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**Electronic commerce and the challenge for  
tax administration\***

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**Table of Contents**

	<u>Page</u>
I. Introduction	3
II. Technological and Commercial Background	4
III. Electronic Commerce and Income Taxation	9
A. Jurisdiction to Tax	9
1) Residence-Based Taxation	10
2) Source-Based Taxation	10
B. Characterization of Income	14
C. Concluding Thoughts on Residence-Based Taxation versus Source-Based Taxation in the Context of Electronic Commerce	17
IV. Electronic Commerce and Consumption Taxation	20
A. VAT Issues	21
B. United States Subnational Retail Sales Tax (RST) Issues	27
V. Conclusion	31

## I. INTRODUCTION

The coming of the Internet Age has profound implications for tax administration as it does for just about everything else. The exponential growth of electronic commerce poses a daunting challenge to taxing authorities' traditional approaches to both direct and indirect taxation. The specter of massive amounts of economic activity conducted through electronic commerce by remote service providers engaged in non traceable transactions from unidentifiable locations has created concern among fiscal authorities around the globe. The Organization of Economic Cooperation and Development (OECD), the European Union (EU), and the American, Australian, and Canadian governments, among others, have issued reports identifying the critical issues raised by the advent of electronic commerce for the world's taxing regimes,<sup>1</sup> and they are engaged in ongoing efforts to address those issues.

In this paper, I provide an overview of the problems raised by taxation of electronic commerce and of the initiatives that are currently being undertaken to resolve them. Part I of this paper describes the technological and commercial background out of which these problems arise and the basic questions that these developments raise for tax administration. Part II considers the principal challenges raised by electronic commerce for income tax regimes. Part III considers the principal challenges raised by electronic commerce for consumption tax regimes.

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<sup>1</sup> See Australian Taxation Office, *Tax and the Internet* (1997) [hereinafter *Australian White Paper*]; Canadian Tax Administration, *Electronic Commerce and Canada's Tax Administration* (1998); Commission of the European Communities, *Proposal for a Council Directive amending Directive 388/77/EEC as Regards the Value Added Tax Arrangements Applicable to Certain Services Supplied by Electronic Means* (2000) [hereinafter *EU Proposed E-Commerce Directive*]; OECD Committee on Fiscal Affairs, *Electronic Commerce: A Discussion Paper on Taxation Issues* (1998) [hereinafter *OECD E-Commerce Discussion Paper*]; Office of Tax Policy, U.S. Treasury Department, *Selected Tax Policy Implications of Global Electronic Commerce* (1996) [hereinafter *Treasury White Paper*].

## II. TECHNOLOGICAL AND COMMERCIAL BACKGROUND

Any serious attempt to examine the legal and policy issues raised by taxation of electronic commerce must begin with an understanding of the technological and business background out of which they arise. This background has been described lucidly and in great detail elsewhere,<sup>2</sup> and I make no pretense of duplicating these efforts in the brief space allotted to me here. Nevertheless, it is appropriate to begin this discussion with some introductory observations about the nature and growth of e-commerce, the business transactions it is spawning, and the fundamental issues that these developments pose for tax administration in order to place in context the more technical taxation issues to which most of my paper is devoted.

"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."<sup>3</sup> A somewhat more descriptive and perhaps more useful definition of electronic commerce refers "to a wide array of commercial activities carried out through the use of computers, including on-line trading of goods and services, electronic funds transfers, on-line trading of financial instruments, electronic data exchanges between companies and electronic data exchanges within a company."<sup>4</sup> Electronic commerce exists today in a number of forms and contexts, and such commerce is likely to expand dramatically in the future, assuming an increase in the speed at which communications networks can transfer data and the development of improved payment systems. Indeed, it is difficult to talk about the growth of the Internet and electronic commerce without engaging in hyperbole.

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<sup>2</sup> See, e.g., Richard Doernberg & Luc Hinnekens, *Electronic Commerce and International Taxation* (1999); Karl Frieden, *Cybertaxation: The Taxation of E-Commerce* (2000).

<sup>3</sup> Treasury White Paper, *supra* note 1, at 8.

<sup>4</sup> Doernberg & Hinnekens, *supra* note 2, at 3.

Predictions for increases in e-commerce revenues are simply staggering. The OECD estimates that the total revenues from electronic commerce may reach \$330 billion by 2000-2001 and may be as much as \$1 trillion by 2003-2005.<sup>5</sup>

Electronic commerce opens up new avenues for the marketing of traditional goods and services directly to consumers. It creates similar opportunities for business-to-business transactions involving both digital and non digital products and services. In fact, in 1998 American companies made \$43 billion worth of sales to one another over the Internet, *five times the consumer retail total*.<sup>6</sup> Examples of electronic commerce include:

- e-procurement, involving Internet-based sales transactions between businesses, including both "reverse auctions" that facilitate on-line trade between a single business purchaser and many sellers and digital marketplaces that facilitate on-line trading between multiple buyers and sellers;
- on-line catalogs, displaying images of goods, which permit Web users around the world to select and order books, wine, and other products;
- computer software, which can be transferred electronically to the user's computer;
- photographs, which can be transferred digitally, and whose price varies with the customer's intended use of the photograph;
- on-line information, such as Lexis, Nexis and other electronic data bases, which are available to users through the Internet and standard telecommunications networks;
- services, such as legal, accounting, medical, and other consulting services, which subscribers can access for a fee using an electronic password to obtain access to the service provider's Web site;

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<sup>5</sup> OECD Division for Fiscal Affairs, Will There Be Uniform International Tax Rules for E-Commerce? (1999).

<sup>6</sup> *The Net's Real Business Happens .Com to .Com*, N.Y. Times, Apr. 19, 1999, at C1, cols. 3-5, & C6, cols. 3-6 (citing statistics from Forrester Research, Cambridge, Mass.). The same article estimated that business-to-business sales will reach \$1.3 trillion or 9.3 percent of corporate America's purchases within four years.

- videoconferencing, which is currently used principally by large businesses and institutions that possess the expensive dedicated equipment necessary to participate in a video conference, but which ultimately may be accessible to many more users with the introduction of inexpensive desktop video cameras that can be connected to a personal computer;
- securities trading, which is currently offered by some stock brokerage firms through Web sites that permit customers to trade bonds, mutual funds, options, futures, and commodities;
- offshore banking, now being offered at some Web sites, including incorporation, banking services, and credit card payment.

