

Taxation of Electronic Commerce: An Assessment of the Opportunities and Challenges Facing Taxpayers and Tax Authorities

Prof. Kathryn Pedwell
University of Ottawa
School of Management

Electronic commerce involves the selling of a wide variety of digitized data and services electronically over the Internet. In principle, the internet is simply a “new trade route” for business (Muscovitch, 1996), and existing legal frameworks apply equally to on-line transactions as they do to conventional ‘brick and mortar’ activities. Therefore, many of the issues that arise in the electronic domain are merely extensions of existing problems associated with national and international trade. However, the application and enforcement of taxes and tariffs to electronic commerce is currently a major issue for governments around the world. While tax professionals and tax authorities agree that existing tax rules can accommodate electronic transactions, they are concerned that certain characteristics of electronic commerce “open up avenues that legally circumvent national tax structures altogether, as well as facilitating outright tax evasion and fraud” (OECD, 1997). Taxpayers, on the other hand, are concerned that the international confusion regarding the treatment of electronic transactions may result in either double taxation or excessive administrative burdens.

There appears to be a consensus in the international community that no new taxes will be imposed on internet activity. Consistent with this position, a “bit tax”¹ proposed by the European Union was rejected in 1997. Further, the United States has corroborated their commitment to unfettered electronic commerce by enacting the Internet Tax Freedom Act (ITFA) in October 1998. Attacked as detrimental to individual states’ financial welfare by the National Governor’s Association and the U.S. Conference of Mayors, the Act imposes a three-year moratorium (from October 1/98 to October 20, 2001) on new internet taxes. That moratorium has just been extended for another two years.

In addition, in the Framework for Global Electronic Commerce (1997), the Clinton administration proposed a duty-free zone for electronic commerce. Both the World Trade Organization and the Organization for Economic Co-operation and Development (OECD) endorsed this proposal and, as a consequence, no nation currently levies customs duties on electronic transactions.²

Another area of international consensus is in the resolve to apply existing taxes equally to both conventional and electronic transactions. Individually, the OECD, Canada, the U.S., Australia, the European Union, U.K. and Japan have all produced position papers³ that advocate a tax-neutral⁴ stance

¹ A ‘bit tax’ is a form of consumption tax or tariff levied on the transmission of digital information.

² See: “Electronic Commerce: Internet Exempt from Customs Duties but not from VAT”, *European Report No. 2318*, May 27, 1998, and Organization for Economic Co-operation and Development, “Dismantling the Barriers to Global Electronic Commerce”, OECD Discussion Paper, September 1997, at <http://www.oecd.org/dsti/sti/it/ec/prod/dismantl.htm>.

³ These position papers include: Canada's *Electronic Commerce and Canada's Tax Administration* (April, 1998), the OECD's *Electronic Commerce: Opportunities and Challenges for Electronic Commerce* (Paris, 1997) and *Electronic Commerce: The Challenges to Tax Authorities and Taxpayers* (Paris, 1997), the U.S.'s *Selected Tax Policy Implications of Global Electronic Commerce* (November, 1996) and *A Framework for Global Electronic Commerce* (1997), Australia's *Tax and the Internet* (August 1997), the European Union's *A European Initiative in Electronic Commerce* (April, 1997), UK's *Electronic Commerce: The UK's Taxation Agenda*, (November, 1999) and Japan's *Towards the Age of the Digital Economy* (May, 1997).

for electronic commerce. This worldwide concern has resulted in international cooperation to establish the tax rules that will be applied to electronic commerce. As a result, governments, the private sector and international organizations have participated in numerous conferences and events to work towards solutions to protect their mutual interests, i.e. to protect national tax bases without impeding the development of electronic commerce. Thus during the October 1998 conference in Ottawa, Canada, ministers from countries with membership in the OECD reached international agreement that the same taxation principles that guide the taxation of conventional commerce will be used to guide the taxation of electronic commerce.

As a result of these endeavors, there is currently international agreement on three points regarding the taxation of electronic commerce. First, no new taxes will be imposed on electronic commerce. Second, current taxes on conventional transactions will apply equally to electronic transactions. Finally, the same guiding principles will be used in the development and application of tax laws for both conventional and electronic commerce.

Despite these international agreements, the taxation of electronic commerce is in chaos. One contributing factor is the resistance of taxpayers towards the payment of taxes and their legitimate right to structure their affairs in order to minimize taxes payable. A second factor is the desire of cash-starved nations to maximize tax revenues. Together, these factors pose challenges and opportunities for both taxpayers and the tax authorities in their approach to the taxation of electronic taxation.

