tax Treaties (CCH) P 210, art. 7(1) [hereinafter "U.S. Model Treaty"] (setting forth rules for the taxation of business profits). See also OECD Model Convention on Income and Capital (1992), 1 Tax Treaties (CCH) P 191, art. 5 cmt. (describing the rationale for the permanent establishment concept by stating that "until an enterprise in one State sets up a Permanent Establishment in another State it should not properly be regarded as participating in the economic life of that other State to such an extent that it comes within the jurisdiction of that other State's taxing rights").

⁵² OECD Model Treaty, *supra* note 47, art. 6 (income from immovable property), art. 13 (capital gains).

⁵³ *Id.*, art. 23A (exemption method for avoiding double-taxation).

⁵⁴ *Id.*, art. 23B (credit method for avoiding double-taxation). See HUGH J. AULT, BRIAN J. ARNOLD, *COMPARATIVE INCOME TAXATION: A STRUCTURAL ANALYSIS* 357 (2d ed., Kluwer Law Int'l 2004).

⁵⁵ See OECD Model Treaty, *supra* note 47, art. 23B.

income involves, first, characterizing income as either passive or business, and, second, determining the nexus of the economic activity, property, or person to the territory of the state.

The source of income for source-based taxation is determined according to categories articulated in the applicable treaty⁵⁶ or in relevant domestic law. For instance, under the U.S. tax laws, income from sales generally is attributed to the residence of the seller;⁵⁷ royalty income is attributed to where the intangible asset giving rise to the income is used;⁵⁸ and income from providing services is attributed to where the services are performed.⁵⁹

Absent a formal residence, the threshold for subjecting a person to activity-based taxation is determined by the extent of the person's nexus with the country. In tax treaty context, nexus is established by a permanent establishment.⁶⁰ The OECD model treaty defines permanent establishment as "a fixed place of business through which the business of an enterprise is wholly or partly carried on,"⁶¹ including the location of management, a branch, an office, a factory, a workshop, a building site or an installation project lasting more than 12 months.⁶² In cases where no tax treaty applies, internal laws of a country govern permanent establishment. In the United States, for example, a federal statute defines a "fixed place of business" as an analogue to permanent establishment for non-treaty countries.⁶³ The "fixed place of business" threshold is developed in case law and is generally lower than under the treaties.⁶⁴

A permanent establishment may also arise by imputation "where a person . . . other than an independent agent . . . is acting on behalf of an enterprise and has and habitually exercises in a Contracting State an authority to conclude contracts that are binding on the enterprise."⁶⁵ Under the OECD model treaty's similar provision, an agent creates a permanent establishment for the principal if the agent is (1) dependent, (2) acting in the ordinary course of

⁵⁶ See generally OECD Model Treaty, *supra* note 47.

⁵⁷ See I.R.C. § 865(a) (2000).

⁵⁸ See I.R.C. § 861(a)(4) (2000).

⁵⁹ See I.R.C. § 861(a)(3) (2000).

⁶⁰ Under most treaties, a state may tax an enterprise's business profits attributable to a permanent establishment located in that country, regardless of the enterprise's country of residence. See U.S. Model Treaty, *supra* note 51, art. 7.

⁶¹ OECD Model Treaty, *supra* note 47, art. 5(1)

⁶² See OECD Model Treaty, *supra* note 47, art. 5(2)-(3).

⁶³ See I.R.C. § 864(b) (2000).

⁶⁴ See *U.S. v. Balanovski*, 131 F. Supp. 898 (S.D.N.Y. 1955); *Comm. v. Spermacet Whaling and Shipping Co.*, 281 F.2d. 646 (6th Cir. 1960); *Green Export Co., v. U.S.* 285 U.S. 383 (Ct. Cl. 1961); *Perry Group, Inc. v. U.S.*, 1980-2 T.C.M. (CCH) ¶ 9603 (D.N.J. 1980).

⁶⁵ U.S. Model Treaty, *supra* note 51, art. 5(5).

business, (3) acting on behalf of its foreign principal, (4) having authority to conclude contracts in the name of the principal, and (5) habitual in exercising such authority.⁶⁶

A multinational corporation can have multiple permanent establishments located across state lines. The taxable income of each permanent establishment in a group of related companies is measured as the hypothetical arm's length profit it would have made if it were an independent firm.⁶⁷ Income from a sale, including sale to a related company, is taxed in the country of sale in full.⁶⁸ Income from manufacturing and sales is split and taxed in the country of manufacture and sale, respectively.⁶⁹ These policies prevent multinational corporations from charging losses to establishments in high-tax jurisdictions and crediting profits to related establishments in low-tax jurisdictions by means of internal accounting in order to minimize the tax bill of the multinational.⁷⁰

C. *The Current International Tax Regime's Failure to Accommodate Electronic Commerce*

The Internet, a means of communication unlike any before it, does not fit into the current regime of international taxation. First, it allows businesses to operate without creating a permanent establishment in any country.⁷¹ Second, it allows businesses to relocate their taxable activities around the world at low cost and without interruption in response to changes in legal and economic environment.⁷² Third, it complicates the attribution of income and expenses to a particular part of the transaction.⁷³ Fourth, the Internet clouds the distinction between providing services and transferring property.⁷⁴ Finally, as a result of all the foregoing, it complicates the administration and collection of taxes.⁷⁵ In

⁶⁶ See OECD Model Treaty, *supra* note 47, art. 5(5).

⁶⁷ See U.S. Model Treaty, *supra* note 51, art. 7(2). The establishment of arm's length prices often depends on finding comparable transactions among unrelated parties. See OECD, TRANSFER PRICING GUIDELINES FOR MULTINATIONAL ENTERPRISES AND TAX ADMINISTRATIONS (OECD, 2001); John Neighbour, *Transfer pricing: Keeping it at arm's length*, OECD OBSERVER, Apr. 2002, available at http://www.oecdobserver.org/news/fullstory.php/aid/670/Transfer_pricing:_Keeping_it_at_arms_length.html.

⁶⁸ See I.R.C. §§ 865(e)(2), 864(c)(4)(B)(iii).

⁶⁹ ROHATGI, *supra* note 45, at 412.

⁷⁰ U.S. Steel Corp. v. Comm., 617 F.2d 942 (2nd Cir. 1980).

⁷¹ See *infra* pages 12-14.

⁷² See *infra* page 15.

⁷³ See *infra* pages 15-16.

⁷⁴ See *infra* pages 16-17.

⁷⁵ See *infra* page 17.

sum, electronic commerce creates opportunities and incentives for businesses to avoid taxation under the current international taxation regime.

The concept of permanent establishment, designed for a world of trade based in tangible products with traceable physical locations, does not work in a world of electronic commerce where information is transmitted in intangible form. In the days when the concept of permanent establishment was designed as a jurisdictional threshold for asserting a country's right to tax, physical presence was necessary to conduct significant business operations. Though operation through direct mailing or independent agents was technically possible without creating a permanent establishment, it was often too impracticable because of the slow speed of communications between buyers and sellers, delays in processing orders, collection problems, and other high associated costs.⁷⁶ Electronic commerce on the Internet eliminates these obstacles: instantaneous interactivity and electronic payments mean that commerce on a grand scale can be conducted without any physical presence in the consumer's jurisdiction. A foreign supplier, for example, can enter into a contract with any buyer in any country without leaving his home office and sell massive amounts of goods without ever setting foot in the importer's country.

On the Internet these commercial activities do not normally create a permanent establishment. There are three reasons for this: first, digitized information traveling between computer terminals around the world does not constitute defined "fixed" presence for tax purposes.⁷⁷ Internet businesses are present both everywhere and nowhere. Second, a server—the main tangible element of the electronic business—is generally not deemed to create a permanent establishment under most current treaties.⁷⁸ This is not an inevitable legal conclusion. One might interpret tax treaties and internal tax laws so as to include a server as physical machinery in the definition of a permanent establishment or a trade or business.⁷⁹ Alternatively, one could characterize servers as vending machines, which are considered permanent establishments under the OECD model treaty.⁸⁰ On the other hand, since a web site does not contain any tangi-

⁷⁶ See Arthur Cockfield, *Transforming the Internet into a Taxable Forum: a Case Study in E-commerce Taxation*, 85 MINN. L. REV. 1171, 1171 (2001).

