Rethinking Canada’s Source Rules in the Age of Electronic Commerce: Part 2

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PRÉCIS
Les règles servant à déterminer la provenance géographique du revenu imposable sont importantes dans le régime fiscal international du Canada. Il est essentiel, aux fins de l’application de plusieurs dispositions de la Loi de l’impôt sur le revenu, d’établir la provenance géographique du revenu. Cependant, en matière de commerce électronique, la notion d’emplacement géographique est pratiquement dénuée de sens puisque les transactions peuvent être effectuées sans tenir compte des frontières entre les pays. Comment les règles habituelles sur la provenance du revenu peuvent-elles s’appliquer aux transactions électroniques lorsque ces transactions semblerent être réalisées dans le lieu imaginaire que constitue le cyberespace, plutôt que dans un lieu réel donné? Quelles sont les conséquences, pour l’administration du régime fiscal international du Canada et l’élaboration de la politique fiscale canadienne, des problèmes que soulève cette question? Les règles sur la provenance du revenu survivront-elles à ces difficultés? En outre, quelles sont les options dont le gouvernement dispose quant à l’élaboration de sa politique? L’auteur de cet article comportant deux parties se penche sur ces questions et tente de formuler des réponses pertinentes.

La première partie de l’article, parue dans le dernier numéro de la Revue fiscale canadienne, offrait un aperçu des règles canadiennes sur la provenance du revenu. Comme le Canada ne s’est pas doté, dans sa législation, de règles détaillées régissant la provenance du revenu, le texte porte surtout sur les dispositions législatives qui, dans les faits, tiennent lieu de ces règles, ainsi que sur le droit jurisprudentiel et sur les prises de position de Revenu Canada. La deuxième partie de l’article

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The rules for determining the geographical source of taxable income are important to the Canadian international tax system. Determination of the geographical source of income is essential for the application of many provisions of the Income Tax Act. In the world of electronic commerce ("e-commerce"), however, geographic location is virtually meaningless since transactions may be conducted without regard to national boundaries. How can traditional source rules apply to e-commerce transactions that seem to take place in the nebulous world of cyberspace rather than in any physical location? What are the implications of these challenges for the Canadian international tax system and Canadian tax policy? Can source rules survive these challenges? And what are the policy options available? The author of this two-part article addresses these questions and attempts to arrive at some persuasive answers.

Part 1 of the article, which appeared in the last issue of this journal, provided an overview of Canada’s source rules. Because Canada does not have comprehensive statutory source rules, the discussion focused on statutory provisions that effectively function as source rules, on the jurisprudence, and on Revenue Canada’s administrative pronouncements. Part 2 of the article describes e-commerce in its current form, explains how it challenges existing source rules, and discusses the government’s response to these challenges. The author argues that there is a continuing need for source rules and that Canada should rethink its existing rules, taking into account the special features of e-commerce as well as general tax policy principles. The author proposes statutory source rules that would apply to both traditional and e-commerce transactions, and provides a tax policy analysis of these proposals.

ELECTRONIC COMMERCE: AN OVERVIEW
Concept of “Electronic Commerce”
Simply defined, electronic commerce ("e-commerce") is the conducting of commercial activities through electronic means. The concept has been defined as “the exchange of goods or services... using electronic tools
and techniques”1 or “the use of computer networks to facilitate transactions involving the production, distribution, and sale and delivery of goods and services in the marketplace.”2 The notion of e-commerce is much wider than mere buying and selling on the Internet. It encompasses all forms of commercial transactions that are based upon the electronic processing and transmission of data, including text, sound, and visual images.3

There are generally two types of e-commerce transactions: digital transactions and other transactions. Digital transactions involve the trading of digital goods (digitized information products such as computer software, books, newspapers, magazines, music, films, and photographs) and services. Digital goods and services can be delivered electronically on the Internet, and therefore the whole process of marketing, contracting, distribution, payment, and after-sale service is done electronically. Other e-commerce transactions involve tangible goods and services that must be physically delivered, while other elements of the transaction are completed electronically. E-commerce transactions take place between businesses, within a business, between businesses and customers, and between businesses and government agencies. Thus far, business-to-business is the largest sector of e-commerce.4

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1 See United States, Department of the Treasury, Selected Tax Policy Implications of Global Electronic Commerce (Washington, DC: US Government Printing Office, November 1996) (herein referred to as “the US Treasury paper”). Canada, Electronic Commerce and Canada’s Tax Administration: A Report to the Minister of National Revenue from the Minister’s Advisory Committee on Electronic Commerce (Ottawa: Revenue Canada, April 1998) (herein referred to as “the Revenue Canada advisory committee report”), 1.2, defines electronic commerce as “the delivery of information, products, services, or payments by telephone, computer, or other automated media.”


4 Business-to-business e-commerce dwarfs the current level of consumer e-commerce in trade volume and has a much longer history. For example, in 1997, Dell Computer Corporation’s daily Internet sales of computers were US$2.2 million, 90 percent of which was with other businesses. Another US company, Cisco, which deals with other businesses, booked US$100 million of sales on the Internet in 1996 and over US$3 billion in 1997, and was expected to close Internet sales of US$4 billion in 1998. See United States, Department of Commerce, The Emerging Digital Economy (Washington, DC: Department of Commerce, April 1998) (available on the Web at http://www.ecommerce.gov), A3-14; and “Survey of Electronic Commerce: Big, Boring, Booming—Business-to-Business E-Commerce Is a Revolution in a Ball Valve,” The Economist, May 10, 1997.
E-commerce has grown at a staggering pace. Between 1996 and 1997, business-to-business trade on the Internet doubled every six months, and by 1998, was doubling every three or four months. Analysts predict that by 2003 businesses will trade as much as $1.3 trillion on the Internet. Analysts predict that by 2003 businesses will trade as much as $1.3 trillion on the Internet. Businesses in virtually every sector of the economy in North America and other developed countries are beginning to use the Internet to cut expenses, increase customer services, and create new business opportunities. Consumers are beginning to reap the benefits of e-commerce in the form of cost savings, increased choice of products and services, and improved consumer convenience. Governments are beginning to use the Internet to procure goods and services, provide information to the public, and deliver government services.

The rapid expansion of e-commerce is made possible by advances in telecommunications and computing technology, in particular the Internet. As the Internet recognizes no national boundaries and is capable of transmitting information instantly all over the world, e-commerce incorporates these characteristics. For example, business-to-consumer e-commerce can potentially facilitate the trading of anything between anyone anywhere in the world. Intrabusiness e-commerce allows multinational enterprises (MNEs) to engage in 24-hour trading, to fragment business operations into specialized centres, and to become “virtual.” Business-to-business e-commerce enables MNEs to be “more multinational” in sourcing for materials, parts, personal services, and capital, as well as in marketing products. These features have broad implications for international trade and the tax system.

Features of E-Commerce

In many explicit and subtle ways, e-commerce is different from traditional commerce:

1) E-commerce ignores both distance and national boundaries. The “borderless” feature is best demonstrated by the terms used to describe this new business vehicle or environment: “global information infrastructure,” “information superhighway,” “Internet,” “World Wide Web,” and “cyberspace.” All these expressions suggest that business conducted over the information networks blurs national borders. The term “cyberspace” even suggests that e-commerce may take place in a new and entirely different world.

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6 The US Treasury paper, supra footnote 1, at 7.2.3.1, used this expression in the following context: “Electronic commerce, on the other hand, may be conducted without regard to national boundaries and may dissolve the link between an income-producing activity and a specific location. From a certain perspective, electronic commerce doesn’t seem to occur in any physical location but instead takes place in the nebulous world of ‘cyberspace.’”

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The global nature of e-commerce means that distance is no longer a barrier to trade and national boundaries are no longer relevant. A transaction can take place between people anywhere in the world. The vendor does not have to set up a production facility or a sales outlet in a foreign country in order to sell products. MNEs can achieve close vertical integration of business functions by scattering across national borders to take advantage of the offerings (including the tax benefits!) of each country. E-commerce has led to a fragmentation of economic activity. The physical location of the supplier, service provider, or buyer of the goods or user of the services has become less important. When digital information or services are involved, national boundaries become even less relevant.

2) E-commerce requires no or only minimal physical presence. A significant difference between e-commerce and traditional commerce is that e-commerce is largely digital. Digital goods and services can not only be traded electronically, but also be delivered electronically. For example, a medical specialist living in the Bahamas can examine, diagnose, and advise patients, or even participate in surgery of a patient in Canada, through electronic images and communications. Where e-commerce involves physical goods, physical presence (such as the production and delivery of the goods) is still required, but other components of the transaction are conducted electronically.

3) E-commerce transactions take place around the clock. Web shops are open 24 hours a day, seven days a week. Transactions that rely on computers to process information can be carried out any time of the day or night since computers do not need any resting time. Even where human efforts are involved, e-commerce can be conducted 24 hours a day via the Internet and other communications technologies. Thus, MNEs can strategically set up operations in different time zones to achieve a dramatic synergistic effect—the sum of the parts being much less than the integrated whole.\(^7\) A typical example is the global trading of financial instruments. Other examples include collaborative research and development activities around the clock by scientists and researchers located in different time zones, 24-hour customer services provided by strategically located service centres, and the design and production of products 24 hours a day.

4) E-commerce allows distant parties to interact easily. The multimedia capability of the Internet and other new technologies enables people in different locations to interact through voice, text, and/or image. It allows traditional interactive services to migrate to cyberspace. Examples are chat-rooms, medical services, education, entertainment, cyber-casinos, electronic slot machines, blackjack and poker games, and other types of electronic gaming services. Interactive services can be supplied, consumed, and paid for at different locations. For example, a Nevada casino company

\(^7\) Jeffrey Owens, “The Tax Man Cometh to Cyberspace” (June 2, 1997), 14 *Tax Notes International* 1833-52, at 1836.
can set up a Cayman Islands subsidiary to own and operate a Web casino that is delivered to subscribers via computer servers located outside the United States. People subscribing to the Web site may play the electronic games by themselves or with other subscribers. Gambling wagers and winnings are paid in “e-money.”

5) E-commerce requires few intermediaries. One significant characteristic of e-commerce is that it may eliminate or significantly reduce the significance of intermediaries, such as distributors, sales representatives, brokers, and lawyers and other professionals, in the delivery of products, services, and information from the ultimate producer to the ultimate consumer. This process has been called “disintermediation.” Disintermediation is more serious in e-commerce in digital goods and services than in commerce in tangible goods. For example, although a book sold on the Internet still needs to be printed, packaged, warehoused, and shipped to the customer, a book sold in digital form can be delivered directly online and read in the digital form—thus circumventing the traditional product distribution chain. Some intermediaries will remain. For example, financial institutions are critical players in e-commerce since they provide the means of exchange, mostly via credit card at present. New intermediaries will appear, such as agencies that provide security for e-commerce transactions, agencies that provide authentication or identification of transacting parties, and transaction managers (network service providers that provide transaction services to users).

6) E-commerce is not subject to much regulatory control, either over the identity of parties to e-commerce transactions or over the content, location, records, and audit of e-commerce transactions. The control of e-commerce is made very difficult because the Internet has no central control. For example, an Internet address (or domain-style name) indicates who is responsible for maintaining that name, but it may provide no information about the computer corresponding to the actual Internet address, or about the location of that machine. Even if an e-mail address is clearly associated with a certain person and computer, it does not identify the location of that person and computer. Thus, it is difficult to establish a person’s location and identity. The location of the computer can be changed on the Internet without much difficulty. Similarly, a Web site does not always point to its owner and its owner’s location. It is also easy to arrange untraceable use of a Web site (if the site’s controller so permits) or an e-mail address. Information transmitted electronically is in digital form, which, until converted to human readable text, provides little or no information about the transaction, its parties, their location, the price of the transaction, and

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8 Even traditional intermediaries, such as lawyers, will continue to be useful in the age of e-commerce. E-commerce is and will be subject to legal regulations. As e-commerce will always involve human beings as producers of goods, suppliers of services, and consumers of these goods and services, legal disputes will need to be resolved by real people for the benefit of human beings.
other details. With the advances of encryption technology, information can be further restricted. Even if the information content can be determined, the use of encryption could preclude human comprehension. In this way, the world of cyberspace has its own citizens; there may be no or little link between a cyber citizenship and citizenship on Planet Earth.

7) Finally, e-commerce coexists with traditional physical trade. E-commerce has been developing at an explosive speed and is positioned to develop rapidly into the new millennium. It will never, however, totally replace conventional trade. There will always be people who want to smell the fish before buying it. The parallel existence of e-commerce and physical trade creates possibilities for alternative structuring of transactions. The question then is, how can e-commerce be dealt with in tax policy without creating distortions of trade?

Implications for International Trade and Investment

E-commerce has fundamental implications for international trade and investment, some of which affect tax policy. These implications are discussed in this section.

First, international trade is no longer the exclusive playground of large multinational corporations. Before the advance in information and communications technology, establishing operations abroad was costly and consumed a great deal of capital, time, and patience. Penetrating world markets was a seemingly impossible task for small and medium-sized enterprises (SMEs). E-commerce has removed some major obstacles. To conduct international business, SMEs need only understand the nuances of using the tools and methods of e-commerce. The cost of reaching global markets is not much different from that of penetrating local markets. SMEs can set up Web shops that can be visited by Internet users all over the world. Since many SMEs are service providers, they can also establish business relations with large e-commerce firms. As more and more large firms become “virtual corporations” and begin to out-source materials, logistics, professional services, transportation, and other functions, SMEs have more opportunities to be “spokes” for these firms, supplying them with materials and services. Via the Internet, SMEs can serve clients at a distance and in foreign jurisdictions.

Second, e-commerce creates the potential for explosive growth in cross-border trade in services and information products. In a physical world,

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10 Dealing with global marketing, logistics, and distribution issues associated with global sourcing (such as buying from suppliers worldwide, meeting customized demands of global customers, and tailoring sales, advertising, and marketing strategies to foreign markets) may throw managers/owners of SMEs into despair and stop them from entering the global markets.

books, newspapers, magazines, photographs, movies, and music can only be sold in hard copies through sales outlets or mail order. The reach of the market is limited by distance and physical presence. In a digital world, these products are available to every willing buyer who gains access to the Internet. Similarly, personal services no longer have to be provided face-to-face; service providers and the recipient can be physically apart in location and time zone. While trade in services has initially developed furthest within MNEs, e-commerce makes it possible for services to be traded commercially between unrelated parties. Trade between related parties is expected to increase as the business of MNEs becomes more fragmented.

Third, e-commerce also helps MNEs to make their business more highly integrated, even while it becomes more fragmented. Higher integration is achieved through efficient and effective control and management of information. Meanwhile, global dispersion of business functions enables MNEs to take advantage of favourable local conditions. In addition, e-commerce fragments particular economic activities. This is clearly the case with the provision of professional services. Traditionally, the service provider and the service recipient meet face to face; the location of the activity is the place where they meet. If services are provided via the Internet, the service provider and the recipient can be in two different locations. In this case, where is the economic activity carried out?

Finally, e-commerce facilitates the migration of businesses to tax havens. In the absence of specific anti-tax-haven legislation in high-tax countries, a tax-haven operation can effectively shelter income from high taxation in the home country of the investor/owner. In e-commerce, physical presence is less important, or irrelevant; businesses are mobile; parties to a transaction can be anywhere; and it is difficult to trace business transactions. The combination of new technologies and rapid globalization of capital markets makes tax havens more attractive to businesses, especially service-oriented businesses. The Revenue Canada advisory committee report stated,

Until recently, the number of tax-haven financial institutions was limited, as was practical access to them. Today, it is estimated that over $2 trillion in assets are managed by offshore financial institutions—a business that is growing at the rate of 15% per annum.

For human-provided interactive services, if the service provider is inclined to live in a sunny country with long beaches and fewer people (some

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13 A Canadian MNE may have its headquarters in Canada, research and development centres in North America, Asia, and Europe, production centres in Asia and Latin America, customer service centres in Canada and Australia, and financing centres in Luxembourg or Holland. All the centres are linked to produce dynamic synergies.