What, then, are the attributes of electronic commerce that have significant implications for taxation? Jeffrey Owens, Head of Fiscal Affairs for the OECD, and from whom you will hear later in this program, has identified six characteristics of the Internet that will influence the operation of tax systems.<sup>7</sup>

- (1) The ability to establish public and private global communications systems which are secure and inexpensive to operate. The opportunities that this opens up for new forms of commercial activities will not be limited to large companies. Small and medium size enterprises will find it easier to engage in international commerce. Start-up capital requirements on the Internet are typically very low. This, in turn, will lead to a rapid expansion in cross border activities.
- (2) The process of “disintermediation” whereby the Internet will eliminate or substantially reduce the need for intermediaries in the sale and delivery of goods and services, and in the provision of information. Commerce which uses the Internet requires a small number of distribution, sales representative, broker and other professional intermediaries. Already it is possible for a producer of software to sell and to deliver its products directly to the final consumer. Similarly, an airline company can deliver tickets directly to passengers. Financial and other information may become available without the intermediation of banks and other financial institutions.
- (3) The development of encrypted information which protects the confidentiality of the information transmitted on the Internet. Whilst it is possible to detect a message sent by one person to another over the Internet, encryption generally

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<sup>7</sup> Jeffrey Owens, The Tax Man Cometh to Cyberspace, paper presented at the Harvard Law School International Tax Program Symposium on Multi jurisdictional Taxation of Electronic Commerce, April 5, 1997.

precludes understanding the content of the message.

- (4) An increased scope for the integration of business functions, e.g., design and production. Private Intranet networks are now widespread in Multinational Corporations (MNE's). OECD estimates that at least two-thirds of Internet transactions take this form. This development produces a closer integration of transactions within an MNE and makes it increasingly difficult to separate out the functions carried out by related enterprises. This integration may also produce a dramatic synergistic effect--- the sum of the parts being much less than the integrated whole.
- (5) The Internet provides greater flexibility in the choice of the organization form by which an enterprise carries out its international activities.
- (6) The Internet has led to a fragmentation of economic activity. The physical location of an activity, whether in terms of the supplier, service provider or buyer of goods or user of the service, becomes less important and it becomes more difficult to determine where an activity is carried out.<sup>8</sup>

Owens goes on to point out that there are several technical features of Internet and intranet systems that are likely to have significant impact on the operations of tax systems, namely, the lack of any central control; the lack of central registration; the difficulty if not impossibility of tracing transactions; and the weak correspondence between a computer domain name (i.e., an Internet address) and reality (i.e., the actual geographic location of the addressee or the computer equipment used to transmit or receive the information). Owens' observations remain as true today as they were when he made them four years ago, even though 1997 may seem like the Dark Ages by the standards of Internet time.

One does not have to be a tax expert to discern the broad implications of the foregoing developments for territorially based taxing regimes. First, there is the sheer magnitude of the increase in cross-border transactions. By significantly reducing the transaction costs of

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<sup>8</sup> *Id.* at 7.

communicating and selling without regard to geographic boundaries or the size of the company, the Internet permits companies that once were confined to local markets to sell goods, services, and information internationally.<sup>9</sup> The resultant increase in cross-border transactions by itself will put greater demands on tax administrations, particularly those already struggling with conventional local commerce.

Second, the digitization of information---the conversion of text, sound, images, video, and other content into a series of ones and zeroes that can be transmitted electronically---creates difficulties in defining the source, origin, and destination of both production and consumption.<sup>10</sup> “The internet is a borderers technology.”<sup>11</sup> Servers can be located anywhere in the world without affecting the substance of an Internet-based business transaction. From the standpoint of tax administration, the principal challenge is to determine how to implement geographically limited taxing systems in a technological environment that renders geographical borders essentially irrelevant.

Third, the technical features of Internet transactions create enormous problems for taxing authorities in establishing audit trails, in verifying parties to transactions, in obtaining documentation, and in fixing convenient taxing points.<sup>12</sup> By eliminating the need for intermediaries, particularly financial intermediaries on which governments have traditionally relied to facilitate tax compliance through reporting obligations, the Internet enhances the danger

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<sup>9</sup> Tom Neubig & Satya Poddar, *Blurred Tax Boundaries: The Economy's Implications for Tax Policy*, Tax Notes, August 28, 2000, pp. 1153, 1158.

<sup>10</sup> *Id.*

<sup>11</sup> Doernberg & Hinnekens, *supra* note 2, at 7.

<sup>12</sup> Owens, *supra* note 7, at 10.



of increased tax avoidance and evasion.

But the implications for tax administration of the growth of electronic commerce are not entirely negative. It has been noted that the Chinese word for crisis combines the characters for "danger" and "opportunity."<sup>13</sup> If the Internet and electronic commerce are threatening a crisis for global tax administration because of the dangers they create for existing tax regimes, they create opportunities as well. Specifically, the new technologies create increased opportunities for streamlining tax administration by replacing paper documentation with electronic data interchange (EDI), by providing for electronic filing of tax returns, and by automating other aspects of tax reporting and compliance. For example, both the OECD's Technology Technical Advisory Group and the Streamlined Sales Tax Project in the United States are currently focusing on means by which new technologies may be utilized to improve service and efficiency in the consumption taxation of cross-border remote sales.<sup>14</sup>

### III. ELECTRONIC COMMERCE AND INCOME TAXATION

The most significant issues raised by the advent of e-commerce for income tax regimes are those relating to jurisdiction to tax and the characterization of income.<sup>15</sup> I address each of these issues in turn.

#### A. Jurisdiction to Tax

Countries generally exercise jurisdiction to tax income on the basis of residence or source.

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<sup>13</sup> *LaShawn A. v. Kelly*, 887 F. Supp. 297, 317 (D.D.C. 1995); see also [www.renewlife.org/faqs/faq\\_10.htm](http://www.renewlife.org/faqs/faq_10.htm).

<sup>14</sup> See OECD, Committee on Fiscal Affairs, Implementing the Ottawa Taxation Framework Conditions (June 2000); Streamlined Sales Tax Project, [www.geocities.com/streamlined2000/projectstatus.html](http://www.geocities.com/streamlined2000/projectstatus.html).