⁷⁷ See OECD Model Treaty, *supra* note 47, art. 5(1).

⁷⁸ Thus, the Treasury's White Paper suggests that a computer server located in the U.S. would not create a permanent establishment under the U.S. Model Treaty. See TREASURY'S WHITE PAPER, *supra* note 3, at 22-23.

⁷⁹ See Peter A. Glicklich, et al., *Internet Sales Pose International Challenges*, 84 J. TAX'N 325, 326-27 (1996).

⁸⁰ See OECD Model Convention on Income and Capital (1992), 1 Tax Treaties (CCH) P 191, art. 5 cmt. However, the vending analogy only works if the server performs a complete cycle of operations in a transaction, including advertising, selling, and collecting money, all in the same country. The operations of an Internet business can easily be adjusted to avoid

ble property but is merely a combination of software and electronic data, it could not constitute a “fixed place of business” within the meaning of Article 5 of the OECD model treaty, and thus, it cannot constitute a permanent establishment.⁸¹

Third, electronic commerce allows businesses to avoid permanent establishment in any state by structuring and fragmenting related physical activities—warehousing, delivering, collecting payment—so that they do not meet the threshold for being considered permanent establishment. Under most current income tax treaties, a permanent establishment does not include the use of facilities solely for the purpose of storage, display, or delivery of goods and merchandise.⁸² Therefore, a supplier can keep a massive inventory in one country and dispose of it from another without incurring any taxes at source.

Electronic commerce makes it even easier to avoid a nexus with a jurisdiction for a company engaged in the provision of services over the Internet. Under the existing tax rules, service income is taxed in the country where the service is provided.⁸³ This rule is based on the assumption that personal service requires a physical contact between the parties to the contract. Again, the advent of electronic commerce destroys this assumption. Modern electronic communications allow for the provision of many services from a distance. Accordingly, territorial contact becomes an ineffective basis for allocating revenue between nations.

Electronic commerce also makes it easy to manipulate activities of a business to minimize worldwide tax liability without incurring high costs or business interruptions. Electronic commerce affords businesses an unprecedented mobility, allowing them to easily migrate to a different jurisdiction in response to any adverse economic changes—including introduction of tax rules designed to “catch” electronic commerce activities. For instance, if the tax rules of one country change to include a server within the definition of a permanent establishment, a business could avoid the ensuing tax liabilities by nearly immediately and effortlessly moving its web site to a server in another tax jurisdiction. A company could locate its web site on a server in a “tax haven” to create a permanent establishment there, and continue to use that server to conduct business anywhere in the world. The company could also establish its formal residence in a “tax haven” and locate its production activities in jurisdictions that do not tax such activities. To underscore, while none of these tax

having that operational convergence in one location.

⁸¹ OECD COMMITTEE ON FISCAL AFFAIRS, CLARIFICATION ON THE APPLICATION OF THE PERMANENT ESTABLISHMENT DEFINITION IN E-COMMERCE: CHANGES TO THE COMMENTARY ON THE MODEL TAX CONVENTION ON ARTICLE 5, § 4.2 at 5, *available at* <http://www.oecd.org/dataoecd/46/32/1923380.pdf>.

⁸² *See, e.g.*, OECD Model Treaty, *supra* note 47, art. 5(4)(a), (b).

⁸³ *See, e.g.*, I.R.C. § 861(a)(3) (2000).

avoidance activities are per se unique to electronic commerce, modern communications make it exceedingly easy for businesses to shift production of income between different states without incurring any substantial transfer costs.

Meanwhile, even when a permanent establishment location of an Internet-based business is determined, attribution of income to the permanent establishment is extremely difficult, because it is unclear where and when the income-generating event occurs.⁸⁴ The use of linked servers located across many jurisdictions that switch signals from one server to the other to balance network traffic makes it difficult to identify which servers are used at any particular time and for which activities.⁸⁵ Furthermore, even if it were possible to associate a particular domain name with a certain person and computer, all three could still be located in different countries.

Electronic sales themselves present unique issues as to whether the resulting income should properly be characterized as royalties or service or business income. Any information that can be digitized—such as books, music, computer programs, and images—can be transferred and sold electronically. Some of these electronic transactions may be equivalent to the purchase of a physical copy of such an item, which would result in business profits taxable only if a permanent establishment exists in the country.⁸⁶ But others would result in royalty income, which may be subject to withholding at source.⁸⁷ Royalties are usually defined as “payments of any kind received as consideration for the use of, or the right to use, any copyright of literary, artistic or scientific work including cinematograph films,”⁸⁸ but some ambiguity remains. If a buyer of an electronic product also receives the right to make reproductions, the payment is, at least in part, in consideration for the use of the copyright. On the other hand, the transaction could also be viewed as a mere substitute for the purchase of ten copies from the publisher.

Electronic commerce enhances opportunities to manipulate income flows between related parties.⁸⁹ First, even in the “offline” world, applying functional analysis⁹⁰ to each portion of a multinational’s business is complicated by the fact that any function may be performed in a number of places. Second, the speed with which transactions take place over the Internet sharply increases the

⁸⁴ See Owens, *supra* note 36, at 1847.

⁸⁵ See *id.*

⁸⁶ See *supra* notes 56-64 and accompanying text.

⁸⁷ See Collin Lau & Andrew Halkyard, *From E-Commerce to E-Business Taxation*, ASIA-PACIFIC TAX BULL. 2, 5-6 (Jan. 2003), available at <http://unpan1.un.org/intradoc/groups/public/documents/ibfd/unpan008624.pdf>.

⁸⁸ See, e.g., U.S. Model Treaty, *supra* note 51, art. 12(2).

⁸⁹ See Owens, *supra* note 36, at 1849.

⁹⁰ Functional analysis looks to whether a transaction occurs in the normal course of business or is rather designed to minimize taxes.

volume of transactions, making it more burdensome to apply separate transactional transfer pricing. Third, the development of corporate intranets allows multinationals to better utilize internal resources, reducing outsourcing and enhancing the frequency of internal transfers, which become increasingly more difficult to value objectively at arm's length rates.

The Internet also complicates tax administration and collection. Traditional audit trails are not generated in most Internet transactions.⁹¹ Tax administrators therefore encounter great difficulty tracing transactions due to the lack of links between electronic entities and their physical counterparts, the impossibility of establishing the identities of the Internet address operators, and the problems in obtaining acceptable documentation of proof especially when several taxing jurisdictions are involved in a transaction. Furthermore, disintermediation removes convenient "taxing points," like banks.⁹²

It should be recognized, however, that new technologies also make the operations of tax authorities more efficient, timely, and taxpayer-friendly. Already, a number of tax authorities use electronic data interchange programs, electronic filing, and direct deposit programs which enable taxpayers to comply with tax regulations faster and with less paper, thereby open new possibilities for tax authorities to exchange tax information in a more timely and secure way.⁹³

D. The Tax Competition Problem

The convergence of national economies and development of electronic communications create new opportunities and incentives for businesses to carry on their operations in different countries. The advances of information technologies enable easy, low cost and instantaneous movement of capital around the world.⁹⁴ As a result, companies have greater flexibility in choosing jurisdictions for carrying out different aspects of their operations and can better tailor their structures to take advantage of tax differences between countries to reduce their worldwide tax liability.

With the globalization of businesses, many countries join in the race for investors' attention.⁹⁵ Traditionally, tax havens were created in smaller and

⁹¹ See Owens, *supra* note 36, at 1837.

⁹² See *id.* at 1838.