14 Revenue Canada advisory committee report, supra footnote 1, at 4.2.2.9.
characteristics of certain tax havens), he/she can move there without losing touch with clients. For information services, the computer can be located anywhere in the world. Not surprisingly, many such computers are located in tax havens.

It takes two to tango. Businesses will not flock to tax havens unless their customers follow them. Many customers do not know, and do not need to know, where services are provided. If Jane Doe loves playing blackjack on the Internet, why would she care where the Web-casino is located? Other customers specifically want to do business with tax-haven enterprises. Take offshore banking facilities, for example. Access to such facilities used to be a privilege for the wealthy. The “average” taxpayer now finds it increasingly easy to use offshore financial centres. Internet banking offers simple access, low transaction costs, secured transactions, a degree of anonymity, and immediate transferability of funds—all attributes that have only recently become available. If the tax savings from using tax-haven operations are split between the service provider and the customer, the customer will be attracted to the tax-haven operation. This situation poses a major problem for the international tax system.

Implications for Existing International Tax Principles

E-commerce is the rage of the 1990s and is helping to usher in the new digital age. E-commerce directly challenges existing international tax principles, many of which were conceived in an era that could not have foreseen the technological advances of the present. Under the existing tax jurisdictional principles, a sovereign country’s tax jurisdiction is limited to residence taxation and/or source taxation whereby either the taxpayer or the taxable income has some connection with that country. Tax enforcement is limited by national boundaries, since few countries are willing to enforce tax judgments of other countries. When international income is subject to double taxation, relief is provided by domestic laws and bilateral tax treaties.

Virtually every aspect of the existing international tax system is challenged by e-commerce.¹⁵ As explained below, residence taxation is challenged by

the international mobility of businesses and the difficulty of enforcing national tax laws in a borderless world. Businesses, especially information-based ones, can be relocated to tax havens and avoid residence taxation in the investor’s home country. Anti-avoidance measures aimed at preventing the use of controlled foreign corporations in tax havens are often deficient. The increasing use of electronic records and encryption technology may make it difficult for the government to gather information on offshore activities and to establish a reliable audit trail. Information on tax-haven operations may be unavailable as a result of bank secrecy laws of tax-haven jurisdictions and the absence of a treaty-mandated exchange-of-information mechanism. Source taxation is challenged by the disappearance of “source” in cyberspace.

It is beyond the scope of this article to analyze all these challenges. Only challenges to source rules are discussed below. It is worth noting, however, that the challenges posed by e-commerce to the international tax system are not new. Most of them predate the existence of e-commerce. For example, the tax-haven problem has caught the attention of law makers since the 1960s, when the United States introduced its subpart F rules.

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The difficulty in establishing the source of income from international transportation was recognized at the very beginning of modern tax treaty history and was dealt with by a special rule, which is now article 8 of the OECD model tax convention.\textsuperscript{16} Mail-order business presents many of the same conceptual tax problems as e-commerce, since foreign corporations can penetrate markets without establishing any local physical presence. E-commerce simply exposes these problems more quickly on a global scale and in an attention-grabbing fashion.

**IMPACT OF E-COMMERCE ON SOURCE RULES**

E-commerce challenges existing source rules because it blurs the character of income and makes territorial location meaningless in many cases. Difficulties in characterizing income derived from e-commerce transactions arise in at least three areas:

1) computer software payments,

2) digital products other than software, and

3) services.

The most difficult and common issue at present is the characterization of software payments. The source of income is becoming mobile in the e-commerce environment because a transaction can take place anywhere in the world between any two parties. The traditional attachment to physical presence becomes less meaningful. Moreover, the migration of taxpayers to tax havens worsens the problem in cases where source rules are tied to the residence of the payer of income. Each of these challenges and Revenue Canada’s responses are discussed below.

**Uncertain Characterization of Software Payments**

*Introduction*

Characterization of income from software transactions for tax purposes is difficult because the characterization is tied to what the software transaction entails and how the software is delivered. A computer software program may contain a bundle of rights, each with different legal consequences: a copyright right, a tangible good embodying the copyright, programming knowhow, or technical services. Methods of delivery of software include single-copy packages of a standardized product, site licences, local area networks, enterprise licences, electronic distribution without tangible media, reproduction by a distribution intermediary, enhancement and reproduction by a value-added reseller, bundling with hardware, limited duration licences, custom programming, and others. Furthermore, software product deliveries may be accompanied by other ancillary transactions, such as installation, customization of standard products, maintenance, training, development

licences, and others.\footnote{See Gary D. Sprague and Robin A. Chesler, “Characterization of Computer Software Revenue in International Transactions” (December 1996), 74 Taxes: The Tax Magazine 1144-66.} As discussed below, the difficulty of characterization is compounded by the ease of reproduction of software, and by the fact that acquisition of software frequently entails the making of a copy by the transferee in order to make possible the operation of the software.

In Canada, the character of income from the transfer of computer software is currently uncertain. The Income Tax Act\footnote{RSC 1985, c. 1 (5th Supp.), as amended (herein referred to as “the Act”). Unless otherwise stated, statutory references in this article are to the Act.} and Regulations do not contain specific rules for software payments. There are no indications that the Canada Customs and Revenue Agency (“Revenue Canada”) has plans to introduce a comprehensive set of guidelines for software payments in the near future. Although the technical interpretations and private rulings issued by Revenue Canada provide some indication of its position on various issues related to the taxation of software payments,\footnote{The only pronouncements from Revenue Canada dealing with computer software relate to the treatment of computer software costs for purposes of capital cost allowance and investment tax credits for qualifying scientific research and experimental development expenditures. See, for example, Revenue Canada technical interpretation 9227025, December 30, 1992.} these interpretations and rulings are inadequate. They have been issued in the context of determining whether or not non-resident withholding tax will apply to a particular type of transaction. Even in this context, the only clear position is that a transaction involving shrink-wrap (prepackaged) software is treated as a purchase and sale of a good, rather than as a copyright licence or some other type of transaction. The treatment of other software transactions must be determined on a case-by-case basis. The characterization of software payments for other purposes of the Act, such as the foreign tax credit and foreign accrual property income (FAPI) rules, has not been addressed.

The United States recently introduced regulations to classify certain transactions involving the cross-border transfer of computer programs for the purpose of applying certain international tax provisions of the Internal Revenue Code\footnote{United States Internal Revenue Code of 1986, as amended.} and for interpreting US tax treaties.\footnote{Treas. reg. section 1.861-18 (herein referred to as “the US software regulations”). These regulations were largely based on the proposed software regulations issued in 1996. For discussions of these regulations, see Rene E. Chaze and Robert B. Jennings, “Guiding Taxpayers Through the U.S. IRS Computer Program Classification Rules” (December 14, 1998), 17 Tax Notes International 1953-64; F. Michael Dell, “Guide to Proposed Regs Classifying Transfers of Computer Programs” (January 6, 1997), 74 Tax Notes 83-88; Michael J.A. Karlin, “Computer Program Prop.Regs. Are a Good but Cautious Start” (February 1997), 8 Journal of International Taxation 64-96; Alan Levenson, Alan Shapiro, Robert Mattson, and Ned Maguire, “Taxation of Cross-Border Payments for Computer (The footnote is continued on the next page.)
There is virtually no international consensus on the characterization of software payments. On the one hand, the current definition of “royalty” in the OECD model does not specifically deal with software. Article 12 defines “royalties” as “payments of any kind received as a consideration for the use of, or the right to use, any copyright of literary, artistic or scientific work including... [a] secret formula or process, or for information concerning industrial, commercial or scientific experience.” Software can be treated as “copyrights of literary works,” “copyrights of scientific work,” “secret formulas or processes,” or “information concerning industrial, commercial or scientific experience.” Any payments for the use of or the right to use software seem to fall within the definition of “royalties.” On the other hand, the OECD commentary (as amended in 1992) on article 12 of the OECD model distinguishes “business profits” from “royalties.” The distinction is based on whether full rights in software are transferred and whether the software is delivered to the user for the user’s own business or personal use, or for commercial exploitation. A transfer of full ownership in software is considered an “alienation” of software, resulting in business profits or capital gains, not royalties.22 A partial transfer of rights in software is treated as a royalty-generation licence. If the transferee acquires a copy of software for “internal use,” the transaction is treated, in essence, as a profit-generating sale for the transferor. However, the current OECD position has not been accepted by Canada23 or generally reflected in tax treaties. It appears that no treaty has focused on the possible distinction between royalty-generation licences and business profits-generation sales transactions. There are over 20 tax treaties in the world (including several of Canada’s treaties) that explicitly provide exemptions from or reduced rates of withholding tax on royalties for software payments.24 All seem to contemplate

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22 Paragraphs 13 to 16 of the commentary on article 12 of the OECD model.

23 The Canadian position is that “payments by a user of computer software pursuant to a contract that requires that the source code or program be kept confidential, are payments for the use of a secret formula or process and thus are royalties within the meaning of paragraph 2 of [article 12]”: paragraph 27 of the commentary on article 12 of the OECD model.

24 Sprague and Chesler, supra footnote 17, at 1155-56. In a recent ruling issued by India’s Authority for Advance Ruling, payments for the right to use computer software were considered to be royalties for purposes of the India-US tax treaty. See Shreya Pandit and Shefali Goradia, “Indian AAR Issues Landmark Ruling on E-Commerce Taxation Under U.S.-India Tax Treaty” (July 5, 1999), Tax Notes International 11-14. The third protocol to the Canada-US treaty exempts payments for computer software from source taxation. See the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed at Washington, DC on September 26, 1980, as amended by the protocols signed on June 14, 1983, March 28, 1984, March 17, 1995, and July 29, 1997 (herein referred to as “the Canada-US treaty”).
the royalty withholding tax rate reduction or exemption as applying to all software payments.

The OECD is currently revising its commentary on article 12 to deal with e-commerce transactions involving software. It published its proposed revision in 1998 (referred to herein as “the OECD revised commentary”).

The US software regulations and the OECD revised commentary have provided some clarification on the characterization issue. However, there are still many areas of uncertainty. The current practice in Canada is even less clear.

**Current Practice in Canada**

Computer software is protected under Canada’s Copyright Act. The term “copyright” means “the sole right to produce or reproduce the work or any substantial part thereof.” The owner of a copyright may assign the right, either wholly or partially, either generally or subject to territorial limitations, and either for the whole term of the copyright or for any part thereof, and may grant any interest in the right by licence. Any person who produces or reproduces a copyrighted software program must either own the copyright or obtain the right under a licence to produce or reproduce the program. According to the Copyright Act, a person cannot reproduce the program without violating the law unless either the right to reproduce has been granted by the copyright holder or the end-user “owns” the copy of program. The owner of a copy of program is permitted by the Copyright Act to make a copy for backup purposes or for internal use.

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26 RSC 1985, c. C-42, as amended. Computer software is encompassed within the term “computer program,” defined in section 2 as “a set of instructions or statements, expressed, fixed, embodied or stored in any manner, that is to be used directly or indirectly in a computer in order to bring about a specific result.”

27 Ibid., section 3.

28 Section 30.6 of the Copyright Act states:

It is not an infringement of copyright in a computer program for a person who owns a copy of the computer program that is authorized by the owner of the copyright to

- make a single reproduction of the copy by adapting, modifying or converting the computer program or translating it into another computer language if the person proves that the reproduced copy is
  - (i) essential for the compatibility of the computer program with a particular computer,
  - (ii) solely for the person’s own use, and
  - (iii) destroyed immediately after person ceases to be the owner of the copy; or

- make a single reproduction for backup purposes of the copy or of a reproduction referred to in paragraph (a) if the person proves that the reproduction for backup purposes is destroyed immediately when the person ceases to be the owner of the copy of the computer program.
The taxation of software payments depends on the characterization of the payments. Neither the Income Tax Act nor the Regulations provide any guidelines for this characterization. Based on Revenue Canada’s administrative pronouncements, the characterization seems to depend on the type of software and the extent of rights transferred.

Shrink-Wrap Versus Custom Software

Revenue Canada distinguishes two types of software—shrink-wrap and custom software:

The term “shrink-wrap computer software” is generally used to describe software that is pre-packaged and commercially available through mail order or at a retail store. Generally, such software is packaged along with a copy of the other related information, including the general licensing agreement, under a plastic shrink-wrapped cover. The general license agreement does not contain the name of the particular end-user of the software or the amount of the license fee. Moreover, the end-user of the software is not normally required to acknowledge in any manner that he has read or agreed to the terms of the software license.

The term “custom computer software” on the other hand, generally describes computer software the use of which is subject to a specific computer software license agreement. As a condition to the end-user acquiring the right to use the computer software, the end-user is required to enter into a computer software license agreement with respect to the use of the software. Such agreement will usually set out the amount of and the description of, the fees to be paid under the particular computer software license and the agreement will usually be signed by both parties to acknowledge acceptance of its terms. While custom computer software includes computer software that has been designed for a particular end-user’s needs, the Department views all software as being custom computer software where an end-user acquires the right to use any computer software program under a specific license agreement. It does not matter that copies of the particular software program may also be available to the end-user and other end-users, as shrink-wrap software.29

Whether a particular software program is shrink-wrap software or custom software is a question of fact that can be determined only by reviewing the licence agreement associated with the right to use the program.30 “Shrink-wrap software” basically refers to over-the-counter software licensed pursuant to a standard unsigned licence agreement, whose terms the licensee may or may not have been aware of at the time of purchase. Where software programs are purchased on the Internet, the so-called click-wrap or Web-wrap software may also be treated as shrink-wrap software. On the other hand, where a customer purchases a software program subject to a licence agreement and it is clear that the customer was aware of the terms of the

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30 Revenue Canada technical interpretation 9502165, April 26, 1995.
agreement (usually verified by the customer’s signing the agreement) when acquiring the software, the software will be considered custom software. Fees paid for the right to use shrink-wrap software are treated as sale proceeds rather than licence fees or royalties.\footnote{Before 1995, Revenue Canada’s position was that payments for acquiring shrink-wrap software were payments for the use of a secret formula or process under subparagraph 212(1)(d)(i).} In other words, where prepackaged or standard software is “purchased” by a consumer, although the transaction is formally referred to as a “licence,”\footnote{The distribution of software has historically been by way of licence because software developers were concerned about their ability to police the making of unauthorized copies owing to uncertainties in copyright laws and the ease of making copies. Since 1988, software has been protected under the Copyright Act. The terms of a licence provide the software developer with few, if any, additional legal rights over those of the licence holder beyond the rights provided by the Copyright Act. Nevertheless, copies of mass-produced prepackaged software are still “licensed,” not sold, to end-users.} for tax purposes the transaction is classified as a purchase and sale of a good.\footnote{The same treatment should presumably apply to software bought in the form of a diskette over the counter or by mail order, as well as software bought over the Internet by downloading directly from the vendor’s Web site. In these circumstances, the customer acquires only the right to use the copy of the software program that he/she bought.} In such cases, the customer does not obtain the copyright (that is, the right to produce or reproduce the software). Fees paid for acquiring a copy of custom software are treated as royalties for the right to use a secret formula or process under subparagraph 212(1)(d)(i) of the Act.\footnote{Also, where a payment is made for the right to make backup copies of custom software, or to make copies for internal use, the payment is taxed as a royalty.}

**Purchase Versus Licence of Copyright Right**

An outright purchase of a copyright right occurs where “there has been an absolute transfer of all intellectual property interests in the software and where the buyer obtains an unrestricted right to sell or lease the software.”\footnote{Revenue Canada technical interpretation, December 30, 1992, reported in *Window on Canadian Tax* (North York, Ont.: CCH Canadian) (looseleaf), paragraph 2322. This interpretation was made in the context of deduction of the cost of acquiring software, but it is relevant to the determination of tax treatment of the payment to the transferor.} An outright purchase does not arise where the transferor or any party other than the transferee maintains proprietary rights or where the transferee has committed itself to restrictions not normally associated with ownership such as restrictions regarding secrecy. Payments for purchasing a copyright are not royalties for Canadian tax purposes.