<sup>15</sup> Transfer pricing problems are also likely to be exacerbated, but Jeffrey Owens will be addressing those issues and I will leave them to him.

Both of these concepts are likely to become more elusive in the context of electronic commerce.

1. *Residence-Based Taxation*

An individual or corporate taxpayer's residence---whether defined in terms of domicile, place of incorporation, or seat of effective management---bears no necessary relationship to the electronic commerce in which the taxpayer engages. Accordingly, insofar as the jurisdiction is relying on the residence principle as the basis for taxation, taxpayers will enjoy enhanced opportunities in the context of electronic commerce to move income out of high tax jurisdictions into low-tax or no-tax jurisdictions assuming the taxpayer is properly treated as the resident of such a jurisdiction.<sup>16</sup> Although these opportunities have long existed with respect to conventional commerce, they are magnified in an environment in which the human or legal actors involved can be largely insulated from the electronic aspects of the relevant transactions.

2. *Source-Based Taxation*

The jurisdiction-to-tax difficulties confronting taxing authorities relying on residence-based taxation in the electronic commerce context are equaled if not exceeded by the jurisdictional issues confronting taxing authorities relying on source-based principles in asserting jurisdiction to tax income from electronic commerce earned by nonresidents. The United States, for example, generally taxes the U.S. source income of nonresident individuals and foreign corporations.<sup>17</sup> With respect to income that arises from a trade or business, however, the United States generally asserts jurisdiction only with respect to "taxable income which is effectively connected with the conduct of a trade or business within the United States."<sup>18</sup> Moreover, under income tax treaties which the

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<sup>16</sup> Karl Frieden, *Cybertaxation: The Taxation of E-Commerce* 441 (2000).

<sup>17</sup> Internal Revenue Code §§ 871, 881, 882.

<sup>18</sup> Internal Revenue Code §§ 871, 882.

United States has entered into with 48 countries, the United States generally asserts its right to tax the U.S. source trade or business income of foreign individuals and corporations only when such income is attributable to a "permanent establishment" or "fixed base" in the United States.<sup>19</sup>

The application of these basic principles of U.S. income taxation to electronic commerce creates a number of problems. First, the question whether a foreign person engaged in electronic commerce is conducting a trade or business "in the United States" is difficult to resolve by reference to the traditional criteria for resolving that issue. The concept of a U.S. trade or business evolved in the context of conventional commerce, which has typically been conducted through identifiable physical locations. As noted above, however, electronic commerce can be conducted through telecommunications and computer links that have no physical connection to the jurisdiction in which the income-producing activity occurs. Moreover, "[f]rom a certain perspective, electronic commerce doesn't seem to occur in any physical location but instead takes place in the nebulous world of 'cyberspace.'"<sup>20</sup> Consequently, even though a foreign person may engage in extensive transactions with U.S. customers, and thus clearly be engaged in trade or business, it is not at all clear that such person is engaged in a trade or business *in the United States*---at least as that concept has generally been understood.<sup>21</sup>

Second, even if a foreign person engaged in electronic commerce with U.S. customers is deemed to be engaged in a U.S. trade or business, it may be even more problematic to suggest that such a person has a "permanent establishment" in the United States in the many cases that will be

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<sup>19</sup> Treasury White Paper, *supra* note 1, at 73.

<sup>20</sup> *Id.* at 26.

<sup>21</sup> See *Piedras Negras Broadcasting Co. v. United States*, 43 B.T.A. 297 (1941), *aff'd*, 127 F.2d 260 (5th Cir. 1942).

governed by U.S. tax treaties. A "permanent establishment" is generally defined as "a fixed place of business through which the business of the enterprise is wholly or partly carried on."<sup>22</sup> Since electronic commerce can (and often will) be conducted without a fixed place of business in the United States, income that might have been subject to U.S. tax were it earned through more traditional commerce may escape U.S. taxation when earned through electronic commerce.

Indeed, the OECD has been struggling with the application of the permanent establishment definition in the context of electronic commerce. In the draft that the Working Party No. 1 on Tax Conventions and Related Questions circulated for comments on the proposed clarification of the OECD commentary on the permanent establishment definition in the OECD Model Tax Convention,<sup>23</sup> the Working Party concluded that while fixed automated equipment operated by an enterprise and located in a country may constitute a permanent establishment, a distinction needed to be drawn between computer equipment and the software used by such equipment. Thus an Internet web site could be seen as a combination of software and electronic data that is stored on and operated by a server. The web site itself would not constitute a permanent establishment, because it involves no tangible personal property and therefore cannot itself constitute a place of business. However, the server itself, which must have a physical location, could constitute such a place of business.

The OECD Working Party's conclusions may be defensible in terms of the preexisting definition of a permanent establishment, and, in fairness to the OECD Working Party, it must be pointed out that the premise of the OECD draft comments was that "the principles which underlie

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<sup>22</sup> United States Model Income Tax Convention of September 20, 1996, Article 5, par. 1.

<sup>23</sup> OECD, 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, Revised Draft for Comments, March 3, 2000.

the OECD Model Tax Convention are capable of being applied to electronic commerce."<sup>24</sup>

Nevertheless, one may question whether that premise makes sense in the context of electronic commerce. At a fundamental level, one can argue that it makes little sense to attempt to fine-tune a definition of permanent establishment, rooted in concepts of physical presence, for a universe of transactions in which physical presence is often irrelevant. In fact, the OECD itself has recognized these concerns by mandating its Technical Assistance Group on Monitoring the Application of Existing Norms for Taxation of Business

to consider and comment on the following questions:

- a) whether the concept of permanent establishment provides an appropriate threshold for allocating tax revenues between source and residence countries with respect to the use of tax havens in the context of electronic commerce;
- b) whether there is a need for special rules relating to electronic commerce and whether such rules would be a viable alternative to existing international norms.<sup>25</sup>

In the end, the principal consequence of defining a server as a permanent establishment may simply be to assure that servers are placed in low-tax or no-tax jurisdictions. Since servers can be located anywhere in the world without affecting the substance of an Internet-based transaction, elementary tax planning considerations would dictate the location of servers in tax havens or in jurisdictions that do not rely on the presence of a server as constituting a permanent establishment. At least one company recently learned this lesson the hard way in the context of U.S. state (subnational) taxation. The company located its server at a hosting company's data center in the State of New Jersey only to learn that New Jersey considered this to establish a "business presence" in the state. As a consequence, New Jersey required the company to pay

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<sup>24</sup> *Id.* at 2.