⁹³ See, e.g., U.S. Treasury Dep't, Internal Revenue Service, e-file for Individual Taxpayers, <http://www.irs.gov/efile/article/0,,id=118508,00.html>; Belgium Federal Public Service Finance, Tax-on-web portal, <http://ccff02.minfin.fgov.be/taxonweb/app/citizen/public/taxbox/home.do>; U.K. HM Revenue & Customs, Online Services, <http://www.hmrc.gov.uk/online/index.htm>.

⁹⁴ See REED, *supra* note 22, at 270.

⁹⁵ See Joosung Jun, *U.S. Tax Policy and Direct Investment Abroad*, in *TAXATION IN THE*

poorer countries which otherwise had little to offer to attract investments.⁹⁶ But as mobility of capital and other factors of production increased, more and more countries discovered that they could attract businesses from other jurisdictions by offering more beneficial tax regimes.⁹⁷ Recently, many countries have started positioning themselves specifically as hubs for offshore electronic commerce, investing heavily in the infrastructure and adopting favorable telecommunications laws and regulations.⁹⁸

The bonding of offshore business and electronic commerce ought to be viewed as natural. After all, both facilitate minimizing tax liabilities. Today, they organically compliment each other: tax haven jurisdictions attract Internet-based businesses by exempting them from income taxes at the place of residence,⁹⁹ while electronic commerce allows the same businesses to escape taxes at the source of income in other jurisdictions.¹⁰⁰

The decision to get involved in tax competition depends on a state's ability to enforce taxation of business and capital income from foreign sources. Paradoxically, if a state is incapable of collecting taxes on foreign source income, it ends up being in its interest to reduce, or even eliminate, business income taxes altogether.¹⁰¹ Aside from the social advantages of attracting foreign investment to increase employment, such a state hopes to collect significant taxes from the less mobile factors of production, such as labor and land.¹⁰²

Originally, the prosperous "industrial democracies" were not interested in lowering tax rates in order to attract investors.¹⁰³ Such states were already inherently attractive to the investors because they offered developed legal systems, sophisticated labor forces, natural and technological resources, and proximity to lavish markets. In addition, they could efficiently enforce their tax collections. Thus, most industrial nations adopted residence-based model of income taxation.¹⁰⁴ Unlike less developed countries, they had enough interna-

GLOBAL ECONOMY 55 (Assaf Razin & Joel Slemrod, eds., 1990).

⁹⁶ See Stephen G. Utz, *Taxation Panel: Tax Harmonization and Coordination in Europe and America*, 9 CONN. J. INT'L L. 767, 782 (1994).

⁹⁷ See *id.* at 784.

⁹⁸ See, e.g., <http://lowtax.net/>, Jurisdiction Home Pages.

⁹⁹ See, e.g., Linda Ng, *News Analysis: Singapore Offers Tax Incentives and Advantages to E-Businesses*, 21 TAX NOTES INT'L 16 (2000).

¹⁰⁰ See *supra* Part II.C.

¹⁰¹ See Roger H. Gordon, *Can Capital Income Taxes Survive in Open Economies?*, 47 J. FIN. 1159, 1161 (1992).

¹⁰² Reuven S. Avi-Yonah, *Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State*, 113 HARV. L. REV. 1573, 1575-77 (2000).

¹⁰³ See *id.*

¹⁰⁴ See Nicolas de Boynes, *International Tax Policy and the New Economy*, 2 GLOBAL JURIST FRONTIERS 10-11 (2002).

tional clout to maintain an extended net of agreements establishing the international exchange of tax information necessary to enforce taxation of their residents' foreign source income. These states were nevertheless careful to keep their residence-based tax burden at roughly similar levels so as not to scare potential investors away. Therefore, the residence-based tax systems in the industrial nations remained stable and had no appreciable spillover effect on other countries.¹⁰⁵

But in the world of mobile capital and fast communications, the advantages offered by industrial nations have increasingly less meaningful appeal. In recent years, the participation of business and individual investors in tax havens has been "expanding at an exponential rate."¹⁰⁶ Consequently, many industrial nations are beginning to change their tax policies in order to retain their position on the market for investments, trying to serve as both tax havens and high-tax powers at the same time.¹⁰⁷

Tax competition has intensified in recent years, and its negative effects have become more obvious.¹⁰⁸ One problem is that the differences in tax burdens between jurisdictions may generate inefficiencies both in public and private sectors. In a world of mobile capital and factors of production, trade and capital flow to jurisdictions with lighter tax burdens, thereby distorting the regional allocation of factor use and impairing the private sector's efficiency.¹⁰⁹ The flow of capital to lower tax jurisdictions also results in the reduction of source-based corporate taxation in the jurisdictions with higher tax burdens, decreas-

¹⁰⁵ See Graetz & O'Hear, *supra* note 6, at 1023-1024.

¹⁰⁶ See Tom Herman, *A Special Summary and Forecast Of Federal and State Tax Developments*, WALL ST. J., June 17, 1998, at A1.

¹⁰⁷ See, e.g., Marshal Langer, *Harmful Tax Competition: Who Are the Real Tax Havens?*, 21 TAX NOTES INT'L 2831 (Dec. 18, 2000); Bruce Zagaris, *Application of OECD Tax Haven Criteria to Member States Shows Potential Danger to U.S. Sovereignty*, 22 TAX NOTES INT'L 2298, 2299-2301 (May 7, 2001).

¹⁰⁸ Both the OECD's Project on Harmful Tax Practices initiated in 1998 and the EU Code of Conduct for Business Taxation adopted the same year evidence the concern of tax authorities with the negative effects of harmful tax competition. See OECD, CENTER FOR TAX POLICY AND ADMINISTRATION, THE OECD'S PROJECT ON HARMFUL TAX PRACTICES: 2004 PROGRESS REPORT, available at <http://www.oecd.org/dataoecd/60/33/30901115.pdf>; Council of Economics and Finance Ministers, Conclusions of the ECOFIN Council Meeting on 1 December 1997, 1998 O.J. (C 2) 1, available at http://ec.europa.eu/taxation_customs/resources/documents/COC_EN.pdf. See also Commission of the European Communities, Company Tax: Harmful Tax Competition, http://ec.europa.eu/taxation_customs/taxation/company_tax/harmful_tax_practices/index_en.htm.

¹⁰⁹ See Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. POL. ECON. 416, 418 (1956).

ing funds available for their public sector.¹¹⁰ These sharp differences are not likely to endure. Jurisdictions with higher tax burdens will try to prevent the outflow of capital to lower tax jurisdictions by lowering their own tax rates or increasing subsidies. If carried on long enough, this “race to the bottom” may result in a loss of revenue to the budgets of all jurisdictions.¹¹¹ In addition, once collections from taxes on corporate income decline, countries will be motivated to maintain their revenue position by switching to taxes on consumption and real, as opposed to financial, wealth. The switch to consumption taxes may result in a shift in income distribution and unemployment, requiring costly offsetting changes in public expenditures.¹¹²

Unlike competition between private firms, competition between tax systems of different states does not drive the market to equilibrium, nor does it secure orderly, efficient, and equitable systems of taxation. The “invisible hand” of competition does not work in the case of fiscal competition. First, Adam Smith’s model of competition assumes that each market participant entering the market has some initial economic resources (“entitlements”) at its disposal. Market participants then engage in voluntary exchange so as to maximize gains to be derived from each initial entitlement. Those assumptions do not hold here, however, because there are no initial sets of entitlements among governments on the basis of which fair competition can proceed.¹¹³ Second, tax competition involves a relatively small number of players, with minor players being dominated by a few large players whose behavior is skewed by strategic considerations akin to those in the “prisoner’s dilemma.”¹¹⁴ Thus, tax competition between the nations resembles an oligopoly rather than a free-enterprise

¹¹⁰ See COMMISSION OF THE EUROPEAN COMMUNITIES, REPORT OF THE COMMITTEE OF INDEPENDENT EXPERTS ON COMPANY TAXATION (“RUDING” REPORT), (Official Publications of the EC, ISBN 92-826-4277-1, March 1992); Commission of the European Communities, Company Tax: Overview, http://ec.europa.eu/taxation_customs/taxation/company_tax/gen_overview/index_en.htm. See also F. Vanistendael, *Round Table on the Ruding Report: Some Basic Problems on the Road to Tax Harmonization*, 33 EUR. TAX’N 22 (1993); Ken Messere, *Round Table on the Ruding Report: A Personal View on Certain Aspects of the Ruding Committee Report and the EC Commission’s Reaction to It*, 33 EUR. TAX’N 2 (1993).