To levy a direct tax such as income tax on either conventional or electronic transactions, four criteria are necessary: (i) the ability to identify the taxpayer, (ii) determination of the jurisdiction in which income was earned, (iii) information about the transaction, and (iv) methods of collecting the taxes owed. Each of these four criteria will be considered in turn.

To impose an income tax, the tax authorities must be able to identify the taxpayer involved in a transaction. Yet, in a brief audit by the Australian Tax Office in 1997, the identity of the taxpayer could not be determined in 15% of the cases selected. Current technology can provide anonymity to a web site operator and the issue is further complicated when taxpayers take action to deliberately conceal their identity, such as through anonymous re mailers⁵ or through “spoofing”⁶.

The legal authority to levy tax, also called jurisdiction, resides with national governments and is based on the concepts of residence and source. Residence-based taxation implies that a country can tax its residents on worldwide income, whether the source of that income is domestic or foreign. Source-based taxation infers that countries levy taxes on any income earned within its borders, without regard to whether a resident or a non-resident of the country earns it. Thus, the same economic activity may be taxed twice, once by the country where the income is earned and again by the country in which the taxpayer is deemed a resident. For example, income earned in Canada by a U.S. company can be taxed in both Canada, based on source, and in the U.S., based on residence. To avoid such double taxation, nations enter into bilateral trade agreements, which provide that residents of a foreign jurisdiction are

⁴ Tax neutrality means that any income earned from a transaction, regardless of whether it is conducted conventionally or electronically, is taxed similarly.

⁵ Anonymous re-mailers can intentionally relay communications to conceal the identity of the sender.

⁶ Spoofing occurs when an imposter poses as an authentic site and diverts payment to itself.

either taxed at lower rates or exempt from taxes in the foreign jurisdiction.⁷ Further, governments extend domestic tax credits for taxes paid to foreign governments.

Jurisdiction is predicated on the taxpayer having a permanent establishment in a country. The concept of permanent establishment originates with the OECD's 1963 Model Tax Treaty and is defined in Article 5 as "a fixed place of business through which the business of an enterprise is wholly or partially carried on". Premises designated as permanent establishment include a place of management, a branch, an office, a factory, a workshop, a mine, an oil/gas well, and a quarry or other place of extraction of natural resources. Permanent establishment can also be created when a vendor contracts with an agent or a business located within the jurisdiction. This definition of permanent residence is frequently used in national taxing statutes and in most tax treaties around the world.

This concept of permanent establishment was created during a period when most economic transactions were confined within national borders and continues to be based on geographical location. This poses problems when commerce is conducted in the borderless, virtual world of the internet. The unique resource locator (URL), which establishes an internet site or home page from which a business conducts its business, suggests the geographical location of the business, such as ".us" for the United States, ".ca" for Canada and ".uk" for the United Kingdom. The assumption is that this designated location determines the jurisdiction that has the authority to tax the income. However, a business enterprise can be located elsewhere than indicated by the URL. Furthermore, URL suffixes such as ".com", ".org" or ".net" provide no clues as to the geographical location of the business. Alternatively, transactions can be relayed through a series of computers to its final destination in another jurisdiction. And web sites can be housed on multiple servers. This potential to obscure the jurisdiction in which the business operates and thereby escape taxation is only one of the problems faced by tax authorities when dealing with electronic commerce.

Another issue is the question of what constitutes a permanent establishment with regard to electronic commerce. A web site does not have a physical presence and, therefore, cannot be designated as a permanent establishment. Even if the business maintains its own server within a taxing jurisdiction, the storage, display or delivery of goods on the internet has been compared to similar mail-order activities, which are not considered a permanent establishment. Further, a corporation conducting business on the internet can separate its ordering, delivery and payment functions by delegating them to ancillary sites throughout the world. This fragmentation results in the corporation circumventing the definition of permanent establishment under most tax treaties and thereby being exempted from taxation on income.