<sup>25</sup> *Id.*

New Jersey corporate income taxes and to collect sales taxes on purchases made by New Jersey residents, whether or not those purchases were made on the company's Web site.<sup>26</sup> In this regard, it may be worth observing that the U.S. Congress, in enacting the Internet Tax Freedom Act, specifically barred the states from relying on the presence of an out-of-state vendor's server as the basis for asserting jurisdiction over the vendor to require it to collect taxes on its distance sales.<sup>27</sup>

#### B. Characterization of Income

Electronic commerce raises thorny questions not only with respect to jurisdiction to subject the taxpayer to a tax on its income, but also with respect to the characterization of such income, once it is determined that the taxpayer is in fact subject to tax. Characterization of income is important because both national and international income tax rules assign different categories of income to different jurisdictions. For example, under the U.S. Internal Revenue Code, income from personal services is generally sourced in the country where the services are performed;<sup>28</sup> income from rentals and royalties is sourced according to the location of the property or, in the case of certain types of intangible property, where the intangible property is used;<sup>29</sup> and income from the sale of purchased inventory is generally sourced in the country where title passes.<sup>30</sup>

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<sup>26</sup> Ed Foster, "Exodus into New Jersey Proves to Be Very Taxing for One Dot-Com Company," InfoWorld.com, Aug. 25, 2000, available at [www2.infoworld.com/articles](http://www2.infoworld.com/articles).

<sup>27</sup> See Walter Hellerstein, *Internet Tax Freedom Act Limits States' Power to Tax Internet Access and Electronic Commerce*, 90 J. Tax'n 5 (1999).

<sup>28</sup> Internal Revenue Code §§ 861(a)(3), 862(a)(3).

<sup>29</sup> Internal Revenue Code §§ 861(a)(4), 862(a)(4).

<sup>30</sup> Internal Revenue Code §§ 861(a)(6), 862(a)(6). On October 2, 1998, The Internal Revenue Service issued final regulations on the classification of income from transactions involving computer programs. See Treas. Reg. § 1.861-18. These regulations could prove influential in the development of U.S. rules for characterizing income from electronic commerce.

Similarly, under the OECD Model Tax Convention,<sup>31</sup> and many bilateral conventions, analogous provisions exist that assign income to a contracting state based on the character of the income.

The critical question for electronic commerce is how to analogize digital transactions to transactions in conventional commerce that are addressed in the relevant provisions of national law and international treaties. For example, the purchaser of a digitized image arguably is purchasing the services of the enterprise that purveyed the image over the Internet. Under such a characterization, the income ordinarily would be sourced to the country in which services were performed.<sup>32</sup> Alternatively, the transaction might be viewed as the license to use an intangible, namely, the digitized image that is transmitted over the Internet. Under such a characterization, the income ordinarily would be sourced to the country in which the intangible right was used.<sup>33</sup> Finally, one might view the true nature of the transaction as the purchase of a photograph, economically identical to the purchase of an item of inventory. Under such a characterization, the income would ordinarily be sourced to the country in which title to the photograph passed.<sup>34</sup> Obviously, the proper characterization of a transaction will depend on its particular facts. The point is simply that the characterization of transactions in electronic commerce, which have significant implications for the

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<sup>31</sup> OECD Model Tax Convention on Income and Capital, 30 June 1998 [hereinafter OECD Model Tax Convention].

<sup>32</sup> Internal Revenue Code §§ 861(a)(3), 862(a)(3). Under the OECD Model Tax Convention, this would depend in part on whether the services are effectively connected with a permanent establishment or are attributable to a fixed base in the country where the services are performed. OECD Model Tax Convention arts. 14, 15.

<sup>33</sup> Internal Revenue Code §§ 861(a)(4), 862(a)(4). Under the OECD Model Tax Convention, this would depend in part on whether the royalties are effectively connected with a permanent establishment or arise from a fixed base in the country in which the royalties arise. OECD Model Tax Convention art. 12.

<sup>34</sup> Internal Revenue Code §§ 861(a)(6), 862(a)(6). Under the OECD Model Tax Convention, this would depend in part on whether the "business profits" from the sale are "attributable to" a permanent establishment in the country where title passes. OECD Model Tax Convention art. 7.

sourcing of income, is a task fraught with difficulties that we have just begun to think about seriously.

These difficulties are illustrated by the preliminary efforts of the OECD's Technical Advisory Group (TAG) on Treaty Characterization to address treaty characterization issues arising from electronic commerce.<sup>35</sup> For example, the Treaty Characterization TAG divided on the proper characterization of electronic ordering and downloading of digital products, where the customer selects an item from an online catalog, orders the product electronically from a commercial provider, and downloads the digital product on to its hard drive. A majority of the TAG believed that the transaction should be characterized as giving rise to "business profits" under article 7 of the OECD Model Convention on the theory that the transaction was equivalent to the electronic ordering of tangible products and that the form of delivery should not change the treaty classification of the transaction. The minority, however, believed that this type of transaction constituted payment for "royalties," and should therefore be treated under article 12 of the OECD Model Convention, on the theory that the substance of the transaction was for the right to copy the program onto the customer's hard drive.

The Treaty Characterization TAG addressed twenty-six types of transactions in its draft including a variety of transactions involving digital products (e.g., updates and add-ons, limited duration software, and single-use software); application hosting (by means of a separate license and as part of a bundled product); website hosting; software maintenance and other customer support; data warehousing and retrieval; electronic access to professional advice; on-line shopping portals and auctions; and many others. While there was unanimity in characterizing some of the

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<sup>35</sup> OECD Treaty Characterization Technical Advisory Group, Characterization of Electronic Commerce Payments Under Existing Treaty Provisions, March 24, 2000.



transactions as giving rise to business profits, royalties, or services within the meaning of the relevant treaty provisions, others gave rise to conflicting opinions. My purpose in describing these transactions is not to assemble a list of rules, but rather to underscore the more fundamental point that electronic commerce is generating countless transactions that raise income characterization issues whose resolution is uncertain under existing categories of income.