¹¹¹ Peggy B. Musgrave & Richard A. Musgrave, *Fiscal Coordination and Competition in an International Setting*, in INFLUENCE OF TAX DIFFERENTIALS ON INTERNATIONAL COMPETITIVENESS, PROCEEDINGS OF THE VIIITH MUNICH SYMPOSIUM ON INTERNATIONAL TAXATION 69 (1990).

¹¹² See OECD, COMMITTEE ON FISCAL AFFAIRS, TOWARDS GLOBAL CO-OPERATION: PROGRESS IN IDENTIFYING AND ELIMINATING HARMFUL TAX PRACTICES 29 (June 2000), available at <http://www.oecd.org/dataoecd/9/61/2090192.pdf>.

¹¹³ See Musgrave & Musgrave, *supra* note 111, at 70.

¹¹⁴ See *id.*

market. Finally, in offering their tax “products,” governments, unlike private firms, incur few costs that in the commodities market would preclude them from indefinite reductions in price. As a result, although tax competition may lead to equilibrium in tax regimes, most likely such an equilibrium will be far below the optimal one.

Opponents of measures aimed at restraining tax competition often argue that tax competition motivates governments to improve the quality of public services, just as competition motivates firms to improve their performance to receive additional profits.¹¹⁵ As commodity, labor, and capital markets open up between countries, governments strive to offer high quality public services at a low tax “price,” in order to obtain the “rewards” of tax competition in the form of attractive resources, residents, and trade.¹¹⁶ On the other hand, tax competition may help to restrain public expenditures by making it more costly for governments to raise the tax revenues necessary to pay for them.¹¹⁷ Therefore, elimination of tax competition could help insulate government budgets from the discipline of international competition.¹¹⁸

The benefits of tax competition, however, are not as obvious as its proponents claim. Tax collections are not the only considerations affecting the size of public sector. Reductions in tax collections caused by tax competition do not necessarily result in greater efficiency in the public sector or consequential improvement in national welfare. A government could simply decide to shift part of the tax burden to future generations by accepting a higher current budget deficit.¹¹⁹ Governments fear loss of popular support much more than they fear budget deficit or excessive borrowing since the debts are not likely to come due before the current governments have left office.

On balance, even if tax competition were to have a positive effect on the public sector, the negative effects of taxes on foreign investment outweigh the positive effects of taxes on domestic welfare and result in aggregate loss for

¹¹⁵ See, e.g., Jeanne-Mey Sun & Jacques Pelkmans, *Regulatory Competition in the Single Market*, 33 J. COMMON MARKET STUD. 67, 82-83 (1995).

¹¹⁶ See RICHARD TEATHER, *THE BENEFITS OF TAX COMPETITION*, ch. 2 (Inst. of Econ. Affairs, 2005), available at <http://www.itio.org/pdf/upld-publication303.pdf>; cf. Marshall J. Langer, *The Outrageous History of Caribbean Tax Treaties With OECD Member States*, 26 TAX NOTES INT’L 1205 (June 10, 2002).

¹¹⁷ See W. Lee Hoskins, *International Policy Coordination: Can We Afford It?*, ECON. COMMENT. (Fed. Res. Bank of Cleveland, Jan. 1, 1989).

¹¹⁸ See *id.* See also Sijbren Cnossen, *More Tax Competition in the European Community?*, Public Finance, Trade and Development: Proceedings of the 44th Congress of the International Institute of Public Finance 153 (1990) (arguing that more tax competition would be beneficial for the EU).

¹¹⁹ See Hoskins, *supra* note 117.

the society.¹²⁰ Nevertheless, possible benefits of tax competition should be taken into consideration in construing the scope of anti – tax competition measures.

III. ANALYZING PROPOSALS FOR CHANGING THE SYSTEM OF INTERNATIONAL INCOME TAXATION TO RESPOND TO THE RISE OF ELECTRONIC COMMERCE

The effect of electronic commerce on the implementation and development of international tax rules has received a lot of attention from international tax practitioners, administrators, and academics. So far, however, the response by countries has been cautious. Few changes to actual laws have been made so far.¹²¹

The proposals for changes to the international tax system can be roughly classified into three categories. The first advocates the general preservation of the existing international tax system and its underlying principles with only minor changes necessary to accommodate electronic commerce. Its supporters include many tax commentators¹²² as well as the OECD.¹²³ The second supports the idea of preserving the current dual system but argues for a shift in the emphasis from source to residence-based taxation. Its advocates include the U.S. Treasury Department.¹²⁴ Finally, there are scholars who argue that the current international tax consensus is not sustainable in the era of electronic commerce at all, in that it creates an imbalance in the tax revenue sharing, which may be detrimental to the global economy in the long run. Their alternative proposals for a new system range from shifting to consumption-based taxes to introducing a special tax on Internet business activities.¹²⁵

A. *The Conservative Approach: Preserving the Current Mix of Residence- and Source-Based Taxation*

The mainstream view on the international taxation of electronic commerce is

¹²⁰ See Utz, *supra* note 96, at 788.

¹²¹ For a detailed account of developments in the area at the international, EU, and national levels, see DOERNBERG ET AL., *supra* note 11.

¹²² See, e.g., 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 (2001).

¹²³ See, e.g., OECD, TAXATION AND ELECTRONIC COMMERCE: IMPLEMENTATION OF THE OTTAWA TAXATION FRAMEWORK CONDITIONS – 2003 REPORT, available at <http://www.oecd.org/dataoecd/45/19/20499630.pdf>.

¹²⁴ See TREASURY'S WHITE PAPER, *supra* note 3.

¹²⁵ See *infra* Part III.C.

that the established rules can and should apply to electronic commerce.¹²⁶ The challenges raised by electronic commerce are simply complications for tax administration and not reflective of any defect in the substantive law, and so any changes should be consistent with traditional tax concepts.¹²⁷

The conservative approach recommends reforming international taxation according to four principles:

- (1) the existing rules and concepts should be preserved to the fullest extent possible;
- (2) all changes should treat similar income equally, regardless of whether it is earned through electronic means or through existing channels of commerce (otherwise known as the principle of neutrality);
- (3) no new taxes should be introduced pertaining to electronic commerce;
- (4) the problems of electronic commerce taxation should be resolved through international cooperation, and the current international consensus should be preserved.¹²⁸

The advocates of the conservative approach admit that the current rules of international taxation require some modifications, particularly with regard to the concept of permanent establishment and the distinction between goods and services. One of the proposed modifications is to expand the concept of permanent establishment to include electronic commerce, either by expanding the definition of a permanent establishment to cover a server owned by a foreign entity, or by including network providers in the definition of a dependent agent.¹²⁹ Another modification would preserve the property/services dichotomy but artificially expand the definition of property to include what used to be considered property under traditional commerce, even if it is now delivered over the wire.¹³⁰

¹²⁶ See Stanley I. Katz, *International Taxation of Electronic Commerce: Evolution not Revolution*, 52 TAX L. REV. 655 (1997).

¹²⁷ This kind of “incremental” approach has been embraced by the OECD. Jeffrey Owens, currently the Head of the Centre for Tax Policy and Administration at the OECD, said in 1997, “The Internet will not raise new problems, but it will put old problems in a new context.” Owens has also declared himself “quite optimistic” that traditional tax concepts can be adapted to accommodate electronic commerce. Albertina M. Fernandez, *Business, Tax Authorities Work Toward Consensus on Electronic Commerce*, 15 TAX NOTES INT’L 1658, 1658 (Nov. 24, 1997).