Payments for a licence of a copyright are generally taxed as royalties. However, because computer software is recognized as a “literary work,” payments for the right to produce or reproduce software in Canada fall within the exemption under subparagraph 212(1)(d)(vi) of the Act. The right to make backup copies for the licensee’s own use is not considered
a right to produce or reproduce for the purposes of the exemption. As a practical matter, in some cases the difference between making backup copies and making copies under the right to produce or reproduce software may be insignificant. Consider, for example, a large Canadian company that acquires custom software from a US software provider. The Canadian company has many terminal operators and requires multiple copies of the software. The payment for the right to make the copies would qualify for the exemption if the licence agreement specified that the software provider allowed the customer to make a predetermined number of copies and that the payment was made not for the use of the software, but rather for the right to produce the copies.

Service Fees Versus Royalties
In a software licence transaction, it is not uncommon for the licensor to provide related services, such as maintenance, training, technical support, updates, modifications, improvements, and additions to computer software. Payment for such services may be separate from or part of the licence fees. The characterization depends on the nature of the services, whether their acquisition is optional, and whether the payments for the services are reasonable in relation to the software licence fee.

If payments are in respect of additions, product updates, enhancement, improvements, or modifications to the original software, Revenue Canada will likely consider them to be royalties. In cases where a Canadian company hires a software engineer to develop a computer program to satisfy the company’s particular needs, payments made under the contract may be considered a blend of payments for services and for the computer program. A reasonable allocation of the payments may be required. The portion of the payments attributable to developing the computer program will likely be taxed as royalties under subparagraph 212(1)(d)(i). The portion attributable to services will not be taxable as royalties if the amount is not dependent on use, production, or profit.

Where the acquisition of services is optional and the payments for services are reasonable in relation to the software licence fee, the payments are treated as service fees. Subparagraph 212(1)(d)(iii) will not apply to such payments unless the payments are dependent on the use to be made of or

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36 Revenue Canada technical interpretation 9430560, December 13, 1994. In addition, where a Canadian resident acquires only the right to make additional copies of custom software for his/her own use, Revenue Canada would expect that the portion of the payment, if any, for that right would be nominal in comparison with the portion of the payment for the right to use the program. Ibid.


38 Ibid.
the benefit to be derived from the services. However, if the failure to enter into or renew an agreement or the cancellation of such an agreement would cause the loss of the right to use the licensed software, Revenue Canada would normally consider the payments to be part of the licence fee.\(^\text{39}\)

The current situation in Canada can be significantly improved if Canada introduces legislative guidelines similar to the US software regulations or the OECD revised commentary.

**US Software Regulations and the OECD Revised Commentary**

Both the US software regulations and the OECD revised commentary characterize software payments on the basis of the classification of software as a copyright right, a copyrighted article (or copy of the program), a secret formula or knowhow, or services.\(^\text{40}\) A transfer of a copyrighted article is generally categorized as a sale of goods. A transfer of a copyright right is further distinguished between a sale and a licence. A transfer of information that is not protected by copyright laws may be characterized as a transfer of knowhow or services.

**“Copyright Right” Versus “Copyrighted Article” or “Program Copy”**

Computer software programs are considered literary works for purposes of copyright laws in the United States and many other countries.\(^\text{41}\) The distinction between copyright rights and copyrighted articles (or program copy) in copyright laws is respected by both the US software regulations and the OECD revised commentary. This distinction is the most fundamental one in the characterization of software transactions. A transfer of a copyrighted article gives rise to sale proceeds, whereas a transfer of a copyright right may give rise to royalties or sale proceeds, depending on whether the transfer is made by way of a sale or a licence.

The US software regulations base the distinction between a transfer of a copyrighted article and a transfer of a copyright right on the absence or presence of the transfer of any of the copyright rights. These copyright rights include the right to make copies for distribution to the public.\(^\text{42}\)

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\(^{39}\) Revenue Canada technical interpretation 9421895, January 17, 1995.

\(^{40}\) For example, the US software regulations characterize software transactions into four categories: (1) a transfer of a copyright right in the computer program; (2) a transfer of a copy of the computer program (a copyrighted article); (3) the provision of services for the development or modification of the computer program; and (4) the provision of knowhow relating to computer programming techniques. See Treas. reg. section 1.861-18(b)(1).

\(^{41}\) The commentary on article 12 of the OECD model notes that, with one exception, all OECD member countries protect software rights either explicitly or implicitly under copyright law.

\(^{42}\) For purposes of the regulations, “the public” does not include a related person, persons who may be identified by either name or legal relationship to the original transferee, and (The footnote is continued on the next page.)
right to prepare derivative programs, the right to make a public performance of the program, and the right to publicly display the program.\textsuperscript{43} If any copyright right is transferred, the transaction is a transfer of a copyright right; if no copyright rights are transferred, the transaction is a transfer of a copyrighted article.

Under the copyright laws of many countries, a person who acquires a software program automatically obtains the right to copy the program onto the hard drive or random access memory of a computer without breaching the copyright. Copying the program in this manner is an essential step in using the program. Therefore, for tax purposes, the right to reproduce software is relevant only when it is coupled with the right to sell copies of the software to the public. The US software regulations rely on the distinction between transactions in which the transferee has no right to copy the software (except for essential purposes such as installation and backup) and transactions in which the transferee can reproduce the software for purposes of distribution to the public. If a person acquires the right to use a software program, but the owner of the program does not grant any right to reproduce the software for distribution to the public, to prepare derivative programs, to make a public display, or to give a public performance, the software acquired by the person is a copyrighted article, not a copyright right. Typical examples of this type of transaction are shrink-wrap or Web-wrap licences.

The OECD revised commentary on article 12 of the OECD model makes the distinction on a similar basis. A transaction is considered a transfer of the copyright in the software where the rights to use the program are granted in a manner that would, without such licence, constitute an infringement of copyright. Infringement of copyright occurs where, without a licence, a person reproduces and distributes to the public software incorporating the copyrighted program, or modifies and publicly displays the program. As noted above, copying the program onto the computer’s hard drive or random access memory or making an archival copy is generally not considered an infringement of copyright. Therefore, such copying is disregarded in analyzing the character of the transaction for tax purposes.

A computer program transferred under a site licence, an enterprise licence, or a network licence is treated as a program copy under both the US software regulations and the OECD revised commentary. Under such a licence, the transferee obtains rights to make multiple copies of the program for the purpose of operating the program on its computers or network, and reproduction for any other purpose is not permitted.

\textsuperscript{42} Continued . . .

employees or independent contractors permitted to use the program to perform services for the “licensee” (transferee). See Treas. reg. section 1.861-18(g)(3)(i). This definition ensures that an enterprise licence transaction is generally classified as the transfer of a copyrighted article because the use of the transferred software is within the licensee enterprise (including its affiliated legal entities).

\textsuperscript{43} Treas. reg. section 1.861-18(c)(2).
Both the US software regulations and the OECD revised commentary place excessive emphasis on whether the transferee has the right to make copies for public distribution. Because computer programs can be copied easily at little extra cost, this approach may be problematic. The problem is illustrated by the following examples:

[1] Corp A, a U.S. corporation, transfers a disk containing Program X to Corp D, a foreign corporation engaged in the manufacture and sale of personal computers in Country Z. Corp A grants Corp D the non-exclusive right to copy Program X onto the hard drive of computers which it manufactures, and to distribute those copies (on the hard drive) to the public. The term of the agreement is two years, which is less than the remaining life of the copyright in Program X. Corp D pays Corp A an amount based on the number of copies of Program X it loads on to computers.\(^4\)

[2] The facts are the same as in Example [1], except that Corp D, the Country Z corporation, receives physical disks. The disks are shipped in boxes covered by shrink-wrap licenses. . . . Corp D uses each individual disk only once to load a single copy of Program X onto each separate computer. Corp D transfers the disk with the computer when it is sold.\(^5\)

In an economic sense, it is almost impossible to distinguish the facts of these two transactions or their economic outcome, especially if it is assumed that in example 1 Corp D will acquire backup disks (or the right to make them) that it sells with the computer. Nevertheless, the legal characterization in the US software regulations is different. In example 1, Corp D is considered to have acquired a copyright right in the form of a licence. In example 2, no copyright right has been transferred because Corp D has acquired the disks without the right to reproduce and publicly distribute further copies of the program. The transaction is therefore a transfer of copyrighted articles.

The distinction makes little sense in economic substance. It is true that in example 1, Corp D has acquired a specific right to copy the program, whereas in example 2, Corp D has not acquired that right. The difference between these examples appears to be the medium employed to transfer the computer program to Corp D—that is, a single disk versus multiple disks. The economic reality, however, is that the software company would provide Corp D with as many copies as it needed upon request. Thus, instead of authorizing Corp D to copy the program, the software company can make copies for Corp D. No matter who is doing the copying, Corp D must pay for the right to install the program in each computer.\(^6\) Consequently, the distinction between copyright rights and copyrighted articles is not always clear.

\(^4\) Treas. reg. section 1.861-18(h), example 8.
\(^5\) Ibid., example 9.
\(^6\) Karlin, supra footnote 21; and “Commentary: Ernst & Young Wants Further Guidance in Computer Program Regs” (July 14, 1997), 15 Tax Notes International 135-41, at 136.
Once a software transfer is classified as either a transfer of a copyrighted article or a copyright right, a further distinction must be made between a “sale” and a “lease” or “licence.” A transfer of a copyrighted article or program copy may be considered a “sale” or a “lease,” whereas a transfer of copyrights may be considered a “sale” or a “licence.” Under the US software regulations or the OECD revised commentary, only a licence of copyright rights results in royalties.47

“Sale” Versus “Licence” of Copyright Right

A sale of a copyright right gives rise to either business profits or capital gains, whereas a licence gives rise to royalties. The US software regulations look at whether “all substantial rights in the copyright” have been transferred. If all substantial rights in the copyright pass to the transferee, the transaction is a sale of a copyright right.48 If less than all substantial rights are transferred, the transaction is a licence.49 Whether all substantial rights have been transferred to the transferee is determined by the terms of the transfer. In general, under US law, the term “all substantial rights” in a computer program means all rights (or an undivided interest therein) that are of value at the time the rights (or an undivided interest therein) are transferred.50 The transfer of a copyright right will not generally be con-

47 A software transaction can be classified as either a “licence” or a “sale.” The classification is made difficult because software transfers are almost always made by licence. See Glicklich, Goldberg, and Levine, supra footnote 15, at 330; US Treasury paper, supra footnote 1, at 7.3.3; and Sprague and Chesler, supra footnote 17, at 1148.

48 Treas. reg. section 1.861-18(h), example 5: “Corp A, a U.S. corporation, transfers a disk containing Program X to Corp B, a Country Z corporation, and grants Corp B an exclusive license for the remaining term of the copyright to copy and distribute an unlimited number of copies of Program X in the geographic area of Country Z, prepare derivative works based upon Program X, make public performances of Program X, and publicly display Program X. Corp B will pay Corp A a royalty of $y a year for three years, which is the expected period during which Program X will have commercially exploitable value.”

49 The US software regulations provide the following example (Treas. reg. section 1.861-18(h), example 6): where a US corporation grants a two-year non-exclusive right to reproduce and distribute for sale to the public an unlimited number of disks in return for a payment related to the number of the disks copied and sold, the transaction is classified as a licence. The reason is that there has not been a transfer of all substantial rights in the copyright owing to (1) the non-exclusivity, even in the country of the licensee; (2) the US corporation’s right to sell that copyright, subject to the non-exclusive licence; and (3) the fact that the term of the licence is for less than the remaining life of the copyright in the program.

50 The US software regulations allow the Internal Revenue Service (IRS) to look to a broad foundation of tax law and tax principles to determine whether there has been a transfer of all substantial rights in the transfer of a copyright right for purposes of these regulations. The US Treasury and the IRS believe that the “all substantial rights” test in the regulations under section 1235 of the Internal Revenue Code (which applies to patents) reflects the “all substantial rights” test under case law. As a result, section 1235 is used as an appropriate standard to be applied to transfers of computer programs. See Chaze and Jennings, supra footnote 21.
considered a transfer of all substantial rights if it provides for a grant of the following rights: \(^{51}\)

- a right that is limited geographically within the country of issuance;
- a right that is limited in duration by the terms of the agreement to a period that is less than the remaining life of the copyright right;
- rights that are less than all the rights covered by the copyright right, which exist and have value at the time of the grant;
- a right that transfers to the transferee less than all the claims or inventions covered by the copyright right that exist and have value at the time of the grant; or
- a right that permits the transferor to retain the right to terminate the transfer at will.

The OECD revised commentary distinguishes a sale from a licence on the basis of whether full rights in the software have been transferred. If full ownership of the rights in the copyright has been transferred, the transaction is a sale of copyright. Whether full ownership of copyright has been transferred may be very difficult to determine in cases where (1) there is extensive but partial alienation of rights involving exclusive right of use during a specific period or in a limited geographical area, (2) there is additional consideration related to use, or (3) consideration is paid in the form of a substantial lump-sum payment. \(^{52}\) The OECD revised commentary provides no guidelines for this determination but seems to favour treating these cases as “sales” rather than “licences.” \(^{53}\)

Either the “transfer of full ownership” in the OECD revised commentary or the “transfer of all substantial rights” test in the US software regulations provides more guidance than the current practice in Canada. The same is true with respect to the distinction between transfers of knowhow and services.

“Knowhow” Versus “Services”

In some software transactions, a software company or computer programmer provides information and technical assistance to a customer. In these cases, the distinction between a transfer of “knowhow” or a “secret formula”

\(^{51}\) See Treas. reg. section 1235-2(b)(1). Some rights that are not considered substantial may be retained by the transferor without the transaction being considered the transfer of all substantial rights. Examples are the retention by the transferor of legal title for the purpose of securing performance or payment by the transferee in a transaction involving a transfer of an exclusive licence to manufacture, use, and sell for the life of the intangible; the retention by the transferor of rights in the property that are not inconsistent with the passage of ownership, such as the retention of a security interest (for example, a vendor’s lien), or a reservation in the nature of a condition subsequent; and the retention by the transferor of rights of no practical value. See Chaze and Jennings, supra footnote 21, at 1957.

\(^{52}\) Supra footnote 25, paragraph 15 of the OECD revised commentary on article 12.

\(^{53}\) Ibid.
and a transfer of services is relevant. Consideration for the transfer of knowhow or a secret formula may be taxed as royalties, while consideration for services is taxed as business profits or personal service fees.

The OECD revised commentary indicates that if there is a supply of information about the ideas and principles underlying the program, such as logic, algorithms, or programming languages or techniques, payments for the information are royalties for the use of, or the right to use, secret formulas or for information concerning industrial, commercial, or scientific experience, which cannot be separately copyrighted.\textsuperscript{54} Payments for other types of information are considered to be service fees.

The US software regulations will likely classify a transaction as a provision of services where a software company contracts with a customer to develop or modify the customer’s software program in accordance with the customer’s specifications, the development or modification requires substantial labour, and the developed or modified program belongs to the customer.\textsuperscript{55} On the other hand, where a software company sends a development engineer to the customer’s location to impart information on programming techniques that will allow the customer to more efficiently create computer programs, the contract may be classified as a transfer of knowhow.\textsuperscript{56} The term “knowhow” is defined as information relating to computer programming techniques, furnished under conditions preventing unauthorized disclosure, and subject to trade secret protection.\textsuperscript{57} It is not clear whether it covers techniques that use computer programming as opposed to techniques used to develop, improve, modify, or correct software. There seems to be no reason to limit the categories of information to programming techniques, except, perhaps, that the United States wants to limit the scope of “royalties.” A transfer of knowhow gives rise to royalty income subject to source withholding tax, while the provision of services does not. Since the United States is the world leading software exporter, the narrow definition of knowhow may assist US software companies in reducing foreign withholding taxes.\textsuperscript{58}

\textsuperscript{54} Ibid., paragraph 14.3. The term “knowhow” is not defined in the OECD model. The commentary on article 12 of the OECD model seems to adopt the following definition: “Know-how is all the undivulged technical information, whether capable of being patented or not, that is necessary for the industrial reproduction of a product or process, directly and under the same conditions; inasmuch as it is derived from experience, know-how represents what a manufacturer cannot know from mere examination of the product and mere knowledge of the progress of technique.”