However, is it realistic to assume that the current concept of permanent establishment could exempt electronic commerce from taxation? Consider a Canadian corporation operating a web site for customers world-wide. It sets up a host computer in Great Britain from which customers can download software, and establishes banking facilities in the Bahamas to which customers send payment electronically. If a U.S. customer downloads software from the host computer, in which jurisdiction has the economic activity occurred? Under common law, the primary consideration is the jurisdiction in which the contract was made. However, both the U.S. and Great Britain can legally argue that the contract was accepted in their jurisdiction, depending on whether acceptance is determined to occur in the location of the host computer or the recipient computer. However, contract law also applies "profit

⁷ As of 1998, the U.S. has bilateral trade agreements with at least 48 countries and Canada has treaties with approximately 70 countries.

emanation” tests, which consider additional factors in the determination of authority to tax. These include (i) the residency of the business entity, also known as the mind and management test (which indicates Canada can tax the transaction), (ii) the location of the inventory being sold (Great Britain), (iii) the location of the corporation’s banking facilities (Bahamas), and (iv) the point of exchange or delivery (U.S. or Great Britain?). Because jurisprudence on this issue is unclear, none of these countries or potentially all of these countries may claim the right to tax the economic activity. Further, the absence of international agreements regarding how income attribution will be determined make it difficult to resolve the issue.

Another concern regarding residence-based taxation of income is the ease with which the location of servers can be shifted to another jurisdiction. Nations compete to attract business by reducing their tax rates⁸, establishing economic zones⁹ and instituting laws and banking practices designed to protect assets and privacy.¹⁰ This results in some internet businesses engaging in “flag-shopping”, i.e. the establishment of an electronic residence in a low- or no-tax jurisdiction. Significant reductions in tax cost can be realized on active business income if a business takes a global approach to tax planning, leading Li and Sandler (1997, p. 894) to assert that “[t]ax avoidance through international transactions is virtually limitless.”

Information about economic activities is required by national tax authorities in order to enforce compliance with tax laws. Although taxpayers are required to self-assess the taxes which are payable, they are also required to provide information to the tax authorities, keep receipts, and permit tax assessors to inspect records, regardless of whether the commercial activity was conducted conventionally or electronically. However, electronic records are more readily altered or destroyed, bringing into question their reliability. As well, electronic records can easily be hidden in jurisdictions that refuse to disclose information or computers can be controlled through a series of programs to leave no audit trail.

To deter evasion, tax authorities monitor economic activity. However, given the decentralized structure, the variety of transmission media, the binary format, and the various encryption and security measures, the tax authorities’ ability to monitor economic activity on the internet is impaired. Payment methods may further obscure a transaction. While monitoring and enforcement mechanisms are well established for electronic debit systems (for example Interac™ or Smart Cards) and credit systems (such as credit card payments), electronic cash has the same element of anonymity as has cash in conventional transactions. The ATO (1997, p. 17) concludes that the use of electronic money is “likely to have significant adverse impacts on the enforcement of tax law.” Further, it takes only a millisecond to transfer funds between banks, and less than an hour to shift funds through so many banks and

⁸ Between 1986 and 1996, the U.S. reduced its corporate tax rate by almost one-quarter, from 46% to 35%. During the same time period, Canada’s corporate tax rate declined from 46% to 38%, and are now at 28%. Sweden’s corporate rate reduction has been even more dramatic. It declined over 50%, from 52% in 1986 to 25% in 1996.

⁹ Special economic zones offering lower tax rates and duty-free import/export privileges to businesses that locate within the zone have been established by the Netherlands, Ireland, Costa Rica and Indonesia.

¹⁰ Switzerland, the Bahamas, the British Virgin Islands and the Channel Islands (Jersey and Guernsey) are examples of these tax haven countries. They offer low or zero tax rates to businesses and there are typically no taxes on transfers and capital gains. Total discretion and punishment for unauthorized disclosures are contained in the bank legislation of many tax haven countries such as *The Bahamas 1965 Bank and Trust Company Regulation* and Switzerland’s *Article 47 of the 1934 Federal Law Relating to Banks and Savings Institutions (as amended in 1970)*. Similar legislation is in place in the Cayman Islands, Luxembourg, Liechtenstein and Panama. Corporate registration in these countries is typically simple and low-cost, making it attractive to establish a permanent residence. Further, the absence of tax treaties with other nations prevents other governments from compelling the tax haven country to disclose financial information about a business.

offshore accounts that it would take the tax authorities months to unravel the transactions (Lee, 1997). In situations where tax authorities suspect tax evasion, detection of concealed business activity is generally through indirect auditing techniques in which income is determined on the basis of spending. When records of spending are outside the tax auditor's jurisdiction, these techniques are difficult to apply.