¹²⁸ See TREASURY’S WHITE PAPER, *supra* note 3, at 1; OECD, *ELECTRONIC COMMERCE: A DISCUSSION PAPER ON TAXATION ISSUES 4* (1998). See also Lee, *supra* note 9, at 2570-71.

¹²⁹ See Lee, *supra* note 9, at 2577-78.

¹³⁰ See Jonathan Zittrain, *The Classification Dispute: How Should the WTO Treat Digital Products on the Internet* (July, 2000), <http://cyber.law.harvard.edu/is2000/wtoreading1.htm>. But see Lee, *supra* note 9, at 2577.

The shortcoming of this approach is that it seems to ignore the fact that the current laws were never written with the Internet in mind, and thus do not meet the requirements of today's information society. Moreover, the half-measures proposed within the scope of this approach do not provide any guidelines for solving the tax competition problem. Instead they preserve the *status quo*, which will continue to strain.

Ignoring the revolutionary nature of electronic commerce, as demonstrated by the recent example from the realm of indirect taxation – introduction of the VAT on digital products imported into the EU,¹³¹ is punished by adoption of laws and regulations that are downright unenforceable.¹³² Yet appearance of rules that have no teeth is the result that should definitely be avoided, for “[i]f tax laws are not enforceable and taxpayers use the internet to play a *catch-us-if-you-can* game of tax avoidance and evasion, then the resulting tax system is neither efficient, nor equitable nor sustainable.”¹³³

B. *The Evolutionary Approach: Switching to Residence-Based Taxation*

Support has also been voiced for the idea of switching from source-based to residence-based taxation.¹³⁴ One of the advocates of this evolutionary approach is the U.S. Treasury Department.¹³⁵ It has noted that because the Internet makes it “difficult, if not impossible” to apply traditional source concepts to link an item of income with a specific geographical location, tax authorities should rely upon residence-based taxation since “almost all taxpayers are resident somewhere.”¹³⁶ Several recent developments in U.S. tax rules, such as the source rules for sales of non-inventory property¹³⁷ and the rules for space

¹³¹ Commission of the European Communities, VAT on Electronic Services, http://ec.europa.eu/taxation_customs/taxation/vat/how_vat_works/e-services/index_en.htm.

¹³² See Herbert Smith, *VAT and E-COMMERCE: Countdown to 1st July 2003*, <http://www.herbertsmith.com/Publications/archive/2003/tax13june2003.htm>; see also James Graff, Brussels Decrees an E-VAT, *TIME EUROPE*, Vol. 155, No. 24 (June 19, 2000), available at <http://www.time.com/time/europe/magazine/2000/0619/euvat.html>.

¹³³ See Neil Warren, *Internet Challenge to Tax System Design*, in *THE INTERNATIONAL TAXATION SYSTEM* ch.4, 78 (Andrew Lymer & John Hasseldine, eds., Kluwer Acad. Publishers, 2002).

¹³⁴ See, e.g., 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, 691-95 (1997).

¹³⁵ See TREASURY'S WHITE PAPER, *supra* note 3, at 21-22 (predicting that the rise of electronic commerce would accelerate a trend towards proliferation of residence-based taxation as a default rule for taxing international income).

¹³⁶ *Id.* at 23.

¹³⁷ See I.R.C. § 865(a) (2000).

and ocean activity,¹³⁸ have already brought U.S. law closer to residence-based taxation.

Although the Treasury Department emphasized that the White Paper was merely an invitation to discussion and not a blueprint for future changes, its advocacy of residence-based taxation is not to be taken lightly. It indicates that the Department is prepared to make it the cornerstone of its future policy on taxing electronic commerce. Further, the Department's thoughts on the increasing importance of residence-based taxation were echoed by the White House in a 1997 report titled "A Framework for Global Electronic Commerce."¹³⁹

The proposal for residence-based taxation of electronic commerce has been met with severe criticism from the academic and the practicing tax community.¹⁴⁰ Critics stress that, while it can be difficult to establish the source of income in electronic commerce, it is even more difficult to establish the residence of corporate taxpayers in cyberspace.¹⁴¹ There are several methods for determining the residence of a company: the place of incorporation,¹⁴² the place of central management and control,¹⁴³ and the residence of the shareholders.¹⁴⁴ However, because electronic commerce can be carried out from any location on the globe connected to the Internet, and because it is very easy to set up a holding company in a "tax haven," then – in the absence of source-based taxation – a company might avoid all income taxes.

Likewise, the rules that look to the corporation's place of central manage-

¹³⁸ See I.R.C. § 863(d) (2000).

¹³⁹ PRESIDENT WILLIAM J. CLINTON, A FRAMEWORK FOR GLOBAL ELECTRONIC COMMERCE (July 1, 1997, Wash., D.C.), available at <http://www.technology.gov/digeconomy/framework.htm>. This report is a comprehensive study that suggests policies on a variety of financial and legal issues pertaining to the Internet. With respect to international taxation, the Report set forth broad policy goals that such taxation should be neutral, transparent, and able to accommodate the tax systems of the U.S. and its international partners. It also questioned the continuing viability of source-based taxation both at the international and subfederal levels. See *id.*, art. I. § 1.

¹⁴⁰ See Walter Hellerstein, *Electronic Commerce and the Challenge for Tax Administration*, 15-18 (World Trade Org., Comm. on Trade and Dev., Seminar on Revenue Implications of E-Commerce for Development, Geneva, Switzerland, 22 Apr. 2002), available at http://www.wto.org/english/tratop_e/devel_e/sem05_e/hellerstein.doc.

¹⁴¹ See *id.* at 8, 17.

¹⁴² See, e.g., I.R.C. § 7701(a)(4) (2000).

¹⁴³ The place of central management and control is used, e.g., in the U.K., see *De Beers Consolidated Mines v. Howe*, 5 T.C. 198, 455, 458 (1906), and in some European double tax treaties, see Bernard Jeffcote & Pieter Kroon, *UK/NETHERLANDS DOUBLE TAXATION TREATY 10* (Kluwer Law and Taxation Publishers, 1992).

¹⁴⁴ There is no precedent for using this basis except in special tax regimes. AULT & ARNOLD, *supra* note 54, at 349.

ment and control to establish corporate residence can be rendered obsolete by the rise of intranets. Internal electronic communications eliminate the need for companies' managers to meet in one physical location. Thus, corporate management can be dispersed throughout many different taxing jurisdictions.

It would also be impracticable to link the residence of a corporation to the residence of its shareholders.¹⁴⁵ Since shares of most multinational corporations trade on several exchanges in different countries, there is no single corporate residence from the shareholders' perspective. Taxing a multinational on a residence basis would essentially result in a form of pass-through taxation of shareholders on the earnings of the corporation.¹⁴⁶ Such taxation would be difficult to administer since the roster of shareholders in a publicly traded corporation changes constantly, and it would be hard for the shareholders to obtain the requisite information from a foreign corporation they would not control.¹⁴⁷

Several American academics also point out that residence-based taxation contradicts the "original intent" underlying U.S. international tax policy, which was based on a preference for source-based taxation of active income and a consideration of its practical implementation in the international provisions of the Internal Revenue Code.¹⁴⁸ Despite the suggestion in the Treasury's White Paper, it is hard to detect a trend toward more residence-based taxation in recent U.S. tax policy. The examples of residence-based taxation of non-inventory sales and space and ocean activities cited by the Treasury Department¹⁴⁹ are relatively minor segments of the overall scheme of U.S. taxation.

Still, it seems that the advocates of the evolutionary approach resist recognizing the revolutionary (as opposed to evolutionary) character of the Internet and truly acknowledge the new business techniques it has made possible. The proposed scheme of residence-based taxation appears both impracticable and contrary to U.S. and international tax principles. Moreover, this approach still does not provide a solution for the harmful tax competition problem. It simply postpones looking for one.

¹⁴⁵ See Amir Licht, *Regulatory Arbitrage for Real: International Securities Regulation in a World of Interacting Securities Markets*, 38 VA. J. INT'L L. 563 (1998).