\textsuperscript{55} Treas. reg. section 1.861-18(h), example 15.

\textsuperscript{56} Ibid., example 16.

\textsuperscript{57} Treas. reg. section 1.861-18(e).

\textsuperscript{58} However, unless the US approach is widely accepted by other countries, US software-exporting companies may be whipsawed. The export of shrink-wrap software may be treated as a licence in some countries and as a sale in the United States. Absent treaty exemptions, royalties will be taxed in the source country. Under US domestic law, the

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Computer software is one of the most important types of digital products traded electronically. As discussed below, the difficulties in characterizing software payments apply to other types of digital products as well.

**Uncertain Characterization of Digital Transactions**

E-commerce transactions involving digital products are difficult to characterize for tax purposes because all digital products can be perfectly reproduced, often by the purchaser, and most products are protected by copyright laws. For example, a customer who desires to purchase 10 copies of a book has three options:

1) she can purchase 10 bound copies from a publisher or a bookstore;
2) she can purchase 10 electronic copies from the publisher; or
3) she can simply purchase 1 electronic copy and acquire the right to make 9 additional copies.

The economic substance of all three options is the same. For tax purposes, however, the third option can be treated as creating royalty income, at least in part, because the customer obtains the right to make 9 copies. Alternatively, the transaction can be viewed as a substitute for the customer’s purchasing 10 copies from the publisher, giving rise to sales proceeds.

In addition to blurring the distinction between sales and royalty income, the electronic delivery of information may blur the distinction between sales income and services income. For example, when a publisher sells books, journals, or newspapers, the income is sales income. When the same publisher goes online, providing the same information content electronically, and charges a fee for access, reading, downloading, or printing, is the fee in the nature of sales or services income? The answer depends on how the transaction is analyzed:

- Where a customer merely accesses and reads on the computer screen information provided by an online publisher and does not download or print the information, the transaction can be treated as analogous to either

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58 Continued . . .

59 While most material commonly made available in digitized form will be subject to copyright protection, there may be items that will not be copyrighted, such as material published by the government, phone books, and texts for which the copyright has expired.

60 This example is based on the US Treasury paper, supra footnote 1, at 7.3.2.

61 Source rules under Canada’s domestic law and tax treaties are different for sales income and services income. If services are considered to be rendered in Canada, a 15 percent withholding tax is imposed on the fees under regulation 105. Taxes withheld under regulation 105 are refunded if the non-resident files a Canadian tax return and establishes that the service fees are exempt from Canadian tax by virtue of a tax treaty between Canada and the non-resident’s country of residence.
The customer may have received the same benefit as in the case of printing out the data or purchasing a hard copy. That is particularly true for information with temporary usefulness, such as a newspaper or weekly magazine. In that case, the transaction gives rise to sales income. On the other hand, since the customer cannot physically “acquire” a copy of the information for the full useful economic life of the information, it would make sense to treat the transaction as equivalent to reading in a library and thereby giving rise to services income.

• Where a customer downloads or prints the information accessed online for his/her own use, the customer has clearly acquired a copy of the material. The transaction will be treated as a sale of information. Alternatively, in the absence of a separate charge, the downloading or printing of data can be considered as part of an online service provided by the publisher, and the portion attributable to downloading or printing is merely incidental to the overall service.

• Where a customer is allowed to download the information and make 10 copies for his/her own use, the transaction may be treated as the equivalent of purchasing 10 copies (giving rise to sales income) or the equivalent of acquiring the right to use the copyright and make 10 copies (giving rise to royalty income).

It is expected that the OECD and the United States will eventually apply the principles supporting the characterization of computer software transactions to digital transactions.

Other characterization difficulties arise with respect to the global trading of financial instruments. Global trading creates characterization problems because Canada and many other countries do not yet have specific rules for determining the source of income produced by derivative financial products.


Uncertainty about the characterization of payments for digital products makes it difficult to determine the territorial source of income, because royalty income, sales income, and services income have their own source rules. However, e-commerce challenges to traditional source rules are not limited to the characterization of income. In many cases, even if guidelines can be established for the characterization of income from an e-commerce transaction, establishing the geographical location from which the income is derived is not easy.

**Disappearing Territorial Source**

Existing territorial source rules are, to a large extent, based on the physical presence of personnel or assets, or both. The most important applications are with respect to business income and services income. The requirement of physical residence was developed for a physical commercial world, long before the advent of modern technologies and the Internet. At that time, it was very difficult for a business to conduct substantial operations in a country without having a fixed place of business there. The international consensus was that “until an enterprise of one State sets up a permanent establishment in another State it should not properly be regarded as participating in the economic life of that other State to such an extent that it comes within the jurisdiction of that other State’s taxing rights.”64 Although business could be carried on through mail orders, the mail-order business was not considered threatening to the principle because such businesses had many limitations and could not compete with those that had physical presence.65

The principle of physical presence is incompatible with the world of e-commerce. As one tax expert has put it,

> [t]o the extent commerce becomes electronic rather than physical, and to the extent what is being sold also becomes electronic—information, entertainment, technology—the search for a physical presence such as permanent establishment takes on a touch of the quixotic.66

People can conduct business, negotiate, meet, revise documents, sell, plan, and otherwise conduct business functions from almost anywhere with limitless mobility and without any of the fixtures that once characterized the “place of business.” Virtual offices, virtual stores, and virtual workplaces can be virtually anywhere. Where is the physical presence in a predominantly virtual world?

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64 Paragraph 3 of the commentary on article 7 of the OECD model. As one commentator explains, “[t]he high tax threshold embodied in the permanent establishment rule is thought to facilitate international trade by preventing foreign taxpayers who do not have a substantial physical presence in a country from having to bear the costs of learning about the tax system of that country.” See Michael J. McIntyre, “The Design of Tax Rules for the North American Free Trade Alliance” (Summer 1994), 49 Tax Law Review 769-93, at 788-89.

65 Horner and Owens, supra footnote 15.

66 Kingson, supra footnote 15, at 656.
Place of Performing Services

The current source rule for income from services is that such income arises in the place where the services are performed. When services are provided face to face, the place of performance is the place where the physical meeting takes place. When services (such as consulting) are physically performed in country A and the result of the services income is country A. When services are delivered electronically, as in the case of a medical doctor who is physically in country A while participating via the Internet in a surgical operation in country B, where are the services performed? Could the Internet be considered an extension of the doctor’s arms and hands? In the case of automated online information services, such as Lexis-Nexis, is the place of performance the place where the service provider is located, the place where the customer receiving the services is located, or the place where the electronic equipment that transmits the information is located? There are no clear answers yet to these questions. In general, however, the place of performance is likely the place where the service provider is located.

Global collaboration between members of an MNE in conducting research and development or providing services also complicates the application of source rules. For example, when an automobile is designed by engineers in multiple jurisdictions, where is the source of income? Similarly, where is the source of income from global trading of financial instruments? Is the income sourced in all the jurisdictions where the engineers or traders are located? If so, how is the income to be allocated to each jurisdiction? These questions cannot be answered adequately by the existing rules.67

“Carrying On Business in Canada”

The territorial source of income from a business is the place where the business is carried on, which is in turn determined pursuant to the deeming rule under section 253 of the Act or the case law. In the context of a tax treaty, the test is the place of a permanent establishment.

E-commerce raises many questions with respect to what constitutes carrying on business in a particular country. When goods and services are provided on the Internet, where are these goods or services produced, created, or sold? Where is the situs of a transaction? Can the Web site of

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67 Applying the arm’s-length principle to e-commerce transactions in itself is very difficult because of the difficulties in establishing arm’s-length prices for services and intangible goods and in conducting functional analysis of contributions made by each collaborative party. It is beyond the scope of this article to deal with transfer-pricing issues. For further comments on this issue, see the US Treasury paper, supra footnote 1, at 7.5; Revenue Canada advisory committee report, supra footnote 1, at 4.2.2.7; and Owens, supra footnote 7, at 76-79.
a vendor be treated as the equivalent of a sales outlet or place of rendering services or the soliciting of orders in the country where a customer accesses the Web site? Can an Internet service provider (ISP) or other intermediary be regarded as the agent of the vendor? Can intelligent software agents be treated as “agents” for tax purposes? Where is the place of digital contract? There is no clear answer to these questions. For reasons discussed below, however, it is very unlikely that section 253 or existing case law will deem a non-resident vendor of goods and services on the Internet to be carrying on a business in Canada.

Under paragraph 253(a), a non-resident person who “produces, grows, mines, creates, manufactures, fabricates, improves, packs, preserves or constructs” anything in Canada is deemed to carry on business in Canada. Where a non-resident person sells goods or provides services to Canadian residents remotely via the Internet, nothing is “produced,” “created,” or “improved” in Canada for purposes of paragraph 253(a). Thus, paragraph 253(a) will not operate to deem the non-resident to carry on business in Canada.

Under paragraph 253(b), where a non-resident solicits orders or offers anything for sale in Canada, through an agent or servant, the non-resident is deemed to carry on a business in Canada regardless of the place where the contract is concluded. In the Sudden Valley case, the court held that a “mere invitation to treat” did not fall within the ambit of this provision and, specifically, the phrase “soliciting orders or offering anything for sale in Canada.” Soliciting orders in Canada means that orders must be sought and attempts made to obtain them in Canada. In Sudden Valley, the expression “offered anything for sale in Canada” was limited to offers that, if accepted, would create a binding contract between the offeror and the offeree. In the context of e-commerce, the issue is whether a non-resident vendor’s Web site accessible by Canadian purchasers can be considered a mere invitation to treat, soliciting orders, or offering things for sale in Canada. If the Web site merely provides information on goods and services and is a form of advertising or an offer to treat, paragraph 253(b) does not apply. However, if the information on the Web site is detailed, providing a description of the product and pricing and shipping information that is much more substantial than the information in the Sudden Valley advertisements, and the Web site contains an electronic order form that a Canadian buyer would complete and transmit electronically, it is possible to consider the Web site as making a firm offer. The issue of whether the information on a Web site constitutes a firm offer or merely an invitation to treat may depend on the intention of the vendor as revealed by the language used and the surrounding circumstances:

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68 Sudden Valley Inc. v. The Queen, 76 DTC 6448; [1976] CTC 775 (FCA).
69 Ibid.
[T]he test is essentially one of the intention of the person putting the information on the Web page: did he intend to be bound by a response (in which case he has made an offer) or did he intend that he would need to acknowledge the response by word or action, such as despatching the goods (in which case the Web page constitutes an invitation to treat).70

Even if the information on a Web site amounts to the solicitation of business or the offering of goods for sale in Canada, paragraph 253(b) does not deem the non-resident vendor to carry on business in Canada unless the activities are carried out through an agent. Unless the concept of “agency” is expanded to accommodate e-commerce by deeming a software agent or an ISP to be an agent of the non-resident vendor, paragraph 253(b) is not applicable. It is possible, however, that the non-resident would be considered to be carrying on business in Canada under general case law principles.

One important test at common law for determining whether a non-resident carries on business in Canada is the place where the contracts for sale are made.71 The place of contract is determined according to the law of contract, and this is the place from which acceptance of an offer is communicated. The general rule for instantaneous communication (albeit developed for communications by telex) is that the place of contract is the place where the acceptance is received.72 This principle could apply to e-commerce, also a medium for instantaneous communication. In the case of e-commerce, the place where acceptance is received will depend on whether the page on the Web site constitutes an invitation to treat or an offer for sale. If the Web page is an invitation to treat, the customer in Canada will make an offer to the non-resident vendor, which will accept or reject it. Where the offer is accepted, the vendor will communicate acceptance through the Internet to the customer, and acceptance therefore will be received in Canada. The place of contract will thus be in Canada, and consequently the non-resident vendor will be carrying on business in Canada. In contrast, if the Web page constitutes an offer for sale, the Canadian customer will accept the offer in Canada and communicate acceptance through the Internet to the non-resident vendor. The place of contract will thus be outside Canada, and consequently the vendor will not be carrying on business in Canada. As mentioned above, whether information at a non-resident vendor’s Web site amounts to an invitation to treat or an offer for sale may depend on the facts and circumstances of each case.73

70 See Graham J.H. Smith, ed., Internet Law and Regulation, 2d ed. (London: Sweet & Maxwell, 1999), 1385. For further comments, see Bourgeois and Blanchette, “... Part 2,” supra footnote 15, at 1385.
71 See part 1 of this article, (1999), vol. 47, no. 5 Canadian Tax Journal 1077-1125, at 1095.
72 Erichsen v. Last (1881), 4 TC 422, at 425 (CA).
Another principle at common law is that a non-resident may be considered to be carrying on business in Canada, even though its business contracts are made elsewhere, as long as the operations from which the profits arise are located in Canada. Applying this principle to e-commerce, the issue is whether the sale of goods and the provision of services via the Internet can amount to carrying on business in Canada. The issue must be determined by reference to the facts and circumstances of each case. If the activities of a non-resident vendor are limited to a passive solicitation of business via a Web site and the vendor has no physical presence in Canada, the vendor will not be considered to be carrying on business in Canada. However, if the activities of the vendor are more substantive, the vendor might be considered to be carrying on business in Canada. An example would be the case where the vendor’s Web site provides detailed information on products and services and the Web site is capable of taking orders, accepting payments, and delivering the products sold (as in the case of digital goods). Further, the Web site may be hosted on a server located in Canada, and if tangible goods are sold, the vendor may have a stock of goods in Canada from which it fills its Canadian orders. In general, though, none of these factors is determinative. Moreover, if the storage of goods in Canada or the location of a server in Canada would cause a non-resident to be taxable in Canada, the warehouse or the computer may be easily moved out of Canada. Therefore, it is very difficult to consider the non-resident to be carrying on business in Canada in the context of e-commerce.

“Permanent Establishment”

Even if a non-resident e-commerce company is considered to be carrying on business in Canada under domestic law, the non-resident may be exempt from Canadian tax under an applicable tax treaty where the non-resident does not carry on the business through a permanent establishment in Canada. In the context of e-commerce, there is virtually no need for the non-resident to have a permanent establishment in Canada. The sale of goods and services can be conducted directly by the non-resident via the Internet. It would be difficult to regard a non-resident’s computer server, customers, or ISP as constituting a permanent establishment.74

A computer server hosts a vendor’s Web site or Web store. If a foreign vendor owns and maintains a server in Canada for its Internet business in

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74 Even if a vendor is deemed to have a permanent establishment in the host (customer’s) country, the extent of source taxation becomes dependent on the further issue of determining the income attributable to the permanent establishment. The international consensus on allocation of income between an enterprise and its permanent establishment or between an enterprise and its related parties is the arm’s-length standard espoused in articles 7 and 9 of the OECD model and of the United Nations Model Double Taxation Convention Between Developed and Developing Countries, UN publication no. ST/ESA/102, 1980 (herein referred to as “the UN model”). See Irene J.J. Burgers, “Commentary on Article 7 of the OECD Model Treaty: Allocation of Profits to a Permanent Establishment,” in The Taxation of Permanent Establishments, vol. 1 (Amsterdam: IBFD Publications) (looseleaf), chapter 2.
Canada, can the server be considered a permanent establishment? An answer to that question may depend on answers to the following further questions:

- Is the server considered a cyber-equivalent of a place of advertising or a facility solely for the purpose of storage, display, or delivery (in the case of digital goods) of goods or merchandise? If it is, under the OECD model, the server is not a permanent establishment. Under the UN model, however, a place of delivery may be considered to constitute a permanent establishment. 75

- Is the server considered the equivalent of a sales outlet? If the Web site on the server permits not only the viewing of merchandise but also the placing and acceptance of orders, a case may be made that the server is to be considered a place of business.

- Can the server be considered “automatic equipment”? The commentary on article 5 of the OECD model states that a permanent establishment may exist if the business of an enterprise is carried on “mainly through automatic equipment,” with the activities of personnel being restricted to setting up, operating, controlling, and maintaining such equipment. 76 In cases where the computer is fully capable of accepting orders, concluding contracts, and delivering a copy of the digital information for downloading by a purchaser, the computer may be regarded as a place of business.