The tax authorities ability to monitor information in conventional transactions is facilitated by intermediaries. Distributors, importers, marketers and retailers maintain records that provide the tax authorities with an audit trail that can be crosschecked with the taxpayer's records. Other intermediaries such as financial institutions, the postal service or customs agents become involved in the economic activity at various "taxing points" (Cohen, 1997) and are required by law to document and report these activities. These reporting and withholding regulations have also been applied to such cyber banking services as automatic teller machines (ATMs) and wire transfers. However, there is concern regarding the ability to extend these regulations to all electronic transactions. Some transactions are readily monitored. Tangible goods are taxed when they pass through customs, and other purchases such as airline tickets leave an audit trail. However, the direct transfer of digitized text, image, video and audio bypasses traditional distribution chains and intermediaries. To prevent such an occurrence, the tax authorities have been considering introducing new intermediaries, such as network providers, Internet service providers (ISPs) and even site designers, and assigning them the responsibilities of identifying the site owner, providing information on the business's activities and even withholding taxes.

By far, the greatest concern on the part of the tax authorities is with regard to the actual collection of taxes. Collection poses a number of problems including (i) the determination of the type of tax to be collected, (ii) the ability of the vendor to collect the tax and (iii) the ability of the tax authorities to levy and enforce the collection of taxes on internet transactions.

Characterization of the income related to a sale over the internet remains an unresolved dilemma. Computer software can be considered a good, a service or an intellectual property, and the interpretation affects both domestic withholding taxes and taxes designated under treaty provisions. Software, a music CD or a book, purchased in a conventional store, incur sales taxes, but what if the software, the music or the book¹¹ is downloaded from the internet?¹² The U.S. Department of the Treasury (1996) concludes that these sales should be treated as royalties on the basis that copyright law generally protects digitized information and payments related to the use of copyrights are considered royalties. Similarly an analysis by Brown (1994) concludes that the Internet sale of software qualifies as royalties in Canada. However, the OECD suggests that such digital transactions be treated as either business or personal services income or capital gains. Thus, the characterization of income from electronic transactions can result in two potential problems. First, different countries may impose different taxes on the same electronic transaction, creating administrative difficulties for the business and an incentive to be selective in where in the business is established. Second, the disparity between the taxation of the same product purchased through conventional versus electronic means may result in inequitable tax treatments between traditional and electronic goods of the same nature.

¹¹ Stephen King published the first chapter of his new book, *The Plant*, on his website, www.stephenking.com, on July 24, 2000 for US\$1 per download. By midnight on July 30, 152,132 people downloaded the chapter, with 76% either paying the fee or promising to do so (Lewandowski, 2001). Sales taxes were neither levied nor collected.

¹² States consider software in a box sold in a conventional brick-and-mortar establishment to be taxable, yet half of the states consider software delivered electronically to be non-taxable.

Another issue is the ability of the vendor to collect the taxes owing. The simplicity and low cost associated with establishing an Internet presence infers that relatively unsophisticated enterprises can operate a commercial web site. Since these businesses may not be familiar with the tax laws that apply to their transactions, there is a concern that the level of accidental non-compliance will increase. Further, the complexity of tax laws poses a major obstacle in the collection of taxes. For example, in the U.S. there are 30,000 potential sales tax jurisdictions, including states, cities and special districts, of which slightly less than 7,500 jurisdictions impose sales taxes. Each jurisdiction has its own tax rates, reporting systems and categories of goods making compliance a daunting task, even for the most well intentioned vendor.

Further, monitoring and enforcement of tax compliance under these circumstances represent an administrative nightmare for tax authorities. The average internet purchase in the U.S. in 2000 was US \$248 (Greenfield Online, 2001). Statistics Canada's Household Internet Use Survey (2001) concludes that the average value of purchases by Canadians on the internet during 2000 was C \$121. While Bruce and Fox (2001) project e-commerce sales for 2001 will total approximately \$755 billion U.S., much of it seems to result from millions of nominally valued transactions. As a consequence, tax authorities are struggling to determine how to monitor and enforce compliance on all these transactions, to ensure both the truthful reporting of income tax liability by the vendor and the collection of sales taxes from the purchaser.

In the area of sales taxes, business-to-business (B2B) transactions, which are estimated to account for 92.6% of all current electronic commerce and are expected to grow to 95% by 2011 (Bruce and Fox, 2001), is not a source of major concern. Many B2B transactions are ordinarily sales tax exempt in order to avoid double taxation. Further, businesses typically voluntarily declare and pay taxes owing because their accountability to their shareholders motivates them to maintain proper business records and to maximize income and thus, taxes payable. The major concern regarding sales tax losses is attributable to business-to-consumer (B2C) transactions.