¹⁴⁶ Joseph M. Dodge, *A Combined Mark-to-Market and Pass-Through Corporate-Shareholder Integration Proposal*, 50 TAX L. REV. 265, 267 n.4 (1995).

¹⁴⁷ The U.S. experience with taxing passive foreign investment companies (PFICs) on a pass-through basis under I.R.C. §§ 1291-1298 has not been very successful. See Reuven S. Avi-Yonah, *The Rise and Fall of Arm's Length: A Study in the Evolution of U.S. International Taxation*, 15 VA. TAX. REV. 89 (1995).

¹⁴⁸ Graetz & O'Hear, *supra* note 6, at 1037-38.

¹⁴⁹ TREASURY'S WHITE PAPER, *supra* note 3, at 21 n.38, 27.

C. *Revolutionary Approaches: Switching the Emphasis to Consumption-Based Taxation, Changing Transfer Pricing Rules, Sui Generis Taxes*

In view of the truly revolutionary changes in the ways of doing business brought about by the Internet, surprisingly few proposals for radical reforms of Internet-based income taxation have been put forward so far. Among the most promising proposals are recommendations to:

- (1) shift the emphasis to consumption-based taxation by setting consumption-oriented thresholds for the current concept of permanent establishment;¹⁵⁰
- (2) capture the Internet tax revenues through transfer pricing rules;¹⁵¹ and
- (3) introduce an entirely new Internet-specific tax, like a “bit tax” on data passing through the Internet or a Tobin tax (a tax on foreign exchange transactions).¹⁵²

1. Shifting to Consumption-Based Taxation

One proposal separates electronic commerce from general taxation rules and subjects it to consumption-based taxation. Under the consumption-based system, permanent establishment would be defined not in terms of physical presence, but rather in terms of a pre-set minimum gross income earned within a jurisdiction. For example, the rule could exclude from source-based taxation legal persons with gross electronic commerce sales of \$1 million or less within the given state.¹⁵³ The threshold number should be high enough to exclude most small businesses from the tax in order to ensure that income derived from a jurisdiction would exceed the costs of complying with its tax laws.¹⁵⁴ The threshold should also be set on gross sales rather than net to avoid unduly burdening the local tax administration.¹⁵⁵

Consumption-based taxation would eliminate problems related to the characterization of income since all services, royalties, rents, and sales in electronic commerce would be subjected to the same sourcing rule: where did the consumption of goods or services take place.¹⁵⁶ Unless the income from these types of electronic transactions exceeded the threshold for taxation of business profits, they would not be taxed by the source country. However, once the

¹⁵⁰ See Avi-Yonah, *supra* note 48, at 535-36.

¹⁵¹ See *id.* at 545-50.

¹⁵² See Warren, *supra* note 133, at 79.

¹⁵³ Avi-Yonah, *supra* note 48, at 536.

¹⁵⁴ *Id.*

¹⁵⁵ See *id.*

¹⁵⁶ See *id.* at 545.

threshold was reached, the taxpayer would be required to file a return and be taxed on a net basis. A withholding system could then be used to ensure sellers file in jurisdictions where they have no presence.

The mechanics of the consumption-based withholding tax regime would be similar to the destination-based value added tax (VAT) rules, except that the tax base would be calculated based on net income.¹⁵⁷ A gross withholding tax would be imposed on the sales of goods and provision of services provided through electronic means into the jurisdiction where goods and services are consumed, at a rate equal to the corporate tax rate in that jurisdiction. The withholding would apply equally to all sellers in electronic commerce, so that there would be no discrimination among domestic and foreign sellers. Next, to obtain a refund or reduction of the gross tax, the taxpayer would file a return stating its deductions, including cost of goods sold. The jurisdiction of consumption would only allow deductions to related and unrelated parties that are located in jurisdictions that both impose tax at a similar rate and have the same rules of deductibility, unless such related and unrelated parties file returns and pay tax to the jurisdiction of consumption.¹⁵⁸ The jurisdiction of consumption would refund the difference between the gross and net tax. If the residence jurisdiction of the taxpayer imposes a corporate tax, the net consumption-based withholding tax on the Internet sales should be creditable in the residence jurisdiction of the taxpayer.

The challenge of the consumption-based taxation system is in determining where the goods or services are consumed. The ground rules on the Internet would have to be modified to allow tracking of sales, perhaps through the use of some sort of a “digital certificate” attesting a customer’s residence in a country.¹⁵⁹ Such tracking should be done without unduly infringing on privacy since tax authorities only need to know the amount paid by a consumer, not the content of goods and services provided.¹⁶⁰

An important criticism of the consumption-based threshold for permanent

¹⁵⁷ *See id.* at 538-40.

¹⁵⁸ This rule is needed because otherwise a high-profit taxpayer will sell its goods into the jurisdiction of consumption through an unrelated low margin distributor in a jurisdiction with high marginal tax rates. The rule is similar to the VAT rule that allows deductions for inputs only for purchases from registered VAT payers. *See id.* at 538.

¹⁵⁹ A digital certificate acts similar to a passport, revealing certain aspects of the computer user’s identity such as age or location. For a more elaborate definition, *see* http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci211947,00.html (last visited Dec. 10, 2006). The identification techniques utilizing digital certificates could also be reinforced by introducing the ‘smart cards’ proposed by the Clinton administration. *See* Clayton W. Chan, *Taxation of Global E-Commerce on the Internet: The Underlying Issues and Proposed Plans*, 9 MINN. J. GLOBAL TRADE 233, 262-64 (2000).

¹⁶⁰ *See* Avi-Yonah, *supra* note 48, at 536.

establishment and related withholding is that it would require the overhaul of the entire system of international taxation both domestically and in the double tax treaties.¹⁶¹ However, nothing seems to prevent countries from limiting application of consumption-based taxation to electronic commerce transactions. The problems raised by electronic commerce are unique to it, and do not necessarily spill over to other forms of commerce. In fact, limiting any new rules to only electronic commerce is similar to the way capital income is differentiated from labor income because of the higher mobility of the former. If the new rules are limited to electronic commerce, it will be unnecessary to renegotiate all the existing tax treaties, except to the extent necessary to carve out an exception for electronic commerce. Although limiting application of consumption-based taxation to electronic commerce would violate the principle of neutrality, the ardent adherence to this principle in case of electronic commerce may be unnecessary because the nature of electronic commerce is truly unique and the line between electronic commerce and non-electronic one is relatively easy to draw.¹⁶² Of course, if application of consumption-based proposals to other types of income becomes justified in the future, it certainly would be possible to expand the scope of the new electronic commerce rules to other types of commerce.

2. Capturing Internet Tax Revenues Through Transfer Pricing Rules

Transfer pricing rules may be another mechanism for addressing international taxation of electronic commerce.¹⁶³ The problem of over- and under-taxation would be resolved if it were possible to agree on a formula to apportion a multinational's profit from electronic commerce among various countries involved in the transaction. In that case, the traditional transfer pricing analysis of comparable transactions between unrelated parties could be replaced by the profit split analysis.¹⁶⁴ Profit split analysis is based on a functional analysis of each part of the multinational, assigning profit appropriate to each function under a market-based return. Profit splits must be applied to the global profits from an entire line of business rather than from one specific transaction basis in order to avoid unaccounted profits.¹⁶⁵ For large multina-

¹⁶¹ See Katz, *supra* note 126, at 655.

¹⁶² See Avi-Yonah, *supra* note 48, at 531.

¹⁶³ See Lisa Peschcke-Koedt, *A Practical Approach to Permanent Establishment Issues in a Multinational Enterprise*, 16 TAX NOTES INT'L 1601, 1612 (May 18, 1998).

¹⁶⁴ The profit split method is currently allowed both under the U.S. transfer pricing regulations and the OECD guidelines. See Treas. Reg. 1.482-6(c)(3)(i)(B). See also OECD, TRANSFER PRICING GUIDELINES FOR MULTINATIONAL ENTERPRISES AND TAX ADMINISTRATION (1995), *reprinted in* 9 TAX NOTES INT'L 155, 179-80 (July 18, 1994).