- Does a computer server satisfy the spatial and temporal requirements for a finding of “permanent establishment”? It is true that computers are located somewhere on earth and do have a link to a geographical point, but they can be moved so easily that their location can be manipulated at will. The Internet allows instantaneous worldwide communication at little cost, and there are generally no practical economic or technical restrictions on where the server could be located. If a computer server is considered to constitute a permanent establishment, no one should be surprised if the majority of servers are located in tax havens, or if the servers are moved around from one jurisdiction to another to avoid having a permanent establishment in any jurisdiction. Even within the same tax jurisdiction, a computer can be so mobile (moving from building to building or moving with its carrier) that it will not be geographically fixed anywhere. 77 Much easier still, a business does not have to move computers; it can simply move its Web site from a server in one jurisdiction to a server in another. Such

75 Article 5(5) of the UN model.
76 See paragraph 10 of the commentary on article 5 of the OECD model.
77 According to paragraph 6 of the OECD commentary, a place of business of a purely temporary nature is not “fixed.” On the other hand, it is not necessary for the place of business to exist for a set period of time to satisfy the temporal requirement. If the place of business was not originally established for temporary purposes but, in fact, existed for only a short period of time, owing to the nature of the business activity, it can still be considered “fixed.”
an operation could even be automated. These characteristics of computer servers make it unwise to extend the existing permanent establishment concept to servers.\textsuperscript{78}

- Can the location of a purchaser be considered a permanent establishment of the vendor? A vendor’s Web store is accessible by anyone who has an Internet connection. When a purchaser in Canada downloads a vendor’s Web page into the random access memory of his/her computer, is a “place of business” created for the vendor? The answer is no if the Web site is treated as the equivalent of a mail-order catalogue. Mere solicitation of orders from the purchaser is not sufficient to give rise to a permanent establishment.\textsuperscript{79} The answer may be yes if the Web site is capable of concluding contracts so that it can be considered the equivalent of a visiting sales agent with the authority to conclude a contract. Suppose that a purchaser logs on to the vendor’s Web site, finds what she wants, decides to purchase, and clicks on a hyperlink. An intelligent mobile software agent then “travels” from the vendor’s server to the purchaser’s browser. The software agent negotiates the price and terms of payment and concludes a binding contract of sale with the purchaser. In such cases, the software agent performs the same functions as a human agent. The activities of a human agent will clearly give rise to a permanent establishment. A software agent is not an agent for tax law purposes because, under current law, an agent must be a human being or a legal person.\textsuperscript{80}

- Can the location of an ISP be considered a permanent establishment of a vendor? The business of ISPs is to provide Internet access and other services, including the leasing of memory space or hard disk to users. The likelihood of treating an ISP as an agent of a foreign vendor depends on what the ISP does. If an ISP simply provides access to local users, it is clearly not an agent of the foreign vendor. The ISP’s role is no more than

\textsuperscript{78} Owens, supra footnote 7, at 1847. See also J. Clifton Fleming Jr., “U.S. Taxation of Profits from Internet Software Sales—An Electronic Commerce Case Study” (August 16, 1999), 19 Tax Notes International 675-88, at 677.

\textsuperscript{79} Some tax administrations may have thought about whether mere availability of information is enough to constitute presence. See Owens, supra footnote 7, at 1846.

\textsuperscript{80} Under both the OECD and the UN models, only a human being, company, or other body of persons can be considered an agent. Even if a software agent is treated the same as a human agent, it is technically easy to avoid having a fixed place of business at the place of business of the purchaser. The vendor may manipulate the computer software so that no sales contracts are concluded at the purchaser’s place of business. In other words, the transaction can be made into an equivalent of the purchaser’s travelling away from his/her home to purchase goods at the vendor’s regular place of business (wherever it is, as long as it is not at the purchaser’s location). For further discussion, see Arthur Pleijsier, “The Agency Permanent Establishment Under Revision?: ‘Acting in the Name of,’ or ‘What’s in a Name?’!” (June-July 1997), 25 Intertax 247-54.
that of the telephone company that connects the user and the vendor. To the extent that the computer of the ISP plays a more active role in any particular transaction, the ISP may be the controlled tool of one party but not necessarily its agent.81 If, however, with improving technology and computer intelligence, a computer becomes proactive and functions as a human agent, it may be possible to deem the ISP to be an agent.82 Even in that case, the ISP would be an independent rather than a dependent agent of the vendor, since it is likely to provide services similar to those of many companies, including the vendor. An independent agent generally does not constitute a permanent establishment of its principal.83

In October 1999, the OECD released draft proposals on permanent establishment and e-commerce.84 According to the draft proposals, a Web site itself will not constitute a place of business. On the other hand, a server through which a Web site is operated is a tangible piece of equipment that needs a physical location and may be a fixed place of business of the enterprise that operates it. A server will be considered “fixed” unless it is in fact moved. This guideline precludes the possible argument that a server should be considered temporary solely by virtue of its mobility. An ISP that hosts a Web site of an enterprise will generally not be considered an agent of that enterprise.

Given the discussion above, it will be extremely difficult for Canada to impose part I tax on a non-resident company that sells goods and services to Canadian customers. The existing concepts of “carrying on business in Canada” and “permanent establishment” are based on bricks and mortar and are effectively meaningless in the virtual world of bits and bytes. If these concepts are to have a fighting chance for survival in the new digital world, they have to be adapted.

81 Revenue Canada advisory committee report, supra footnote 1, at 4.2.2.2.
82 Ibid.
83 Pursuant to the OECD model, an independent agent operating in the ordinary course of its own business will not constitute a permanent establishment of its client. Under the UN model, an enterprise may be considered to have a permanent establishment because of its agency relationship if the agent acts exclusively for the enterprise. Since it is rare that an ISP is authorized by a foreign vendor to conclude contracts in the vendor’s name, the activities of the ISP will be considered “preparatory or auxiliary” and be excepted from the definition of “permanent establishment.”
Mobile Corporate Residence

Some territorial source rules, such as those applicable to dividends, interest, and royalties, are based on the residence of the payer. When the payer’s residence is mobile or uncertain, the effect of these source rules becomes uncertain.

For Canadian tax purposes, corporate residence can be determined either under the Act or pursuant to common law. The statutory test is the place of incorporation, and the common law test is the place of central management and control, which is generally where the directors of the corporation meet and exercise control. E-commerce makes it easy for corporations to manipulate their residence or to relocate to tax havens.

The test of place of incorporation has always been artificial but offers certainty. This test is not made any more artificial by the rise of e-commerce. However, because e-commerce can be conducted anywhere and because it is inexpensive to relocate a business to a tax haven, it is easy to incorporate a business in a tax haven and run it from there without moving people to that location. An e-commerce company in a tax haven can conduct a business over the Internet with corporate employees, managers, and directors located in Canada. Because the company is not a resident of Canada under the place of incorporation test, it is not subject to Canadian tax unless it derives Canadian source income.

The place of effective management is equally mobile. In a digital environment, when face-to-face meetings are replaced by virtual meetings organized by means of conference calls, video-conferencing, interactive e-mail exchanges, and other communications technology, there may no longer be a physical place for meetings between directors, shareholders, and managers. People’s minds may meet in cyberspace where they are physically thousands of miles away from one another. Where is the central management and control located? Is it in the place where the meeting is first initiated? If corporate decisions are determined by resolutions that are executed digitally, where are these decisions made? Is it possible that a company is resident anywhere or (physically) nowhere? The location of effective management and control is difficult to establish. Even if it is...

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85 The residence of a corporation is also relevant to the source of employment income in cases where paragraph 115(1)(c) applies and to the source of capital gains.

86 Paragraph 250(4)(a).

87 De Beers Consolidated Mines, Limited v. Howe, [1906] AC 455, at 458 (HL). See also Swedish Central Ry. Co. v. Thompson, [1925] AC 495 (HL); Unit Construction Co. v. Bullock, [1959] 3 All ER 831 (HL); and Union Corporation, Ltd. v. Commissioners of Inland Revenue (1953), 34 TC 207 (HL). English cases have generally been followed by Canadian courts.

88 The US Treasury paper, supra footnote 1, at 7.1.5, suggests the move toward residence-based taxation on the ground that source rules become almost impossible to apply to e-commerce. Its argument is that all taxpayers are resident somewhere.
possible to pinpoint a physical presence of the meetings, that place is subject to taxpayer manipulation.

If corporate residence becomes more mobile and the physical presence principle is virtually meaningless in a digital world, how can one apply traditional territorial source rules to e-commerce? What does such uncertainty mean to taxpayers and governments?

**Implications for Canadian Tax Policy**

Uncertainty in applying source rules to e-commerce has fundamental implications for Canadian tax policy. Both double taxation and double non-taxation are likely to result. The very survival of the source system of taxation is placed in jeopardy by the ambiguities inherent in the existing source rules as applied to electronic commerce.

**Problems of Double Taxation and Double Non-Taxation**

Double taxation will result where several, or even many, countries impose source taxation on the income of a transaction. Suppose, for example, that company X, a resident of country A, has a Web site through which software can be purchased and delivered. Company Y, a resident of country B, acquires a copy of the software for $100 and uses it in its branch operations located in countries C, D, and E. There are three possible tax scenarios:

1) All countries may consider the $100 to be sales income sourced in the country where the contract is concluded. In this case, there is no double taxation.

2) Country A is the only country that characterizes the $100 as sales income sourced in country A; the other countries characterize it as royalty income. Double taxation occurs because country A is unlikely to provide any relief for foreign taxes paid on “domestic source” income.

3) The $100 may be unanimously considered to be royalty income. Country B may tax the $100 because it is paid by a resident of that country. Countries C, D, and E may tax it because the software is used in these countries.

Uncertain source rules may also lead to double non-taxation. Where the source of income is based on the payer’s residence, the income escapes taxation if the residence is in a tax haven. Where the source of income is based on other tests, the income escapes taxation if, under domestic tax laws, income from e-commerce transactions is not viewed as sourced in any high-tax jurisdiction and the payer is a resident of a tax haven.

The double non-taxation problem is exacerbated by the fact that a corporation can move an e-commerce business to a tax haven without having to relocate personnel or incurring other large transaction costs. For example, a computer server that dispenses data to customers in high-tax jurisdictions can be moved from a high-tax jurisdiction to a tax-haven country or simply rented from a company based in a tax haven. The server itself is small and requires little on-site maintenance, and the data that reside on the server can be created, updated, and manipulated remotely.
from high-tax countries without difficulty. There are many countries in
the world willing to compete for a share of e-commerce business by
offering tax benefits in the form of little or no income tax. It is beyond the
scope of this article to comment on the merits of such tax competition, but the effect of relocating e-commerce businesses to tax havens is such
that residents of high-tax jurisdictions can isolate income in a tax haven
while enjoying the benefits of their home country. Income earned by a
tax-haven entity is likely not taxed anywhere in the world.

For Canadian companies, relocating in a tax haven is very attractive
because of the relatively high tax rates in Canada. Although tax havens
are a longstanding feature of the Canadian international tax landscape, they
have potentially greater appeal in the age of e-commerce. E-commerce
businesses operated through a controlled foreign affiliate (CFA) located in
a tax haven can successfully avoid Canadian taxation. Barbados is a prime
location for Canadian companies because of the Canada-Barbados tax treaty
and the Barbados regime for taxing international business corporations.
A Barbados-based CFA engaged in e-commerce activities can avoid the
high Canadian taxes with impunity for the following reasons:

- Canada cannot tax the CFA as a resident because it is not a resident under
either the place-of-incorporation test or the place-of-central-management-and-
control test. Canada can tax the CFA only if it derives Canadian source
income. As explained earlier, under the current test in section 253 or at
common law, it is very unlikely that the CFA will be considered to be
carrying on business in Canada. Even if the CFA is deemed to be carrying
on business in Canada under the Act, it will likely be exempt from Canadian
tax because of the absence of a “permanent establishment” under the Canada-
Barbados tax treaty. Payments made by Canadian customers to acquire
goods or services on the Internet are generally free of Canadian withhold-
ing tax under the treaty.

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89 The problem of harmful tax competition has been addressed in Organisation for
Economic Co-operation and Development, Harmful Tax Competition: An Emerging Global
Issue (Paris: OECD, 1998). For further discussion, see Alex Easson, “The Tax Competition
Controversy” (January 25, 1999), 18 Tax Notes International 371-90.

90 One reason is that “companies selling information over the Internet can call any
place home, and the savvy ones are choosing jurisdictions with low or no taxes, financial
privacy, governmental stability and decent communication systems (warm water and sandy
beaches are also a plus)”: M. Murphy, “Cooling the Net Hype,” Wired, September 1996, 86.

91 See “Challenge to Fair Taxation: Accountants, Tax Lawyers Recognize E-commerce

92 Canadian companies can establish headquarters and operate in Barbados and pay
corporate tax at a rate of only 2.5 percent.

93 Supra footnote 91.

94 Furthermore, the Barbados company can continue to take advantage of Canadian tax
credits, such as the scientific research and experimental development credit, through which
the costs of software development can be tax-deductible. Ibid.
• The FAPI rules do not apply. These rules apply only to passive income from property and income from business other than an active business.\textsuperscript{95} An active business is defined as any business other than an investment business or a business deemed by subsection 95(2) of the Act to be a business other than an active business. An investment business includes a business the principal purpose of which is to derive income from property including interest, dividends, rents, royalties, or any similar returns. Subsection 95(2) applies only in limited circumstances. Income generated by the Barbados CFA from e-commerce does not generally fall under any of the traditional categories of FAPI. Suppose that the Barbados CFA sells toys on the Internet and delivers toys sold to Canadian customers out of a warehouse in Canada. The income from the sales activities is clearly active business income. Suppose that the company supplies computer software programs on the Internet to Canadian customers and delivers the software electronically. Income from the supply of prepackaged or Web-wrap software is currently treated as income from the sale of goods, hence income from an active business. Income from the supply of custom software in the form of a licence is treated as a royalty. Unless the main purpose of the Internet business is to derive royalty income, the business is not an “investment business” that gives rise to FAPI. Even if the business is deemed to be an investment business, FAPI can be avoided if the business employs more than five employees to carry on the business.\textsuperscript{96} Further suppose that the company provides information or certain services (such as accounting, advertising, consulting, travel, and financial services). Income from these activities is generally not FAPI, even though the activities may be carried on by the CFA in the absence of employees present in Barbados. The services income will not be deemed by paragraph 95(2)(b) to be FAPI if the services are provided to arm’s-length parties or if they are rendered by employees of the CFA who are non-residents of Canada.

• Finally, when the Barbados CFA pays dividends to its Canadian parent company, the dividends will be “exempt” for Canadian tax purposes.\textsuperscript{97}

\textsuperscript{95} Organisation for Economic Co-operation and Development, \textit{Electronic Commerce: The Challenges to Tax Authorities and Taxpayers: An Informal Round Table Discussion Between Business and Government} (Paris: OECD, 1997) (the Turku report), stated at paragraph 116, “The ability of residents to establish offshore non-resident companies, when combined with the highly mobile nature of electronic commerce, could lead to a tax driven migration of businesses to the Internet and Internet businesses (web sites and individuals providing services) to low tax jurisdictions. This will place even greater importance on the role of controlled foreign corporations measures and their current effectiveness in addressing Internet operations.”

\textsuperscript{96} A business can meet the “more than 5 employees” test in the definition of “investment business” in subsection 95(1) by hiring employees directly or by subcontracting certain elements of the work to other companies. However, if the royalty income is considered to be derived from “lease obligations” of Canadian residents or businesses, it may be deemed to be FAPI under paragraph 95(2)(a.3) or (a.4).

\textsuperscript{97} Subsection 113(1).
The ability of taxpayers to establish companies in tax havens, combined with the highly mobile nature of e-commerce, could lead to the indefinite deferral of Canadian income tax. The Canadian tax base is threatened because the existing anti-deferral rules cannot deal effectively with this situation.