C. Concluding Thoughts on Residence-Based Taxation versus Source-Based Taxation in the Context of Electronic Commerce

In its white paper entitled " Selected Tax Policy Implications of Global Electronic Commerce,"<sup>36</sup> the U.S. Treasury suggested that the advent of electronic commerce will "accelerate" a trend towards preferring residence-based taxation to source-based taxation due to the difficulty of implementing a source-based regime in the world of cyberspace:

The growth of new communications technologies and electronic commerce will likely require that principles of residence-based taxation assume even greater importance. In the world of cyberspace, it is often difficult, if not impossible, to apply traditional source concepts to link an item of income with a specific geographical location. Therefore, source based taxation could lose its rational and be rendered obsolete by electronic commerce. By contrast, almost all taxpayers are resident somewhere . . . United States tax policy has already recognized that as traditional principles lose their significance; residence-based taxation can step in and take their place. This trend will be accelerated by developments in electronic commerce where principles of residence-based taxation will also play a major role.<sup>37</sup>

This suggestion is hardly uncontroversial for a variety of reasons. First, as Professor Reuven Avi-Yonah has observed, "the recommendation to tax income from electronic commerce primarily or exclusively on a residence basis is inconsistent with generally accepted international

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<sup>36</sup> Treasury White Paper, *supra* note 1.

<sup>37</sup> *Id.* at 20.

consensus, as embodied in tax treaties and in the U.S. international tax regime."<sup>38</sup> That consensus is based on the principle that the residence jurisdiction has the primary right to tax passive (investment) income while the source jurisdiction has the primary right to tax active (business) income.<sup>39</sup> Abandoning the source-based principle in favor the residence-based principle in the context of electronic commerce would therefore violate accepted international norms of tax policy.

Second, it is by no means clear that residence-based taxation provides a panacea for the difficulties of assigning income from electronic commerce on a source basis. While the task of administering a residence-based regime may be somewhat less daunting than the task of administering a source-based regime with respect to income from electronic commerce, "[m]any international tax professionals have experienced cases which are much more complex leading to the conclusion that the ultimate solution for electronic commerce will not rely on the 'resident somewhere' principle."<sup>40</sup> Moreover, the "relative meaninglessness of corporate residency,"<sup>41</sup> and the ease with which an Internet-based enterprise may establish a corporate residence divorced from any of its "tangible" activities, suggest that the general adoption of a residence-based regime for electronic commerce could raise as many problems as it resolves.

Third, and of particular importance to developing countries and countries with economies

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<sup>38</sup> Reuven S. Avi-Yonah, *International Taxation of Electronic Commerce*, 52 Tax L. Rev. 507, 525 (1997).

<sup>39</sup> *Id.* at 520.

<sup>40</sup> James D. Cigler, *International Taxation of Electronic Commerce: An Evolution Requiring Planning and Action* (unpublished paper presented to the International Tax Reform Forum, Tax Policy Group, Silicon Valley Joint Venture, Dec. 4, 1997), quoted in Charles E. McLure, Jr., *Taxation of Electronic Commerce: Economic Objectives, Technological Constraints, and Tax Laws* 269, 419-20 (1997).

<sup>41</sup> Avi-Yonah, *supra* note 38, at 527.

in transition, a residence-based rule raises troublesome questions of international tax equity. As Charles McLure has observed, “[a] shift to residence-based taxation would be a boon to the United States, the world’s leader in the production of electronic content.”<sup>42</sup> “But,” he continues, “it is troubling to those worry about the ability of source countries and countries where consumption occurs---especially developing countries---to tax income and consumption.”<sup>43</sup>

David Tillinghast has expressed similar concerns:

The changes wrought by the Internet . . . , which drastically reduce the need for a seller or a service provider to have a physical presence in the country where its customer is located, threaten fundamentally to alter this division of revenue by shifting the balance of taxing jurisdiction, and revenue, decisively in favour of the country of residence. Since income flows between countries are not necessarily balanced and in the case of flows between developed and developing countries are often severely imbalanced, such a shift could have profound revenue consequences.<sup>44</sup>

In short, wholly apart from the dictates of sound tax policy or practical considerations about enforcement, we cannot lose sight of the fact that the choice of tax principles may well create winners and losers. Accordingly, when distributional implications are added to the calculus, a residence-based approach to taxing income from electronic commerce may not be particularly attractive.

There is, of course, an alternative approach to "sourcing" income that would avoid some of the difficulties of the existing source rules without wholesale adoption of a residence-based approach to taxing electronic commerce, namely, formulary apportionment. Such an approach would also obviate recourse to complex, painstaking, and often unsatisfactory arm's-length

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<sup>42</sup> McLure, *supra* note 40, at 420.

<sup>43</sup> *Id.* (emphasis supplied).

<sup>44</sup> David R. Tillinghast, *The Impact of the Internet on the Taxation of Informational Transactions*, 50 Bull. Intl. Fisc. Doc. 524, 525 (1996). The Australian Tax Office has expressed similar sentiments. See Australian White Paper, *supra* note 1, at § 7.

transfer pricing inquiries as an antidote to price manipulation among commonly controlled enterprises. Needless to say, although the formulary apportionment methodology has a long history in the American states,<sup>45</sup> the prospect of applying it in the international tax arena is extremely controversial<sup>46</sup> and is contrary to international norms accepted by the OECD<sup>47</sup> and United States *federal* fiscal authorities.<sup>48</sup> I mention it here not to advocate its adoption, or even its serious consideration, but only to assure that all relevant options are "on the table."

#### IV. ELECTRONIC COMMERCE AND CONSUMPTION TAXATION

In many respects, the most pressing problems of tax administration raised by taxation of electronic commerce are those raised by consumption taxes rather than income taxes. As the number of individual consumers with access to the Internet increases every day, and with more and more products---tangible and digital---being sold over the Internet, the challenges for tax administrations are immediate and real, because transactions involving individual consumers tend to be the weakest link in the chain of tax administration. Thus, the OECD has observed that "[t]he problems concerning the application of consumption taxes are generally recognised as having more immediacy than the issues concerning direct taxation."<sup>49</sup>

<sup>45</sup> See generally 1 Jerome R. Hellerstein & Walter Hellerstein, *State Taxation* chs. 8, 9 (3d ed. 1998).