¹⁶⁵ The global profit split is currently allowed by the U.S., the U.K., and Japan. See, e.g., Treas. Reg. 1.482-6(c). The OECD guidelines insist that profit splits must be applied on a

tionals, such an apportionment can be worked out through negotiation of advance pricing agreements among tax authorities.

The main obstacle to such procedure is the lack of an appropriate forum for negotiating multi-jurisdictional pricing agreements. For smaller companies, where obtaining global advance pricing agreements would be impracticable, a global profit split analysis could be combined with a consumption-based system. Under this system, a consumption jurisdiction will impose a gross withholding tax on payments for sales into its territory. If a seller is also subject to tax by another source jurisdiction, a global profit split analysis should be applied to allocate those market-based returns to the routine functions performed in different jurisdictions.¹⁶⁶

Transfer pricing reform alone, however, is not likely to resolve all issues inherent in taxing Internet commerce, as it is limited to transactions among related parties. Although the top 300 multinationals own about one-quarter of the world's productive assets, and related party transactions constitute about one third of the global trade,¹⁶⁷ the overwhelming majority of companies operating in the world today are small-to-medium entities and single proprietorships¹⁶⁸ for which compliance with global profit splitting rules on the Internet would be too costly.¹⁶⁹

3. Introducing a New Internet-Specific Tax

Finally, there have been proposals for taxes targeted specifically at electronic commerce. For instance, under one of the more intriguing proposals, a so-called "bit tax" would be levied on every piece of digital data – or bit – that flows over the Internet. The per bit rate would be very low, but the tax could raise enough money to potentially wholly replace revenues allegedly lost as Internet-based transactions replace physical ones.¹⁷⁰

The concept of a bit tax was first articulated in a paper co-authored by Arthur J. Cordell and Thomas Ran Ide titled "The New Wealth of Nations".¹⁷¹

separate transaction basis. See OECD TRANSFER PRICING GUIDELINES, *supra* note 164.

¹⁶⁶ See Avi-Yonah, *supra* note 48, at 548-49.

¹⁶⁷ See Bill Emmott, *Multinationals Back in Fashion, Everybody's Favorite Monster: A Survey of Multinationals*, THE ECONOMIST, March 27, 1997, at 6.

¹⁶⁸ See Francis Pereira & Elizabeth Fife, *Economic, Social and Cultural Factors Affecting of Adoption of E-commerce Applications in Small and Medium Size Enterprises: A Cross-Country Analysis* (sic) 2-3, <http://www.marshall.usc.edu/ctm/publications/PTC2002Paper1.pdf>.

¹⁶⁹ See *id.* at 3-4.

¹⁷⁰ See Bangemann says "nein" to Bit Tax, 12 LEARNING IN A GLOBAL INFO. SOC'Y (Feb. 22, 1997), <http://www.pjb.co.uk/12/tax.htm>.

¹⁷¹ See Jeanne Goulet, *Counting Bits*, Paper Presented at International Tax Program and the Society for Law and Tax Policy, Harvard Law Sch., SYMPOSIUM: MULTI-

The idea was further developed in successive writings by Cordell, a policy adviser to the Canadian government.¹⁷² In Europe, the chief advocate of research on the issue became Luc L. G. Soete, Professor of International Economics at the Maastricht University and director of the Maastricht Economic Research Institute on Innovation and Technology (MERIT). He and his colleagues at MERIT – Karen Kamp and Bas ter Weel – popularized the alternative approach to Internet taxation in a series of articles published in 1996-1998¹⁷³ and a book published in Toronto in 1997, probably the first book ever written on the interaction of tax laws and electronic commerce.¹⁷⁴

The bit tax idea gained even more attention in Europe in 1997 after the High Level Group of Experts chaired by Prof. Soete in its Final Report called on the Commission to ensure “more fundamental reflection and research on alternative taxation systems.”¹⁷⁵ The Report has named the bit tax a possible alternative, although admitting that “its features and implementation aspects need more study.”¹⁷⁶ Moreover, at about the same time, governments of Belgium and Italy were seriously considering introduction of a bit tax as a source of compensation for the loss of tax revenues caused by electronic commerce.¹⁷⁷

Nevertheless, the idea of a bit tax has met with objection from the very beginning. Its opponents based their arguments mostly on policy considerations, the most important of them being the tax policy criteria of neutrality and eq-

JURISDICTIONAL TAXATION OF ELECTRONIC COMMERCE (Apr. 5, 1997), available at <http://www.merit.unimaas.nl/cybertax/ibm.html>.

¹⁷² See, e.g. Arthur J. Cordell, *Multi-Jurisdictional Taxation of Electronic Commerce*, Paper Presented at International Tax Program and the Society for Law and Tax Policy, Harvard Law Sch., SYMPOSIUM: MULTI-JURISDICTIONAL TAXATION OF ELECTRONIC COMMERCE (Apr. 5, 1997); Arthur J. Cordell, *New Taxes for a New Economy*, GOV'T INFO. IN CANADA, Vol. 2, No. 4.2. (Spring, 1996), <http://www.usask.ca/library/gic/v2n4/cordell/cordell.html>.

¹⁷³ See, e.g. Luc Soete, *Een belasting op bits en bytes*, *Economisch Statistische Berichten*, Vol. 81, No. 4045, 129 (1996), available at <http://www.soete.nl/dutch/bittax.html>; Luc Soete, *Bit tax advocate defends the proposals to confused users*, NETWORK NEWS, No. 72, Feb. 1997, at 2-8; Luc Soete & Bas ter Weel, *Globalizacao, Erosao Fiscal e Internet, Revista AFRESP de Tributacao*, Vol. 11(4), Dec. 1998, at 46-74 (RM1998-026).

¹⁷⁴ ARTHUR J. CORDELL, T. RAN IDE, LUC SOETE & KARIN KAMP, *THE NEW WEALTH OF NATIONS: TAXING CYBERSPACE (BETWEEN THE LINES)*, 1997).

¹⁷⁵ EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR EMPLOYMENT, INDUSTRIAL RELATIONS, AND SOCIAL AFFAIRS, BUILDING THE EUROPEAN INFORMATION SOCIETY FOR US ALL: FINAL POLICY REPORT OF THE HIGH LEVEL GROUP OF EXPERTS 43 (April 1997), available at <http://ec.europa.eu/idabc/servlets/Doc?id=18740>.

¹⁷⁶ *Id.*

¹⁷⁷ Howard Gleckman, Marsha Johnston, Catherine Lee, *The Tax Man Cometh to Cyberspace*, BUSINESS WEEK, Dec. 9, 1996, available at <http://www.businessweek.com/1996/50/b350595.htm>. See also Bénédicte Vaes, *Di Rupo rêve d'une taxe sur les transferts de "bits" pour récolter 10 milliards par an*, LE SOIR, 11 Juin 1996, at A5.

uity. It has been argued that a bit tax “is not neutral since it is imposed only on digital (as distinguished from nondigital) transfers. It is not equitable since it taxes consumers without regard to the nature of the message being transmitted – a vital medical report would be taxed in the same manner as unsolicited junk e-mail.”¹⁷⁸ The technical feasibility and economic expediency of measuring data traffic on the Internet has also been questioned, particularly with respect to high enforcement costs and the ease of tax avoidance through the use of data compression software and retaining tax-related information in an analogue form.¹⁷⁹

By 1998, as the incremental approach to Internet taxation was taking over the agenda, the tax bit idea lost the battle for hearts and minds of policymakers worldwide. Eurocrats were no exception. In 1997 they clearly enunciated their rejection of the very idea of an alternative approach to taxing electronic commerce in Europe: “On no account . . . should the Member States attempt to acquire fresh sources of revenue by imposing new taxes and duties on electronic transactions (fiscal neutrality). The US government’s position on applying the tax rules currently governing traditional international trade to electronic commerce, while taking account of the new circumstances, must be examined with due consideration for the specifics of the EU.”¹⁸⁰ The OECD has not endorsed the bit tax idea either, and in a 1998 report the US government trumpeted its role in defeating an Internet-specific tax as discriminatory of electronic commerce.¹⁸¹ Still, in 1999, the United Nations Development Programme (UNDP) again proposed the use of a bit tax or a patent tax as an instrument of bridging the “digital gap” between the rich and the poor.¹⁸² But in light of the severe criticism the suggestion has received,¹⁸³ such tax schemes have not been adopted.