**Erosion of Source Taxation**

Source taxation has always been an important part of Canada’s tax policy. Without the support of workable source rules, source taxation is very difficult, if not impossible. In an e-commerce environment, Canada’s jurisdiction to tax income from business will decrease. Where a non-resident vendor sells goods (tangible and digital goods) on the Internet to Canadian customers, if the non-resident maintains no physical presence or employs no agent in Canada, it is very difficult for Canada to invoke section 253 to tax the non-resident. If digital contracts are concluded outside Canada, the sales profits will not be sourced in Canada under case law principles. Similarly, Canada loses source taxation where services (both employment services and other services) that used to be performed by non-residents in Canada are rendered outside Canada via the Internet. The scope of Canadian withholding tax on royalties will be significantly reduced where former royalty-generating “licensing transactions” are being turned into “sales transactions” or services on the Internet.98

The potential increase in international double taxation and double non-taxation and loss of source taxation are of serious concern to both taxpayers and governments. Recognizing that e-commerce is a global issue, the governments of many countries, including Canada, are engaged in studies of its implications. While it may be bad tax policy “to kill the goose that lays the golden eggs” by introducing new taxes on e-commerce, it is equally bad policy not to devise solutions to the issues that e-commerce raises. The following section examines Revenue Canada’s e-commerce initiatives to date.

**Revenue Canada Advisory Committee Report on E-Commerce**

In 1997, Revenue Canada established an advisory committee to undertake a study of e-commerce taxation, which resulted in a report issued in 1998.99

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98 See the discussion above under the headings “Impact of E-Commerce on Source Rules—Uncertain Characterization of Digital Transactions” and “. . .—Disappearing Territorial Source.”

99 The Revenue Canada advisory committee report, supra footnote 1, is one of several recent reports that deal with e-commerce taxation. Other reports include the US Treasury paper, supra footnote 1; Australian Taxation Office, *Tax and the Internet: Discussion Report of the Australian Taxation Office Electronic Commerce Project* (Canberra: AGPO, August 1997), and *Tax and the Internet: The Second Report* (Canberra: AGPO, December 1999); New Zealand, Department of Inland Revenue, *Guidelines to Taxation and the Internet* (Wellington: Inland Revenue, 1998); Report to Underminister of Finance from Dutch Advisory (The footnote is continued on the next page.)
The minister of national revenue has responded to the report. The minister generally agrees with the committee’s recommendations and has set up four more advisory groups to study them further.

The general view expressed in the report is that Canada is not willing at present to take radical action on the e-commerce issue and will not introduce any new taxes on e-commerce transactions. While acknowledging the difficulties caused by e-commerce, the committee seems to be satisfied that the current rules either are robust enough to absorb and encompass e-commerce or are capable of adaptation. Canada is willing to work with other countries to reach an international consensus. The committee emphasizes four general tax policy principles and makes 72 specific recommendations. These recommendations generally relate to technical changes or administrative measures. No major policy recommendations are made with respect to source rules. Overall, the report is a good start in dealing with e-commerce taxation. The main tax policy principles and discussions related to source rules are discussed below.

**General Tax Policy Principles**

The committee proposes four tax principles to guide the study of e-commerce taxation. The first principle is the principle of neutrality and equity. The report states:

A fundamental principle of sound tax policy is that a tax should be economically neutral as well as equitable. A tax is neutral (or efficient) when it does not induce taxpayers to change their behaviour in response to the tax. . . .

A tax will be considered equitable if the tax burden is distributed fairly among similarly situated taxpayers.

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99 Continued . . .

Committee, “Notitie belastingen in een wereld zonder afstand,” May 1998; United Kingdom, Board of Inland Revenue and HM Customs and Excise, *Electronic Commerce: UK Taxation Policy* (London: HM Customs and Excise, October 1998); and Ireland, *Electronic Commerce and the Irish Tax System* (June 1999). In addition, the European Union has released guidelines to deal with value-added tax and e-commerce. The OECD has not published any formal positions but has made its current views known through discussion papers, including one presented by the Committee on Fiscal Affairs at the OECD Ministerial Conference: A Borderless World—Realizing the Potential of Electronic Commerce, held in Ottawa, October 1998.


101 These are the Taxpayer Service group, the Compliance and Administration group, the Interpretation and International Co-operation group, and the Consumption Taxes group. I am a member of the Interpretation and International Co-operation group.


103 Revenue Canada advisory committee report, supra footnote 1, at 4.1.2.1.
This principle requires that functionally equivalent transactions be taxed in the same fashion. That is, the tax treatment of a transaction should not confer advantages or disadvantages as a result of any particular method by which it may be conducted. Traditional commerce and e-commerce should be treated the same. Any advantages enjoyed by those using electronic means are presumed to be purely commercial. The report is silent on the greater potential of tax avoidance available through e-commerce than through traditional commerce.

The second principle is the need for administrative simplicity. The report states:

"Taxes should be easy to administer and collect. If a tax is difficult to understand, no matter how perfect it may be in theory or design, or if compliance burdens are excessive and the costs of administering the tax are unreasonable, the tax will fail to serve its intended function as a reliable source of revenue. A workable tax system must ensure that taxes imposed are collectible at a reasonable level of administration and compliance costs." 104

The notion of applying this principle to the international tax area in general and to e-commerce in particular may be more idealistic than realistic. Canada’s international tax rules are very complex. Since the committee recommends the application of existing rules to e-commerce, some of these rules will inevitably be “difficult to understand” for taxpayers and their tax advisers. Applying these complex rules to e-commerce will also involve significant compliance and administrative costs as a result of the following difficulties identified by the committee:105

Electronic commerce and Internet transactions raise practical compliance difficulties from an evidentiary perspective. . . .

It may be difficult to assess compliance with Canadian tax law when little is known about the extent of business being conducted electronically by residents and non-residents, or about who they are. . . .

Existing recordkeeping standards may not be sufficient to reflect electronic transactions. . . .

Electronic commerce may have an effect on the search-and-seizure rules and Revenue Canada’s ability to locate and access electronic records. . . .

Revenue Canada will have difficulty accessing encrypted information where taxpayers do not provide the decryption key or access to the decrypted records.

The third principle is that there should be no multiple taxation. The report states this principle as a logical corollary of the principle of neutrality and equity. Because e-commerce ignores national boundaries and confuses the traditional application of source rules, there is a clear possibility of multiple taxation by different jurisdictions. The committee does not mention the problem of international non-taxation, although this problem is at least as important a policy concern as double or multiple taxation.

104 Ibid., at 4.1.2.2.
105 Ibid., at 4.5 through 4.5.4.
The fourth principle relates to the need for a fair allocation of the tax base and tax revenues. The report states:

The tax system should provide a fair allocation among and between jurisdictions. Ensuring this result may require interprovincial, federal-provincial, and international cooperation on income tax issues.\(^{106}\)

The report is silent as to what constitutes a “fair” allocation to Canada. It does not address the possible ascendancy of a residence-based tax principle as mentioned by the US Treasury paper.\(^{107}\) Given the fact that the United States currently accounts for about 90 percent of exports in e-commerce\(^{108}\) and is also Canada’s biggest trading partner, it is probably reasonable to assume that Canada is a net importer vis-à-vis the United States. Because existing source rules are difficult to apply to e-commerce, it may also be reasonable to assume that Canada will lose some of its revenue base. The principle of neutrality (no new taxes on e-commerce), coupled with the potential loss of source taxation, should raise concerns about allocation of the tax base to Canada.

The implementation of these four principles in devising a system of taxing e-commerce may not be easy. One or more principles may have to be sacrificed in order to achieve other policy objectives. Which principle must be sacrificed is a fundamental policy decision. The report’s recommendations seem to indicate that the committee favours the principles of neutrality and equity and avoidance of multiple taxation over those of administrative simplicity and fair allocation.

**Recommendations Regarding Source Rules**

Some of the problems with the existing source rules are recognized in the report, and limited recommendations are made with respect to business income, royalties, income from services, and the scope of FAPI. As discussed below, however, the committee does not deal with fundamental source issues. It raises some general questions without answering most of them. In cases where the committee offers concrete recommendations, these proposals tend to further limit Canada’s jurisdiction to tax.

In the case of income from business, the committee recommends that Revenue Canada issue an interpretation bulletin to provide clarification as to what constitutes carrying on business in Canada when goods and services are traded on the Internet. With respect to whether the concept of “permanent establishment” is still valid in the e-commerce environment, the committee concludes that tax treaties do not provide sufficient direction and definition of various concepts to ensure that double taxation will not occur. In the context of e-commerce, the committee considers that there

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\(^{106}\) Ibid., at 4.1.2.4.

\(^{107}\) US Treasury paper, supra footnote 1.

are at least two possible sites for a permanent establishment: the location of the customer signing on to the site to conduct the transaction, and the location of the server. Neither of these possibilities is recommended as an alternative to the existing definition of permanent establishment. Instead, the committee recommends that Revenue Canada should be an active participant in the work of the OECD to address e-commerce tax issues and that “[p]riority should be given to considering and applying existing concepts to electronic commerce before choosing to pursue alternative or new concepts.”109 Furthermore, the committee recommends that, as soon as the OECD publishes its recommendations with respect to changes to the model tax treaty, Canada should promptly renegotiate its existing treaties to address the e-commerce situation.110

With respect to the characterization of e-commerce transactions involving digital goods and services, the committee recommends that there should be no withholding tax on payments for the use of electronic subscriptions and similar transactions where those transactions are treated as equivalent to the purchase of tangible goods.111 The report does not provide any guidelines as to how to distinguish transactions that are equivalent to the purchase of tangible goods from other transactions. The concern is that if the recharacterization of an activity results in withholding taxes, these taxes may become a cost of doing business. Such costs will be absorbed by Canadian businesses if non-residents gross up the fees in order to account for the Canadian withholding tax.

With respect to the source of services income, the committee recognizes the difficulties in determining whether a service provider is a non-resident, the place where services are actually rendered, and whether services are rendered by a human being or a machine. It recommends that Revenue Canada issue an interpretation bulletin to provide clarification.112

The committee also questions the adequacy of the existing FAPI rules in the e-commerce environment. Does an active business exist where a fully automated server conducts all transactions? Is the term “royalty” still appropriate for income tax purposes? Is the five full-time employee exception still realistic? The committee urges Revenue Canada to provide

109 Revenue Canada advisory committee report, supra footnote 1, recommendation 14.
110 Ibid., recommendation 15. The minister states in his response, supra footnote 100, that the existing concept of permanent establishment has served countries well during the past 50 years and continues to be relevant. He indicates that he will be guided in this matter by the results of the OECD study currently under way. In the meantime, there will be no change with respect to Revenue Canada’s policies or practices in the application of the concept of permanent establishment to specific cases.
111 Revenue Canada advisory committee report, supra footnote 1, recommendation 27. The minister’s response, supra footnote 100, is that he will work closely with the Department of Finance in respect of the withholding tax policy. He also implies that he will wait for the OECD’s revised definition of “royalty” for tax treaty purposes.
112 Revenue Canada advisory committee report, supra footnote 1, recommendation 30.
answers to these questions. More specifically, the committee recommends that Revenue Canada\textsuperscript{113}

- clarify to what extent active business activities include activities of computers;
- consider the possibility of excluding from the definition of passive income receipts from the exploitation of intellectual property; and
- review the appropriateness of the employee-based exemption from investment income categorization in an e-commerce environment.

The committee does not clearly acknowledge that the existing source rules are inherently inadequate to deal with digital transactions. In my view, if source taxation is to be preserved, Canada must re-examine its source rules.

**RETHINKING CANADA’S SOURCE RULES**

It is time for Canada to rethink its source rules to ensure that they are consistent with its international tax policy in the age of e-commerce. E-commerce raises serious questions about whether existing source rules are becoming obsolete and whether source taxation can be sustained. Some critics suggest that the impact of e-commerce on source rules is so fundamental that source taxation should be replaced by residence taxation\textsuperscript{114} or by more radical taxes, such as a “bit tax,”\textsuperscript{115} and other new taxes.\textsuperscript{116} Alternatively, it can be argued that there is a continuing need for source taxation. It is possible to preserve source taxation in the age of e-commerce by devising new source rules.

\textsuperscript{113} Ibid., recommendations 33 to 36.

\textsuperscript{114} US Treasury paper, supra footnote 1.

\textsuperscript{115} The idea of a “bit tax” was first put forward by Arthur Cordell and Thomas Ide in 1994 in a paper entitled “The New Wealth of Nations.” See Luc Soete and Karin Kamp, “The ‘Bit Tax’: Taxing Value in the Emerging Information Society,” in Arthur J. Cordell, T. Ran Ide, Luc Soete, and Karin Kamp, *The New Wealth of Nations: Taxing Cyberspace* (Toronto: Between the Lines, 1997), 83-101. See also Luc Soete and Karin Kamp, “The ‘BIT TAX’: The Case for Further Research” (Maastricht Economic Research Institute on Innovation and Technology), August 12, 1996, available on the Web at http://www.ispo.cec.be/hleg/bittax.html. A bit tax would be levied on the transmission of digital information, irrespective of the value of the information. If a bit tax can be collected on a global basis and tax revenue can be allocated fairly to all countries that participate in e-commerce, it can at least guarantee utilization countries some revenue from e-commerce. However, potential administrative and compliance problems have effectively killed this idea. These difficulties include whether the tax is collected by national governments or by a supernational body, the computation of tax base, enforcement, and audit. From a policy perspective, a bit tax is not a good substitute for source rules. It has been rejected by governments, scholars, and businesses. See Luc Hinnekens, “Looking for an Appropriate Jurisdictional Framework for Source-State Taxation of International Electronic Commerce in the Twenty-First Century” (June-July 1998), 26 *Intertax* 192-200, at 193; and the Revenue Canada advisory committee report, supra footnote 1, at 4.1.3.1.

\textsuperscript{116} For example, a transaction tax levied on the money flows on the Internet, which would be similar to the “Tobin tax” on cross-border financial transactions; a “telecoms tax” levied on the basic telecommunications charges; or a “computer poll tax.” See Hinnekens, supra footnote 115.
The next sections of this article will first discuss the reasons for retaining source taxation and the need to reform Canada’s source rules. Then two sets of source rules will be proposed—one for traditional income and another for e-commerce—along with an analysis of the tax policy justifications for such an approach.

The Continuing Vitality of Source Taxation
Source taxation is a universally accepted principle in international taxation. It is an integral part of the income tax system in Canada and other countries. Although source taxation is becoming more difficult to apply in the world of e-commerce, its vitality is undiminished because the fundamental reasons for its adoption remain unchanged. These reasons are summarized as follows:

- First, source taxation is the cornerstone of the approach agreed upon among nations worldwide for taxing international income. The international consensus is that tax jurisdiction over cross-border income is shared between the residence country and the source country and double taxation should be avoided. While residence taxation is unlimited, source taxation is limited.


118 There is no international tax law. Taxes on international income are imposed by national tax laws. In fact, the term “international tax” may be considered a misnomer. It is used for convenience to refer to the tax treatment of international transactions. Brian J. Arnold and Michael J. McIntyre, *International Tax Primer* (The Hague: Kluwer Law International, 1995), 3. Taxation is purely a sovereign right. Sovereign countries enter into tax treaties to promote cross-border trade and investment by preventing double taxation of international income. These treaties generally represent an international tax consensus.

Limitations on the taxing power of the source country are probably based on two suppositions. First, where the flows of international income are balanced between two countries, it makes little difference which country’s power is limited. If the source country’s power is limited, as long as the limitation is reciprocal, a country loses tax revenue on income paid to the other country but gains revenue on income received from that country. In other words, any revenue loss is offset by a corresponding gain. This supposition fails where the flows between the two countries are unequal. Second, administratively, it is easier to limit source taxation because it is generally levied on a gross basis at a flat rate.

- Second, source taxation is easier to enforce than residence taxation. The source country is generally in the best position to enforce taxes on cross-border income. It can monitor this income by requiring domestic enterprises or institutions to report payments they make to non-residents and to withhold taxes from such payments. Where income is not subject to withholding, such as business profits earned through a permanent establishment, the non-resident generally has assets in the source country that may be appropriated by the tax authorities in the event of default in payment of taxes due.