<sup>46</sup> See *Barclays Bank PLC v. Franchise Tax Bd.*, 512 U.S. 298 (1994) (sustaining constitutionality of California's formulary apportionment of corporate income as applied to a foreign-based multinational corporation and describing international opposition to formulary apportionment).

<sup>47</sup> OECD Model Tax Convention art. 7, commentary, para.4 (Sept. 1992).

<sup>48</sup> To the casual observer, it might seem odd that the American states could pursue a policy contrary to that embraced by the national government. It is in the nature of the American federal system, however, to allow the states to go their own way in fiscal matters in the absence of an *explicit* directive from Congress to the contrary. See Hellerstein & Hellerstein, *supra* note 45, at ¶ 8.16. There is no such explicit congressional directive barring the states' application of formulary apportionment to multinational enterprises, although the states themselves have generally adopted legislation in recent years confining the application of formulary apportionment to "water's edge" unitary groups. *Id.* at ¶ 8.17.

<sup>49</sup> OECD E-Commerce Discussion Paper, *supra* note 1, at 18.

In examining the impact of electronic commerce on consumption taxes, one should distinguish between national and sub national consumption taxes and, more particularly, between value added taxes (VATs) like those adopted by members of the European Union (EU) and the retail sales tax (RST) in force in the American states. Although both levies in principle are consumption taxes, and both levies encounter certain common problems raised by electronic commerce, there are also dramatic differences between the VAT and the American RST that can lead to confusion and misconception when they are lumped together under the broad rubric of "consumption" taxes. I therefore propose first to discuss the electronic commerce issues raised by the VAT and then to turn to the special problems raised by the American RST.

#### A. VAT Issues

To put the implications of electronic commerce for consumption taxation in proper perspective, it is useful at the outset to identify four categories of transactions in involving electronic commerce: first, transactions involving business-to-business (B2B) sales of tangible property consummated through electronic means (e.g., the purchase over the Internet of a computer by a business taxpayer from a remote computer vendor); second, transactions involving B2B sales of digital products (e.g., the purchase over the Internet of an electronic data base by a business taxpayer from a data base vendor); third, transactions involving business-to-consumer (B2C) sales of tangible property consummated through electronic means (e.g., the purchase over the Internet of clothing by an individual from a remote vendor); and fourth, transactions involving B2C sales of digital products (e.g., the purchase over the Internet of a downloadable video by an individual from a remote vendor). These four categories of transactions may be illustrated as follows:

B2B Tangible	B2B Digital
B2C Tangible	B2C Digital

There is really nothing new about the issues raised by transactions involving sales of tangible property effectuated through electronic means---whether B2B or B2C. Distance selling has existed for many years, and there is no difference in principle between a cross-border transaction in tangible goods effectuated by fax or a telephone call than one effectuated by the click of a mouse. Moreover, as the OECD has observed, "[m]ember countries . . . have systems in place to ensure the taxation of imported tangible goods."<sup>50</sup> While electronic commerce plainly increases the opportunity for cross-border trade, and the increase in the volume of such transactions counsels that attention be paid to existing procedures to assure that they ensure the efficient collection of taxes as well as the speedy expedition of goods to their destination,<sup>51</sup> electronic commerce does not raise any fundamental new challenges to operation of the VAT system insofar as tangible goods are concerned. As the EU recently concluded with respect to the likely increase in purchases of physical goods by private consumers over electronic networks:

For VAT purposes, these are treated in the same way as any other form of distance sales (*e.g.*, from catalogues, by phone, post, *etc.*). There are well established channels for taxing these transactions---goods purchased from third countries are taxed at import, exported goods are zero-rated and intra-Community sales of goods are taxed under a special regime for distance sales, either in the member State of the seller or the buyer

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<sup>50</sup> OECD E-Commerce Discussion Paper, *supra* note 1, at 21.

<sup>51</sup> The OECD has pointed out that many Member countries have a *de minimis* standard for low value packages sold by distant sellers that allows them to escape taxation altogether. In the context of a global market in which local consumers can more easily acquire such packages from distant suppliers, the OECD has suggested that Member countries may wish to reevaluate the *de minimis* threshold to assure that local suppliers are not being harmed by tax-free competition from distant sellers. *Id.* at 22.

(dependent largely on the volume of such trade carried out by the seller).<sup>52</sup>

Accordingly, it is not B2B or B2C sales of *tangible* products effectuated through electronic networks but rather B2B and B2C sales of *digital* products that raise novel and difficult questions for the VAT. These questions are in many respects analogous to those encountered in connection with direct taxation, namely questions of jurisdiction and questions of characterization, although they arise in a different context. In principle, of course, there is no question of jurisdiction over the ultimate VAT taxpayer---the consumer---because the taxing authority will always have jurisdiction over the consumer if the tax is imposed by the country of consumption. As a practical matter, however, unless the taxing authority has jurisdiction over the seller, it will not be able effectively to administer a consumption tax on B2C digital transactions.

Characterization is also important because liability for the VAT (at least in the EU, on which the following discussion is based) depends on the place where a supply is made, and the determination whether a supply is one of goods or services is critically important in determining if and when the VAT is due as well as establishing the party responsible for paying it to the taxing authorities.<sup>53</sup> While the VAT rule for supply of goods is the destination principle, the rule for services is more complicated. The basic rule is that the place where a service is supplied is the place where the supplier has established its business or has a fixed establishment from which the service is supplied.<sup>54</sup> However, there are a number of special rules for particular types of services, e.g., services relating to land, services relating to transport, services involving physical performance, and, most importantly for present purposes, services involving intangibles,

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<sup>52</sup> EU Proposed E-Commerce Directive, *supra* note 1, Explanatory Memorandum at 4.

<sup>53</sup> Frieden, *supra* note 16, at 408.