Without advocating the specific idea of a bit tax, the author would suggest that this idea most wholly corresponds to the revolutionary nature of business

¹⁷⁸ See DOERNBERG ET AL., *supra* note 11, at 578.

¹⁷⁹ See Luc Soete, *Reaction to European Commission, DG XIII Bit Tax Proposal Analysis*, <http://www.merit.unimaas.nl/cybertax/response.html>.

¹⁸⁰ Opinion of the Economic and Social Committee on the ‘Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions: A European initiative in electronic commerce’, 1998 O.J. C 19, p. 72, 77, available at http://europa.eu.int/eur-lex/pri/en/oj/dat/1998/c_019/c_01919980121en00720084.pdf.

¹⁸¹ See U.S. GOV’T WORKING GROUP ON ELECTRONIC COMMERCE, FIRST ANNUAL REPORT 13-14 (Nov. 30, 1998), <http://permanent.access.gpo.gov/lps13577/e-comm.pdf>.

¹⁸² See UNDP, HUMAN DEVELOPMENT REPORT 1999, 10 (Oxford U. Press, 1999), http://hdr.undp.org/reports/global/1999/en/pdf/hdr_1999_full.pdf.

¹⁸³ See Maria Seminerio, *UN ‘bit tax’ proposal draws fire*, ZDNet News, July 15, 1999, <http://zdnet.com.com/2100-11-515159.html>.

being done over the Internet and would push governments toward search for alternative taxation schemes designed to address the issues raised in this article.

IV. CONCLUSION

The revolutionary approaches have clearly not yet found their way into the minds of key decision-makers, upon whom the solution to the interrelated problem of Internet taxation and tax competition depend. To date, the world's tax authorities have taken a "wait and see" approach to dealing with the rise of electronic commerce.¹⁸⁴ Although various discussions have been held, commissions have been appointed and white papers have been issued, there is still little change and little practical advice based on the existing rules that tax advisors can give to their clients.

One difficulty in developing a tax regime for electronic commerce is that the Internet is still a new medium, the full ramifications of which are not well understood. The caution expressed by governments and business is compounded by their mutual desire not to retard the growth of this promising industry. In addition, businesses will not push for new rules as long as the existing rules can be interpreted favorably to their bottom line. Entrepreneurs are concerned that any changes to existing rules might inadvertently result in lowering the threshold on countries' ability to tax foreigners.¹⁸⁵

Another important reason for caution in introducing new rules for taxing the Internet is that the U.S. and other influential countries benefit from under-taxation of Internet-based commerce. Not only are developed countries the leaders in electronic commerce, but they are also the primary exporters of goods, services, and capital. The cost of exports are lower if the importing country is barred from taxing the exporters' income due to a lack of a permanent establishment. Thus, gains derived from tax-free electronic commerce accrue to the countries that have both exportable capital, goods, and services and strong capabilities in electronic commerce.¹⁸⁶

The advocacy of residence-based taxation by the U.S. Treasury is a particularly interesting example of a developed country trying to promote its exports at the expense of others. The disparity of tax revenues allocation would be even more obvious under an international tax-sharing arrangement based on residence than the existing combination of residence- and source-based taxation. The shift to residence-based taxation would greatly benefit (at least in the

¹⁸⁴ See David L. Forst, *Old and New Issues in the Taxation of Electronic Commerce*, 14 BERKLEY TECH. L.J. 711, 711 (1999).

¹⁸⁵ See *id.* at 715-16.

¹⁸⁶ See *U.S. Could Gain Income if Current Policies Apply to Electronic Commerce*, *Attorneys Say*, TRANSFER PRICING REP., July 16, 1997, at 178.

short-run) the U.S., currently the world leader in electronic commerce,¹⁸⁷ because the U.S.'s share of global tax revenue dramatically increases as it asserts the exclusive right to tax income of all its residents earned over the Internet.

As a result, the residence-based taxation proposal has proven "hard to swallow" even for other developed countries, which strongly favor preserving the current system of international taxation. These countries are not likely to cede their right to tax foreigners under source-based taxation nor to tolerate such a significant shift of revenue flow towards the U.S.¹⁸⁸ Indeed, residence-based taxation has so far failed to receive the support of any other country or major international organization. OECD member states have clearly signaled their preference to adhere to the existing international tax sharing arrangements already established.¹⁸⁹

On the other hand, the developing countries, although disadvantaged by the current regime of international taxation, do not have much bargaining power to influence the redesign of the existing international economic order. In a one-on-one negotiation between a developed and a developing country over a tax treaty, the same old OECD model treaty will be used as a starting point.¹⁹⁰ Collective bargaining has also not been successful so far, as exemplified by the U.N. model treaty.¹⁹¹ Although developing countries participated in its creation, the final draft has become a mere extension or a variation of the OECD Model Treaty. Because developing countries do not have the power to reshape the international tax rules that would better suit their interests, they have resorted to the creative use (or, as developed countries would argue, abuse)¹⁹² of the current regime of international taxation by lowering their effective tax rates and causing tax competition among nations.

¹⁸⁷ See Kenneth L. Kraemer, Jason Dedrick & Debora Dunkle, *E-Commerce in the United States: Leader or One of the Pack*, <http://www.crito.uci.edu/publications/pdf/GIT/GEC/USsnapshot.pdf>; see also eMarketer.com, *The State of European E-Commerce*, <http://www.emarketer.com/Article.aspx?1004170>.

¹⁸⁸ See, e.g., Mwba-Mboma, *France, OECD Take Different Views of Unstaffed Servers as Permanent Establishments*, 2002 WORLDWIDE TAX DAILY 102-5 (May 28, 2002).

¹⁸⁹ See OECD, *TAXATION AND ELECTRONIC COMMERCE: IMPLEMENTATION OF THE OTTAWA TAXATION FRAMEWORK CONDITIONS – 2003 REPORT*, Box 3 at 5, available at <http://www.oecd.org/dataoecd/45/19/20499630.pdf>.

¹⁹⁰ See, e.g., Susan K. Duke, *E-Commerce and the Taxation Doctrine of Permanent Establishment in the United States and China*, J. TRANSNAT'L L. & POL'Y 275, 277 (2005).

¹⁹¹ UNITED NATIONS, DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, *MODEL DOUBLE TAXATION CONVENTION BETWEEN DEVELOPED AND DEVELOPING COUNTRIES* (Wilson Govt. Pub. UN DOCS ST/ESA/PAD/Ser.5/21, 2001), available at <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan002084.pdf>

¹⁹² OECD, *HARMFUL TAX COMPETITION: AN EMERGING GLOBAL ISSUE* 13-18 (1998), available at <http://www.oecd.org/dataoecd/33/1/1904184.pdf>.

2006] *INTERNATIONAL TAXATION OF E-COMMERCE*

For these reasons, only the radical steps such as those discussed in this article¹⁹³ will be sufficient to solve the problem of harmful tax competition. Only such radical proposals would make lowering income tax rates meaningless from the point of view of attracting foreign investment, including investments in Internet-based enterprises. Consequently, these proposals will realign the current international income tax regime with the realities of contemporary information technology-based business. To ignore the revolutionary character of electronic commerce by simply plugging tax leaks through more conservative reforms will render the tax system “neither efficient, nor equitable, nor sustainable.”¹⁹⁴

¹⁹³ *Supra* Part III.C.

¹⁹⁴ *See* Warren, *supra* note 133, at 78.