- Third, because source taxation is usually easier to enforce than residence taxation, it is more effective in combatting tax avoidance. In fact, source taxation may be the only effective weapon in the war against the flight of capital into tax havens. Although over half of the world’s wealth may be found in tax havens, it is certainly not generated there. The economies of tax havens are generally too small to produce much wealth. Capital is simply channelled through tax havens from some non-tax-haven countries for investment in other non-tax-haven countries. When source taxation is widely used, income on the capital is taxed at least somewhere. It is the combination of tax havens and the application of the residence taxation principle that makes tax havens attractive.

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120 Owens, supra footnote 7, at 1845. In practice, there are hardly any two countries with perfectly balanced flows of income between them. OECD member countries as a group may be close to this position even if there are some disparities in flows for specific countries in the group. The flows of income between OECD countries and other countries are mostly one-way, from the latter to the former. Where the flows of income from business and investment are unbalanced in favour of capital-exporting countries, net importing countries, generally less developed countries, will prefer to retain as much source taxation as possible. So far, however, these countries lack the political power to make these preferences effective.

121 Frans Vanistendael, “Reinventing Source Taxation” [1997], no. 3 EC Tax Review 152-61.


123 Ibid.

124 Ibid.

125 Ibid.
• Fourth, source taxation can be justified on theoretical grounds. Under the benefit theory, the source country is entitled to tax income earned in that country because it provides the environment that generates the income. The source country incurs costs in providing that environment, and the income earner benefits from these expenditures; hence, the source country has the right to levy taxes to cover its costs. Furthermore, the income earned by non-residents may have supplanted income that otherwise would have been earned by residents. Another theoretical justification is neutrality. Under the capital-import neutrality (CIN) theory, capital funds originating in various countries should compete on equal terms in the capital market of any country. Neutrality requires that there be no differential tax treatment between domestic and foreign investors, or between foreign investors from different countries. In the source country, neutrality is achieved where income is taxed the same whether it is earned by residents or non-residents. Moreover, taxation by the source country can be justified on the ground of horizontal equity. If a resident taxpayer and a non-resident taxpayer earn the same amount of income from the same income-generating activity in the same location, the principle of equity requires that both taxpayers pay approximately the same amount of tax.

• Fifth, source taxation can also be explained by the appeal of a tax on foreigners. Experts of the League of Nations noted in 1925 that

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126 The benefit theory is used here not to connote a direct relationship between the amount of tax and the cost of public goods and services, but rather to legitimize the tax claim by the source country, because there is a correspondence between the level of taxation and the level of public goods and services. See Nancy H. Haufman, “Fairness and the Taxation of International Income” (1998), 29 Law and Policy in International Business 145-203, at 156-61; and Robert L. Palmer, “Toward Unilateral Coherence in Determining Jurisdiction To Tax Income” (Winter 1989), 30 Harvard International Law Journal 1-64, at 24-30.

127 Complete CIN is achieved if source-based taxation is applied equally to all taxpayers and source-based taxation is the only tax payable by the taxpayer. In other words, the residence country should not tax foreign source income. The residence country should adopt the “territorial” approach and employ the exemption method or provide a credit for all foreign taxes paid. See Avi-Yonah, supra footnote 119; Easson, supra footnote 119; Frisch, supra footnote 119; Palmer, supra footnote 126; and Vogel, supra footnote 117.

128 This is generally the case with business profits and employment income. CIN is not achieved with respect to income subject to non-resident withholding tax because withholding tax is levied on a gross basis and resident taxpayers pay income tax on a net basis. The 30 percent withholding tax in the United States reflects an attempt to tax income at net rates of between 70 percent and 90 percent. See Avi-Yonah, supra footnote 119, at 1324.

129 In reality, tax equity between residents and non-residents exists only in limited circumstances because Canada and many other countries often tax non-residents differently from residents. For example, while investment income earned by non-resident individuals is generally taxed on a gross basis at a flat rate, the same income earned by residents is taxed on a net basis at progressive rates. Tax equity may exist, however, when both non-residents and residents are taxed under the same rules. An example is the Canadian taxation of income from employment and income from carrying on business in Canada where a non-resident derives most of his/her income from Canada.
The desire to tax foreigners has not decreased much since then.  

- Sixth, source taxation helps to balance taxing power between developed and developing nations. Developing countries are net capital-importing nations and, accordingly, are source countries. Source taxation enables these countries to levy some tax without much cost, since it is easier to collect than residence taxation. Taxation exclusively on the basis of residence will result in more revenue being collected by developed countries and less by developing countries. For that reason, developing nations have been trying hard to preserve source taxation.

All these reasons supporting source taxation will continue into the new millennium. The difficulties in applying current source rules do not change the fundamental need for source taxation. Any suggestion of exclusive reliance on residence taxation will be rejected by most countries. At present, the United States is the largest exporter of Internet goods and services. Naturally, the United States has the most to gain from an international tax system based on exclusive residence taxation. Other countries, particularly developing countries, would be hurt by the move. More important, in the world of high-speed and secret electronic communications, it is almost as difficult to determine where people and corporations reside as it is to determine where transactions occur. Enforcing residence-based taxation on the global income of individuals and corporations, especially from tax havens, can be difficult, particularly for developing countries. As e-commerce grows, the mobility of capital is likely to increase substantially; thus, there is an even greater risk of capital flight and greater demand for enforcement efforts. Rules based on corporate residence may be just as susceptible to manipulation as source rules are, if not more so. Furthermore, in the context of e-commerce, more than one country may play a significant role in producing income. Determining taxing jurisdiction solely on the basis of the residence of the provider is arbitrary and is not likely to be

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133 Avi-Yonah, supra footnote 119, at 1313; and Ring, supra footnote 131, at 665.

134 Their collective efforts were reflected in the UN model, which deviates from the OECD model in the scope of source taxation.
accepted by the majority of countries. Therefore, source taxation will continue to play an important role in balancing the interests of importing and exporting countries.

Canada has a long history as a capital-importing nation and has been committed to source taxation in its international tax policy. There is no evidence that e-commerce will change its position. In fact, in order to obtain a fair share in the allocation of income from e-commerce and to prevent tax avoidance and/or evasion through e-commerce, Canada needs to strengthen its source rules.

Need for Legislative Reform
As discussed in part 1 of this article, Canada’s source rules are neither comprehensive nor clear. Most of the rules for applying source taxation are implied by various charging provisions in the Act. The only clear rule is found in section 253. No source rules are even implied for other purposes of the Act. Case law is too sparse to provide any meaningful guidance, and Revenue Canada’s administrative pronouncements are restricted to the facts and circumstances of particular cases.

The existing source rules lack consistency. For example, there are different source rules for different types of “rents”: a rental payment for the use of intellectual property (that is, a royalty) is sourced where the property is used; a rental payment for the use of money (that is, interest) is sourced where the payer resides; a rental payment for the use of human capital (that is, remuneration for services) is sourced where services are performed, not where the payer resides or where the services are used. These different source rules may be explained by policy concerns about enforcement. Nonetheless, they depend on the characterization of the income and do not treat the “economic origin” of income in a coherent manner. Even without the emergence of e-commerce and the associated taxation issues, there are grounds for rationalizing and harmonizing the existing rules. The rise of e-commerce makes legislative reform both more important and more urgent. As discussed earlier, e-commerce defies the traditional characterization of income and makes it difficult to establish territorial sources. The uncertainty inherent in the existing source rules has serious implications for Canadian tax policy.

Reform of the source rules should be aimed at making them viable not only in the e-commerce environment, but also in the traditional world. Canada should consider codifying its existing source rules and introducing

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new rules for e-commerce. Codifying the existing rules will ensure continuity and consistency in the treatment of traditional sources of income. New source rules for e-commerce transactions are necessary because of the difficulty of applying existing rules to e-commerce, especially digital transactions.

The case for legislative rules applicable to e-commerce is compelling for the following reasons:

• First, e-commerce is just emerging. Source rules that provide certain and predictable results will facilitate its further development. Given the limited tax jurisprudence in Canada dealing with source rules, it is difficult to predict how the courts will view specific types of e-commerce transactions. Legislation would avoid the uncertainty associated with leaving the issue to be resolved by the courts. Although the advisory committee recommended that Revenue Canada issue interpretation bulletins to clarify certain issues related to the existing source rules, further administrative pronouncements cannot solve the problem. New and more substantive rules specific to the e-commerce environment are needed.

• Second, given the potential problems of applying existing rules to e-commerce and the implications of these problems for the tax system, a speedy response is warranted. Legislative rules can be introduced relatively quickly. These rules can be formulated in a general and flexible manner in order to accommodate future developments in technology and ways of doing business.

• Third, it is clear that the existing source rules are inherently incapable of addressing many of the issues raised by e-commerce. They need to be reconsidered and recast in a new framework specifically tailored to the e-commerce environment. For example, transactions involving software and other copyrighted goods give rise to various tax issues that cannot be resolved satisfactorily by the existing rules. Since Canada’s copyright laws are substantially the same as those of the United States and some other OECD countries, and since the US software regulations and the OECD revised commentary on article 12 are generally consistent, Canada can introduce legislation that will quickly bring its laws in line with those of its major treaty partners.

A case can also be made for legislative source rules to deal with income from traditional transactions. It may be argued that since the Canadian tax system has operated thus far without comprehensive statutory source rules, and it has more or less worked (albeit not without problems), there is no need to change it now. What can codification of the existing rules add? The arguments for codification can be summarized as follows:

• First, the main purpose of codifying the rules is to bring them together and make them explicit, so that taxpayers and advisers need no longer sift through various provisions of the Act in order to discover which implicit rules might apply.

• Second, codification will provide more consistency by having the same source rules for residence taxation and source taxation. At present, the source rules for residence taxation are less specific than those for source taxation.
• Third, the lack of specific source rules for income may have contributed to the lack of allocation rules for expenses, especially those related to foreign source income. In the process of codification, rules for both source of gross income and allocation of expenses can be introduced.

• Fourth, codification does not have to be limited to the existing source rules. New rules also can be introduced to apply to categories of income that are not clearly dealt with by the existing rules.

**Source Rules for Traditional Income**

**Source-of-Income Rules**

Regarding characterization of income, no changes are proposed except with respect to software payments. The courts have dealt with the characterization of income from traditional transactions, and little is to be gained by codifying the jurisprudence. On the other hand, as explained above, new rules are necessary for the characterization of income from transactions involving software and other digital products. These rules are discussed in a later section.

Statutory territorial source rules for traditional income may include the following:

1) Income from employment services and other personal services—the place where services are performed.

2) Income from carrying on business in Canada—the place determined under section 253 of the Act and the case law tests.

3) Income from carrying on business outside Canada—the place determined by the case law tests.

4) Income from specific business activities—the place determined according to the following rules:

   a) Development and sale of real property—the place where the property is situated;

   b) Merchandise trading—the place where the sales are habitually completed, but other factors such as the location of the stock, the place of payment or manufacture may be considered relevant in particular situations;

   c) Trading in intangible property (e.g., stocks and bonds)—the place where the purchase or sale decisions are normally made;

   d) Money lending—the place where the loan arrangement is in substance completed;

   e) Personal property rentals—the place where the property available for rental is normally located;

   f) Real property rentals—the place where the property is situated;

   g) Service—the place where the services are performed.\(^{137}\)

5) Dividend income—the residence of the payer corporation.

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6) Interest income—the residence of the payer, the place of business where the interest expense is deductible in computing income from that business,\textsuperscript{138} or the location of the real property if the indebtedness is secured by real property.\textsuperscript{139}

7) Rentals and royalties—the place of use of the property, the residence of the payer, or the place of business that bears the expense of the payments (that is, the payments are deductible in computing the income from the business).\textsuperscript{140}

8) Gains from the disposition of real property or resource property—the location of the property.

9) Gains from the disposition of capital property forming part of the business assets of a business carried on—the place of the business or the place where depreciation for the property is claimed.

10) Gains from the disposition of a share in the capital stock of a corporation—generally the place of sale, except that where the share is

   a) a share of a private corporation resident in Canada,

   b) a share of a non-resident company where the value of the company is derived principally from Canadian real property or resource property, or

   c) a share of a public corporation in Canada if during a five-year period the non-resident shareholder owns 25 percent or more of the shares of the corporation,

the gains are deemed to be sourced in Canada.

11) Other payments—the residence of the payer.

In addition, anti-avoidance rules such as paragraph 115(2)(c) and (c.1) should be retained.

New source rules for income from international transportation are necessary. At present, paragraph 81(1)(c) provides that the income of a non-resident person earned in Canada from the operation of ships or aircraft in international traffic is exempt from Canadian tax if the home country of the non-resident grants substantially similar relief to a Canadian resident. However, the determination of whether income is earned in Canada is unclear.\textsuperscript{141} It may be based on the place of contract for carriage, the place

\textsuperscript{138} This is consistent with the implied rule in subsection 212(13.2), clause 212(1)(b)(iii)(E), and subparagraphs 212(1)(b)(v) and (ix).

\textsuperscript{139} This is consistent with the implied rule in subsection 212(13) and subparagraph 212(1)(b)(viii).

\textsuperscript{140} This is consistent with the implied rule in paragraph 212(1)(d) and subsections 212(13) and (13.2). The source of rents, royalties, and interest paid by a partnership is Canada if the amounts are deductible by the partnership in computing its income or loss for Canadian tax purposes. This is consistent with the implied rule in subsection 212(13.1).

\textsuperscript{141} In practice, it seems doubtful whether Revenue Canada ever makes any attempt to calculate taxable income for any non-resident taxpayer in respect of shipping or airline profits imputable to operations in Canada. See comments on paragraph 81(1)(c) in \textit{Canada Tax Service} (Scarborough, Ont.: Carswell) (looseleaf).
of payment, or the place of receipt or disembarkation.\textsuperscript{142} New source rules will provide more certainty. These rules can be based on whether the points of departure and points of destination are within or outside Canada.\textsuperscript{143} Income from transportation beginning and ending within Canada would be deemed to be from Canadian sources; income from transportation solely between foreign destinations would be sourced outside Canada; income from transportation that either begins or ends in a foreign country would be split (say, equally or on the basis of other ratios) between Canada and the foreign country. This method, while arbitrary, can presumably do rough justice, avoid disputes, and be easily administered. These new rules would override paragraph 253(b).

New source rules are also necessary for international communications income (which generally includes income from the transmission of communications or data between Canada and a foreign country). With the rapid development of e-commerce and communications technology, the need for more certain source rules will grow. The new rules can be based on section 863(e) of the US Internal Revenue Code. For Canadian residents, 50 percent (or a higher percentage) of any international communications income would be sourced in Canada and the rest would be sourced outside Canada. Such a rule is obviously arbitrary, but it reflects the difficulty in arriving at a more exact apportionment of income in such a case. If the Canadian resident is subject to tax in a foreign country on its income, it can claim a tax credit under section 126 for foreign taxes paid in respect of the deemed foreign source income. In the absence of such a rule, it may be difficult to determine whether any portion of the international communications income is sourced in a foreign country. For non-residents, international communications income would be sourced wholly outside Canada, unless the income is attributable to a place of business in Canada, as determined by the rules discussed above.\textsuperscript{144}

### Allocation of Expenses

The allocation of expenses has received even less attention than the source-of-income rules. Taxpayers appear to be free to allocate expenses as they see fit, subject only to some vague standard of reasonableness. A strong case can be made for more legislative guidance in order to provide more certainty and to safeguard the Canadian tax base. One of the most pressing aspects of the expense allocation issue is probably the appropriate allocation of interest expense. Allocation rules can be introduced together with the statutory source-of-income rules.

\textsuperscript{142}For example, in \textit{James Wingate & Co. v. Webber} (1897), 3 TC 569, the Court of Exchequer (Scotland) held that a non-resident company was carrying on business in Scotland because it chartered ships and received payments there.

\textsuperscript{143}This rule is similar to section 863(c) of the Internal Revenue Code.