The ability of tax authorities to levy and enforce the collection of taxes on internet transactions, specifically state sales taxes in the U.S., provincial sales taxes and Goods and Services Tax (GST) in Canada, and the Value Added Taxes (VAT) in the European Union, is an area of major international concern. These taxes are imposed in the jurisdiction of the purchaser and vendors located in the jurisdiction are required by law to collect the sales taxes. However, the system becomes complicated when seller and buyer are located in different jurisdictions. For goods or services delivered electronically, does title pass within the jurisdiction of the vendor's or the purchaser's computer? The answer to this question determines which jurisdiction has the authority to tax the transaction.¹³

Estimates of sales tax losses on cross-border electronic transactions vary. Ernst and Young estimated that in the U.S. just under \$170 million dollars¹⁴ of state and local taxes were uncollected in 1998 due to business conducted over the internet (Cline and Neubig, 1998), whereas Goolsbee and Zittrain (1999) estimated that loss to be about \$430 million and growing. According to the US General Accounting Office, sales tax losses in the U.S. due to internet sales could range from US\$1 billion to US\$3.8 billion by 2003 (Lewandowki, 2001). Bruce and Fox (2001) further estimate that by 2011, total

¹³ Tennessee imposes its own state taxes on internet vendors that sell out-of-state, even if the other state also levies state taxes on the transaction.

¹⁴ This amount represents only one-tenth of 1% of total state and use taxes.

state tax revenue losses will grow to US \$29.2 billion.¹⁵ In the U.K., it is estimated that £30 million a year in VAT are lost because these taxes are not collected or remitted by U.S. firms selling into the U.K. (Lambeth, 2001).

Because of the significant monetary values involved, jurisdictions around the world are concerned about enforcement of tax collection by vendors. Currently, a business is only obligated to collect sales and use taxes when it has nexus, which means a physical presence, within the jurisdiction. Vendors from outside the jurisdiction can avoid nexus if the business's only activity within a jurisdiction is solicitation and all other aspects of the business, including approval of sales, shipment of goods and the performance of services, are performed outside of the jurisdiction.¹⁶ Under this definition, electronic vendors, appear to be exempt from the requirement to collect and remit sales taxes on out-of-state transactions. However, the Multistate Commission¹⁷ in the U.S. has defined nexus as "sufficient contact" with a taxing state. This definition suggests that repeat business into a state, i.e. an 'economic nexus', may be sufficient to make the vendor liable for the collection and remittance of that jurisdiction's state taxes. Thus, Katz (2001) states that "continual and systematic electronic contact with customers living in a state would, indeed, give a taxpayer nexus with the state." To date, the concept of 'economic nexus' has not been tested. Others argue that nexus is created either by the Internet Service Provider (ISP), which acts as an agent for on-line merchants, or by the vendor when it contracts with an in-state third party to provide services, such as repair services. To date, these arguments have also not been successful.

As a result, to prevent the leakage of tax revenues, various governments have been constructing innovative mechanisms for extending their tax authority to online transactions. The European Union and the Canadian province of British Columbia have devised a proposal which would demand that vendors conducting business with their citizens register within the jurisdiction so that the business will be required to collect and remit the consumer-based taxes. Anticipated difficulties in the administration of such laws, such as enforcement methods, have prevented implementation. In 1997, the state of Nebraska enacted legislation requiring out-of-state vendors to report all purchases made to Nebraska citizens so that the state can collect taxes directly from the purchasers, but the legislation was later vetoed. Collectively, these actions indicate clearly that governments are determined to implement some mechanism by which they can pressure vendors from outside their jurisdiction to collect sales or value-added taxes from resident purchasers.

In conclusion, the taxation of electronic commerce is still in the discussion stages at both the national and global level. To date, there is international consensus that no new internet-specific taxes, such as the bit tax, would be introduced and that electronic commerce will be taxed in the same manner and to the same degree as conventional commerce. However, there is considerable concern on the part of nations world wide regarding the potential evasion of income taxes associated with electronic commerce. Of even greater significance to governments around the world is the leakage of sales or value-added taxes. In this area in particular, the growth of electronic commerce may be accompanied by significant changes in the administration of tax systems. Business should be prepared for the introduction of new legislation aimed specifically at compelling businesses to collect and remit

¹⁵ This figure is estimated to represent between 2.6% to 9.92% of total state tax collections.