<sup>54</sup> European Community 6th VAT Directive, art. 9.1, Council Directive 77/388/EEC.

consultancy services, and telecommunications.<sup>55</sup> The place of supply for such services when supplied for customers outside the EU or for taxable persons within the EU, but not in the same country as the supplier, is the place where the *customer*---not the supplier--- has established its business.<sup>56</sup> In this connection, the reverse charge or self-assessment mechanism is frequently used to collect the VAT from EU customers,<sup>57</sup> and, under a recent VAT Directive involving telecommunications, non-EU suppliers of telecommunications services to private individuals are required to register in the EU and collect the VAT.<sup>58</sup>

In approaching the questions raised by the EU VAT and other consumption taxes in the context of electronic commerce, the OECD Committee on Fiscal Affairs adopted the following Framework Conditions to guide countries in accommodating their consumption taxes to electronic commerce:

Rules for the consumption taxation of cross-border trade should result in taxation in the jurisdiction where consumption takes place and an international consensus should be sought on the circumstances under which supplies are held to be consumed in a jurisdiction.

For the purpose of consumption taxes, the supply of digitized products should not be treated as a supply of goods.

Where business and other organizations within a country acquire services and intangible property from suppliers outside the country, countries should examine the use of reverse charge, self-assessment or other equivalent mechanisms where this would give immediate protection of their revenue base and of the competitiveness of domestic

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<sup>55</sup> *Id.* at 394-97.

<sup>56</sup> European Community 6th VAT Directive, art. 9.2(e), Council Directive 77/388/EEC.

<sup>57</sup> Frieden, *supra* note 16, at 397-98.

<sup>58</sup> *Id.* at 404-407.



suppliers.<sup>59</sup>

The Framework Conditions have significant implications for application of consumption taxes to electronic commerce. First, by reaffirming the "destination" principle of a consumption tax, namely, that taxation should occur where consumption occurs, the OECD has remained faithful to the philosophical underpinnings of the VAT. At the same time, however, its position raises issues of effective tax administration because determining the place of consumption and enforcing collection at the place of consumption can be daunting tasks with digital commerce. Second, by characterizing the supply of digital products as the supply of services rather than the supply of goods, the OECD has sought to provide certainty in the cross-border treatment of digital products for which taxing authorities will be able to develop a discrete set of rules. It also seeks to prevent the base erosion that could occur if digital products were characterized as goods but were not susceptible to the collection mechanisms (e.g., customs control) that are appropriate for tangible property but not for digital services or intangibles.<sup>60</sup> Third, by recommending the use of the reverse charge or self-assessment mechanism for B2B digital transactions, the OECD has recognized the propriety---if not the necessity---of developing different collection mechanisms for B2B digital commerce than for B2C digital commerce.

The EU's recent Proposed Directive<sup>61</sup> recommending amendments to the EU's Sixth Directive provides an instructive illustration of an effort to address the challenges that electronic commerce poses for consumption taxes against the background of the OECD Framework

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<sup>59</sup> OECD, Committee on Fiscal Affairs, *Electronic Commerce: Taxation Framework Conditions* 5 (1998).

<sup>60</sup> OECD E-Commerce Discussion Paper, *supra* note 1, at 20.

<sup>61</sup> See EU Proposed E-Commerce Directive, *supra* note 1.

Conditions. The proposal addressed the treatment of on-line supply of digital deliveries to final consumers. Observing that “the reverse charge mechanism . . . will ensure the correct taxation of most business-to-business transactions,” the explanatory memorandum accompanying the Proposed Directive, nevertheless noted that “the existing provisions do not comprehensively take account of the full range of services which can be delivered electronically today.”<sup>62</sup> It therefore proposed to maintain the reverse charge system for B2B transactions, but to impose a registration obligation with respect to non-EU suppliers engaged in B2C transactions. At the same time, it made clear that EU suppliers to non-EU customers would not be saddled with a VAT, which placed them at a competitive advantage to non-EU suppliers.

While the EU Proposed Directive squarely addresses the most difficult issue raised by the application of the VAT to electronic commerce---namely its application to B2C transactions involving a remote vendor---it remains to be seen whether the EU (or any other governmental authority for that matter) will effectively be able to enforce a collection responsibility upon remote vendors of digital products to individual consumers. The American Chamber of Commerce reacted predictably to the EU announcement, declaring that “[a]ny Commission legislative initiative that would seek to extend EU VAT jurisdiction beyond the physical borders of the EU is . . . problematic.”<sup>63</sup> Perhaps the more significant point, which was echoed by the Clinton Administration, is that whatever proposals are advanced for addressing the problems raised by international taxation of electronic should be undertaken under the auspices of the OECD, which is coordinating a concerted and broad-based effort to deal with these issues. As

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<sup>62</sup> EU Proposed E-Commerce Directive, *supra* note 1, Explanatory Memorandum at 8.

<sup>63</sup> BNA Daily Tax Report, June 8, 2000, p. G-2.

Deputy Treasury Secretary Stuart Eisentstat declared:

Unilateral proposals, even though intended to be consistent with the OECD framework conditions, increase the risk of unintended consequences. They can undermine the OECD process and weaken the resolve of those who have been resisting unilateral measures while awaiting the results of that process.<sup>64</sup>

B. United States Subnational Retail Sales Tax (RST) Issues

There has been considerable national and international interest in the issues raised by the application of the American retail sales tax (RST) to electronic commerce. This interest, however, at least from an international perspective, is misplaced. As the ensuing discussion reveals, the Americans have very little to teach the world about consumption taxation, and the problems with which they are struggling vis-à-vis taxation of electronic commerce are largely problems of their own making, to wit, the unharmonized character of their state and local tax system and the consequent inability of the states to require distant sellers to collect taxes on sales to local consumers---upon tangible and digital products alike.

To appreciate the "American problem" of sub national (state and local) retail sales taxation of electronic commerce, one must first understand the nature of the American RST and the constitutional restraints that are imposed on its implementation. Forty-five states and the District of Columbia, as well as many of their political subdivisions, have adopted RSTs.<sup>65</sup> Probably the most significant feature of existing state RST laws insofar as they apply to electronic commerce is that state RSTs generally apply only to sales of tangible personal property and not to sales of services or of intangible property. While a few states tax a wide range of services (including

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<sup>64</sup> BNA Daily Tax Report, June 9, 2000, G-3.