¹⁶ In the U.S. Public Law 86-272 establishes the concept of nexus for tangible goods. Bill HR 2526, which would require substantial physical presence to establish nexus for intangible goods delivered via internet is currently before the House of Representatives.

¹⁷ The Multistate Tax Commission (MTC) is composed of 21 member states and 16 associate member states that together attempt to formulate uniform tax policy.

consumer-based taxes from customers, even when those customers reside outside the jurisdiction in which the business is situated.

REFERENCES

- Australian Taxation Office (1997) *Tax and the Internet: Discussion Report of the ATO Electronic Commerce Project*. Australian Government Publishing Service, Canberra
- Brown, Catherine A. (1994) "The Canadian Income Tax Treatment of Computer Software Payments", *Canadian Tax Journal*, Volume 42, Issue 3, pp. 594
- Bruce, D. and W.F. Fox (2001) "State and Local Sales Tax Revenue Losses from E-Commerce: Updated Estimates", *Center for Business and Economic Research*
- Cline, Robert J. and Thomas S. Neubig (1998) "The Sky is Not Falling: Why State and Local Revenues Were Not Significantly Impacted by the Internet in 1998" in Ernst & Young Economics Consulting and Quantitative Analysis. June 18, p. I
- Cohen, B. (1997) "Selected Tax Policy Implications of Global Electronic Commerce", *Report of the Proceedings of Forty-Eighth Tax Conference*, Canadian Tax foundation, Volume 2, pp. 38:1-38:19
- Commission of European Communities (CEC) (1997) *A European initiative in Electronic Commerce*, Communication to the European Parliament, the Council, The Economic and Social Committee and the Committee of the Regions, April
- Coy, Peter (1998) "You Ain't Seen Nothin' Yet: The Benefits to the Economy of E-Commerce Are Boundless", *Business Week*, June 22
- Goolsbee, Austand, and Jonathan Sittrain (1999) "Evaluating the Costs and Benefits of Taxing Internet Commerce", <http://gsbwww.uchicago.edu/fac/austan.goolsbee/research/jzntj.pdf>.
- Greenfield Online (2001) "B2C Revenues Up in February" (April 02) at www.nua.ie/surveys/index
- Hardesty, David (1999) "Web Server in Another Country – Proposed Rules", *E-Commerce Tax News* (October 20), <http://222.ecommercetax.com/doc/102099.htm>
- Inland Revenue (1999) *Electronic Commerce: The UK's Taxation Agenda*, (November)
- Katz, F. (2001) "Business Activity Nexus Does Not Require Physical Presence: Response to the Internet Fairness Coalition's Article 'Business Activity Tax Nexus Standards: The Real Story'", Institute for State Studies, 183-32
- Lewandowski, R. (2001) "The Net Tax Nightmare", *CA Magazine*, Volume 134, Number 2, March, pp. 18-24
- Lee, M. (1997) "The Changing Face of Taxation", *The Taxpayer*, Canadian Taxpayer's Federation, Volume 9, Number 4, pp. 35-58

Li, J. and D. Sandler (1997) "The Relationship Between Domestic Anti-Avoidance Legislation and Tax Treaties", *Canadian Tax Journal*, Volume 45, No. 5, pp. 891-958

Minister's Advisory Committee on Electronic Commerce (1998) *Electronic Commerce and Canada's Tax Administration: A Report to the Minister of National Revenue*, April

Ministry of International Trade and Industry (1997) *Towards the Age of the Digital Economy*, (May)

Muscovitch, Z. (1996) "Taxation of Internet Commerce", <http://www.globalserve.net/~zak/Taxation.html>

Multistate Tax Commission (1995) "Nexus Guideline", Draft, January 25

Office of the President of the United States (1997) "Framework for Global Electronic Commerce, July 1, <http://www.ecommerce.gov/framewrk.htm>

Organization for Economic Co-operation and Development, *Electronic Commerce: Opportunities and Challenges for Government*, Paris, 1997

Organization for Economic Co-operation and Development, *Electronic Commerce: The Challenges to Tax Authorities and Taxpayers* (Paris, 1997)

Statistics Canada (2001) "E-Commerce: Household Shopping on the Internet", *The Daily*, (October 23)

United States Department of the Treasury, Office of Tax Policy (1996) "Selected Tax Policy Implications of Global Electronic Commerce", November, available at <http://ustreas.gov>

United States Department of the Treasury, Office of Tax Policy (1997) *A Framework for Global Electronic Commerce*

About the author:

Prof. Kathryn Pedwell, University of Ottawa, School of Management