<sup>65</sup> 2 Hellerstein & Hellerstein, *supra* note 45, at ¶ 12.02. The local sales taxes are usually, but not always, identical to the state sales tax and in substance simply increase the rate of tax on the taxable sale.

information and data processing services), and most states tax some services (e.g., public utility services and hotel and motel services), most state sales taxes are limited to sales of tangible personal property. This makes the state RST a rather imperfect consumption tax---there is no sound reason for distinguishing between household consumption of goods and services for consumption tax purposes.<sup>66</sup> More importantly for present purposes, it also makes the state RST an unlikely vehicle for concern about taxation of electronic commerce, since sales of digital products---the only novel issues raised by electronic commerce for a properly structured consumption tax<sup>67</sup>---are largely excluded from the tax base.

Why, then, one might ask, are the Americans so concerned about the application of the RST to electronic commerce? To appreciate fully my somewhat extended answer to this question, we must start with an understanding of the constitutional structure governing the power of states to tax interstate sales. To do this we must begin with an explanation of a use tax. When states first enacted RSTs during the Depression, they faced the problem that they would lose revenue and their merchants would lose business, if their residents shopped in neighboring states without RSTs (or with RSTs with lower rates). Under the Commerce and Due Process Clauses of the American Constitution, it has always been clear that one state may not impose a sales tax on a sale that occurs in another state. To address this problem, states enacted use taxes.

A use tax is imposed on the use, storage, or consumption of tangible personal property and selected services in the state. It is functionally equivalent to a sales tax. It is imposed with respect to the same transactions and at the same rates as the sales tax that would have been imposed on the

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<sup>66</sup> See *id.* at ¶ 12.05. The reasons for the limited scope of the American RST lie largely in history and politics. *Id.*

<sup>67</sup> See *supra* notes 50-52 and accompanying text.

transaction had it occurred within the state's taxing jurisdiction. However, because the use, storage, or consumption of property or services within the state are subjects within the state's taxing power, there is no constitutional objection to the imposition of such a tax<sup>68</sup>---as there would be with regard to a tax on an out-of-state sale.

In principle, then, an in-state consumer stands nothing to gain by making an out-of-state or interstate purchase free of sales tax, because he will ultimately be saddled with an identical use tax when he uses, stores, or consumes the property or services in his home state. If, for example, a Washington resident were to go to Oregon to purchase a car, he would pay no tax in Oregon, which does not tax sales, but he would pay use tax in Washington, when he went to register his car, equal to the sales tax that he would have paid had he bought the car in Washington. Every one of the 45 states and the District of Columbia that have sales taxes also impose complementary use taxes.

In theory, the basic sales/use tax regime that I have just described applies to remote sales in the same manner that it applies to transactions involving automobiles. Thus, if I buy a book from Amazon.com, and it is shipped to me in Athens, Georgia, there is no question that I will owe a Georgia use tax equal to the sales tax that I would have paid had I bought the book in a book store in Athens. There is, however, one significant difference between the purchase from Amazon.com and the purchase of the automobile I described above. With respect to the purchase of the automobile, the state has a practical means of requiring the purchaser to pay the use tax---namely, collecting it upon registration of the vehicle. But states do not require that consumers register books they purchase (and presumably will not be able to do so long as we have a First Amendment). Consequently, unless the consumer voluntarily remits the use tax on the purchase from the out-of-

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<sup>68</sup>See *Henneford v. Silas Mason Co.*, 300 U.S. 577 (1937) (sustaining constitutionality of state use tax scheme).

state vendor, which consumers rarely do notwithstanding their legal obligation to do so, the state has no practical means for collecting the use tax unless it can require the out-of-state vendor to collect the use tax in the same way that it relies on the in-state vendor to collect the sales tax.

It is at this point of the legal analysis that we confront the principal constitutional constraint the states face in connection with remote sales, namely, that unless the out-of-state vendor has a substantial connection or "nexus" with the state, the states lack the constitutional power to require the vendor to collect the use tax that the consumer owes with respect to the purchased item. In *National Bellas Hess, Inc. v. Department of Revenue*,<sup>69</sup> decided in 1967, the U.S. Supreme Court held that the Commerce and Due Process Clauses of the Federal Constitution prohibited a state (Illinois) from imposing a use tax collection obligation on a mail-order seller with no physical presence in the state. In so holding, the Court pointed explicitly to lack of harmonization among state and local RSTs as the basis for barring the collection obligation on the remote seller:

[I]f the power of Illinois to impose use tax burdens upon National were upheld, the resulting impediments upon the free conduct of its interstate business would be neither imaginary nor remote. For if Illinois can impose such burdens, so can every other State, and so, indeed, can every municipality, every school district, and every other political subdivision throughout the Nation with power to impose sales and use taxes. The many variations in rates of tax, in allowable exemptions, and in administrative and record-keeping requirements could entangle National's interstate business in a virtual welter of complicated obligations to local jurisdictions with no legitimate claim to impose "a fair share of the cost of local government."<sup>70</sup>

Twenty-five years later in 1992, the Court in *Quill Corp. v. North Dakota*<sup>71</sup> reaffirmed the essential holding of *Bellas Hess*—namely, that states may not require a mail-order seller without physical

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<sup>69</sup> 386 U.S. 753 (1967).

<sup>70</sup> *Id.* at 761-62 (footnotes omitted).

<sup>71</sup> 504 U.S. 298 (1992).

presence in the state to collect the use tax due on goods sold to in-state purchasers.

In sum, the "American problem" with consumption taxation of electronic commerce has very little to do with electronic commerce everything to do with remote selling. And the problem is a self-inflicted wound. If the American states would harmonize their state and local tax systems, thereby removing the burden on the remote seller from complying with the inconsistent tax rules in 45 states and thousands of local taxing jurisdictions, there would no longer be any basis for prohibiting the states from requiring a remote vendor from collecting tax. And then the Americans could start to worry about the real problems raised by electronic commerce---taxation of digital products. But first they would have to include them in their tax base.<sup>72</sup>

## V. CONCLUSION

The challenges posed by electronic commerce for tax administration are not for the faint of heart. Even if we can resolve the technical issues raised by digital commerce, there remain the political questions, which in the end may be more formidable. Nevertheless, I remain hopeful that the considerable efforts of the OECD and other governmental and non governmental initiatives (including the Streamlined Sales Tax Project in the United States) will result in the adoption of taxing regimes will operate effectively---even if not perfectly---in a world of electronic commerce.

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<sup>72</sup> As noted above, some states tax services and digital products, such as information services, computer services, and electronic data bases, but many states do not.