\textsuperscript{144}If a tax treaty applies, the source of income will be based on the existence of a permanent establishment.
It is beyond the scope of this article to elaborate on the proposed expense allocation rules. In general, however, the rules should provide guidelines for allocating expenses that are clearly related to a category of gross income, expenses that are related to all gross income, and expenses that are clearly not related to any item of gross income. In the case of interest expenses, the tracing method should probably be replaced with interest apportionment rules under which interest expense would be allocated to foreign source income on the basis of the proportion of either foreign assets to total assets or foreign source income to total income.  

Source Rules for E-Commerce

The difficulties caused by e-commerce in the application of the existing source rules concern both the characterization of income and the determination of the geographic origin of income. In general, the problem of income characterization is more pressing with respect to transactions involving digital products and services, whereas the problem of establishing territorial source is more critical with respect to sales profits. The following proposals deal with both aspects of the source rules and attempt to identify the economic nexus of an income item with a tax jurisdiction in the context of e-commerce. Their aim is to ensure a fair allocation of the tax base between e-commerce exporting and importing countries, as well as to enhance the policy objectives of tax neutrality and equity, administrative simplicity, and the prevention of double taxation and double non-taxation.

Characterization of E-Commerce Transactions

The characterization of income from e-commerce transactions may follow one of two general approaches: the old “pigeon-hole” approach or the new “panorama” approach. Under the pigeon-hole approach, income from e-commerce is classified into one of the existing categories for characterization of income—namely, as income from sales, royalties, or services. Under the panorama approach, e-commerce transactions are characterized as either “digital transactions” giving rise to a new type of income (which can be referred to as “digital income”) or non-digital transactions giving rise to sales income. Each approach has its own advantages and disadvantages.

The “Pigeon-Hole” Approach

Under the existing source rules, income is assigned to one of several categories according to its character, and its territorial source is that which is designated for that category. The same approach can be applied to e-commerce, so that income from different types of e-commerce transactions can be slotted into the appropriate pigeon holes. Where the nature of a particular transaction is unclear, characterization of the income can be based on a determination of the transaction’s predominant nature. Where
the nature of a transaction is “mixed,” such as a hybrid of sales of goods, the licence of copyright, and the provision of services, the income from the transaction may have to be apportioned to each category. Where a pigeon hole does not exist for a particular type of income, the proper approach is to reason by analogy from the closest available income type for which a pigeon hole exists.

Applying this approach to e-commerce transactions, the following characterizations can be made:

- Income from the sale of tangible goods is clearly sales income. Income from the provision of traditional services via the Internet, such as advertising, consulting, travel, finance, and investment, is clearly income from services. Both sales income and services income are subcategories of business income for purposes of the Act and tax treaties.

- Income from the provision of online information (as in the case of electronic publishing of books, journals, or newspapers or online access to databases) may be characterized as services income, royalties, or sales income. If the predominant nature of a transaction cannot be established on the basis of the facts and circumstances of the transaction, a reasonable allocation may have to be made to each income category. In general, however, characterizing the transaction as the provision of services probably makes better policy sense.

As mentioned earlier, the predominant character of an online information facility is that of a service (enabling the customer to find and retrieve information, which is akin to the traditional library service for a fee). The use or sale of copyrighted material is more or less incidental to providing that service. It is probably uncommon for online information providers to allow their customers the right to make copies for public distribution; therefore, the element of a payment for the right to use copyright (that is, a royalty) is minimal. It appears impractical to use a case-by-case approach for characterization of online information arrangements or to subject each element of the arrangement to a different tax treatment. The result would be extreme uncertainty and an enormous compliance burden for vendors, customers, and tax authorities.146

On the other hand, if the predominant nature of the business of an online information provider is akin to that of a traditional bookstore (charging customers a fee for downloading a product that has a long shelf-life, such as an encyclopedia), income from the business should be characterized as sales income.

- Income from the supply of software and other digital goods that are protected by copyright can be characterized as sales income, royalties, or services income, depending on the nature and extent of the rights transferred.

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146 See Deloitte Touche Tohmatsu’s letter to the OECD Fiscal Affairs Committee, which is published in (December 1997), 24 Tax Planning International Review 18-22.
in a particular transaction. In this respect, the US software regulations and the OECD revised commentary should serve as useful models for Canada. Payments for the transfer of a copyrighted article would be characterized as sales income or rental income; payments for the transfer of any copyright rights would be characterized as royalties; payments for the transfer of ownership of copyright rights (or all substantial rights in the copyright) would be characterized as sales income or capital gains; payments for the transfer of knowhow would be characterized as royalties; and payments for the provision of services would be treated as services income. In the case of mixed transactions, the characterization would be governed by the predominant nature of the transaction, or income from each element of the transaction would be characterized separately.

- Income from e-commerce transactions not mentioned above is characterized as business income.

The main advantage of this approach is tax neutrality. Under this approach, income from e-commerce transactions and income from traditional commerce are characterized according to the same principles and subject to the same territorial source rules. Once income from various types of e-commerce transactions is slotted into one of the existing pigeon holes, all the existing rules will apply accordingly. A corollary of this advantage is that the same characterization applies for purposes of both source taxation and residence taxation. There is no need to modify income characterization rules for purposes of FAPI and foreign tax relief provisions. For example, if income from an e-commerce transaction is characterized as a royalty, the issue of whether or not the royalty is FAPI is determined by the existing FAPI rules.

The main disadvantage of this approach is that the nature of e-commerce defies traditional income characterization rules. Many e-commerce transactions, especially those involving digital goods and online information services, are mixed transactions, resulting in uncertain or arbitrary income characterization. Because different income characterization results in a different territorial source, the tax treatment of different types of e-commerce transactions would differ. Double taxation or double non-taxation would occur. In addition, uncertain characterization rules are prone to manipulation, causing difficulties in enforcement.

The “Panorama” Approach
Under the panorama approach, e-commerce transactions are classified as either digital transactions or non-digital transactions. Digital transactions produce “digital income” and non-digital transactions produce sales or services income. Digital income is a brand new type of income. Digital transactions are transactions that are completed electronically, as in the case of the supply of digital goods, online information, and most types of electronic services. Non-digital transactions are transactions that are completed in part by electronic means and in part by traditional means. Non-digital transactions generally involve tangible goods and some services that still require in-person performance.
The main advantage of the panorama approach is that it greatly simplifies income characterization rules for e-commerce and avoids the uncertainty and arbitrariness of the pigeon-hole approach. Characterizing income from e-commerce as either digital income or sales or services income also conforms to the economic nature of e-commerce and is flexible enough to accommodate all e-commerce transactions. Furthermore, this approach simplifies the rules for determining the geographical location of income. For example, the territorial source of digital income could be deemed to be the country where the customer or purchaser is located.

The panorama approach is open to criticism on the ground of being radical. Both domestic laws and tax treaties need to be revised to accommodate it. International consensus might be difficult to reach, and the absence of consensus will result in international double taxation. These objections are not very compelling, in that the new ways of doing business on the Internet probably call for a revolutionary look at the existing tax concepts. The old concepts are too out of touch with the new reality of e-commerce. Revolutionary rather than evolutionary thinking is warranted.

On the policy ground of tax neutrality, the panorama approach can be either criticized or justified. This approach will cause non-neutral taxation of e-commerce and traditional commerce, but more neutral treatment of different types of e-commerce. For example, a traditional software transaction may be characterized as a mixed transaction of a sale of copyrighted goods, the transfer of copyright, and the provision of services. Each character of income is subject to different source rules and taxed differently in the source country. Sales income and services income are likely free from source taxation. On the other hand, if the same transaction is completed electronically, the income from the whole transaction is characterized as digital income and the whole income could be subject to source taxation. It is difficult to see why the policy objective of achieving tax neutrality between electronic and traditional commerce should prevail over the objective of achieving tax neutrality between different forms of e-commerce. Considering that the non-tax advantages of doing business on the Internet vis-à-vis doing business by traditional means are so overwhelming, it is unlikely that taxing digital transactions differently from traditional commerce would distort the choice of doing business and discourage the development of e-commerce. In the meantime, neutral taxation of different forms of e-commerce would probably reduce the tax distortions and create a more certain and predictable tax environment for the continued growth and development of e-commerce.

Finally, the new characterization of income under the panorama approach would require changes to other related tax concepts. For example, is “digital income” FAPI under the existing rules, or is it “foreign business income” or “foreign non-business income” for purposes of the foreign tax credit rules? Given the policy rationale behind the FAPI regime, it would make sense to deem digital income to be inactive business income unless the business meets the “five employees exception.” Like interest and other typical FAPI, the source of digital income is very mobile. On the other
hand, in contrast to interest or rent, there is significant activity in the provision and updating of digital products. Therefore, the five employees rule can exclude businesses earning digital income from the FAPI regime. For purposes of the foreign tax credit, because the rules are aimed at providing relief from double taxation, deeming digital income to be business income seems to make sense.

From an overall policy perspective, the panorama approach is preferable. As explained below, this approach makes it easier to design territorial source rules and is more realistic in the e-commerce environment.

**Redefining “Source” in E-Commerce**

In simple terms, the current international consensus is that the source of “passive income”\(^{147}\) is the residence of the payer, and the source of “active income”\(^{148}\) is the place of income-producing activities. These source rules are influenced by the benefit theory, economic allegiance theory, and enforceability concerns. These same theories and concerns can guide the search for source rules for e-commerce.

Under the benefit theory, the country that incurs expenditures in providing the infrastructure for income-producing activities is entitled to tax income from these activities. Under the economic allegiance theory, a person owes an economic allegiance to his/her residence country as well as to the country in which his/her income originates. The economic source of income is considered to be the place where wealth is produced. Wealth is produced by people, property, and business transactions.\(^{149}\) In the case of active business income, in traditional transactions, the location of the property and the business transactions that contribute to the production of wealth often coincide with the location of a business’s human capital. For example, in a traditional transaction where goods are manufactured in country A and transported to country B for sale in country B through sales agents or a sales outlet, the wealth created from manufacturing occurs in country A and the wealth created from marketing and sales occurs in country B.\(^{150}\) Although remote sales are possible, goods are generally sold through a retail establishment located in the country where customers are located, and sales agents market and distribute the products to local customers. Under the traditional notion of income sourcing, if goods are simply sold in a country without involvement of the vendor’s sales agents in marketing or distributing the goods, no income will be considered to be sourced in the country where the market is (here referred to as “the utilization country”).

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\(^{147}\) Passive income generally includes dividends, interest, rents, and royalties. Capital gains are more or less taxed as passive income but are generally not subject to withholding taxes.

\(^{148}\) I use “active income” here to include sales income, services income, and other forms of business profits.

\(^{149}\) Report to the League of Nations, supra footnote 130; and Forst, supra footnote 108.

\(^{150}\) For an historical analysis of the economists’ theory of source, see Forst, supra footnote 108, at 1459-62.
In other words, no increase in wealth is attributed to the utilization country for creating a market for the goods. This notion is reflected by articles 5 and 7 of the OECD model, which permit the utilization country to tax business profits only where the profits are attributable to a permanent establishment in that country.

Applying the traditional test of income sourcing, a utilization country, which boasts only a customer base, would be considered to have made no contribution to the creation of wealth. This approach does not make much sense in the age of e-commerce. Unless the utilization country provides the environment for people to acquire purchasing power and the infrastructure for customers to access the Internet and process e-commerce transactions, no income-generating transactions can be carried out in that country. A utilization country should theoretically be entitled to tax the non-resident vendor for benefiting from its expenditures. In the traditional physical world, a non-resident vendor’s access to the consumers in the utilization country could be achieved only through maintenance of a permanent establishment; thus, the permanent establishment test reflected the economic allegiance theory. In the world of e-commerce, a non-resident vendor can gain access to the market in the utilization country without maintaining a traditional permanent establishment. Indeed, non-resident e-commerce vendors can earn large profits from the sales of goods and services to customers in utilization countries without having any physical presence in these countries. That should not mean that these non-residents owe no economic allegiance to the utilization country. The economic allegiance theory should be re-interpreted to take into account the special features of e-commerce. The new concept of source should be based not on physical presence, but rather on “economic” presence.

Enforcement concerns are also important in establishing traditional source rules. The fact that passive income is sourced in the country in which a payer is resident reflects such concerns. Where source taxation on the basis of the economic allegiance theory becomes difficult to enforce, enforcement concerns prevail. An example is the tax treatment of international transportation income. Under article 8 of the OECD model, income from international transportation is sourced solely in the country of residence, even though businesses are carried on through permanent establishments in other countries.

In redefining source for e-commerce, enforcement concerns should continue to play an important role. The new source rules should ideally allow

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151 It is true that under the current international consensus, a utilization country cannot tax the income from e-commerce transactions, but it can levy a consumption tax on the customers. Forcing utilization countries to rely on consumption taxes (such as the goods and services tax in Canada), which focus on the consumer rather than the place where wealth is created, may be problematic. The reasons are that there is no current international consensus on consumption taxes, no tax treaties cover consumption taxes, and consumption taxes paid in a utilization country are not creditable against income tax payable in the residence country. The result will be double taxation.
participants in e-commerce to pay and collect taxes in an administratively feasible fashion to those countries with a legitimate claim to the tax revenues.

**Possible Source Rules for E-Commerce**

In devising new source rules, one can either adopt new rules or adapt the existing source concept to e-commerce with due regard to the technological aspects of e-commerce. The possible source rules and their pros and cons are discussed below.

*Global Formulary Apportionment*

The concept of “global formulary apportionment” (GFA) has been debated in the context of allocating income between associated enterprises. So far, GFA has been rejected as a viable alternative to the arm’s-length principle. This is not the place to revisit the ongoing debate in that context. However, the issues and arguments surrounding GFA are relevant to the tax problems posed by e-commerce. Indeed, arguments in favour of GFA based on criteria such as property, payroll, and sales seem to be strengthened by the rise of e-commerce. The blurring of geographical boundaries and the growing trade in services and intangibles make it more difficult to determine arm’s-length transactions for tax purposes.

The concept of GFA is used in this article to allocate income of a single enterprise to different tax jurisdictions. It is proposed as an alternative to traditional source rules. Canada already uses a formulary apportionment system to allocate corporate income between provinces for domestic tax purposes. The same method can be used to allocate global income from e-commerce between different countries in which e-commerce transactions are conducted.

The key to the use of GFA is the determination of the formula. The formula selected would determine the overall effect of income allocation

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153 Part IV of the Income Tax Regulations.
to the competing export and import jurisdictions. For example, if the formula consists of factors based on property, payroll, and sales, income will be allocated to countries where a company’s property and employees are located and where sales take place. The first two factors are generally attributable to production and export countries. To ensure fair allocation between e-commerce exporting and importing countries, further rules are necessary to determine the location of employees, the situs of property, especially intangible property, and the place where sales take place. In order to protect the tax base of the country where electronic goods and services are produced, the situs of property and the location of the employees could be determined by the deductibility of the cost of the property and payroll expenses. For example, if an e-commerce company deducts the cost of property and wages and salaries in computing its income for tax purposes in its residence country, the property and employees should be deemed to be located in that country. In order to protect the tax base of an importing country, sales should be considered to take place in the country where customers are located, even though the conclusion of contracts, marketing, order taking, the payment system, and shipment may all take place outside that country. In addition, proper weight must be given to the location of customers in order to produce a more satisfactory result to source countries than that which follows from the application of current tax principles.

A strong case can be made for GFA on the following grounds:

- A version of formulary apportionment is already recognized in article 7(4) of the OECD model. Under article 7(4), the amount of income of an enterprise that is attributable to a permanent establishment can be determined by using one or more of the following criteria: (1) the receipts of the enterprise based on turnover or commission; (2) the expenses of the enterprise based on wages; and (3) the capital structure of the enterprise based on the proportion of the total working capital of the enterprise allocated to each branch or part. The appropriateness of each method depends on the circumstances to which it is applied. For example, for enterprises that provide services or produce proprietary property with a high profit margin, net profits will depend very much on turnover. For enterprises that manufacture goods with a high-cost raw material or labour content, profits may be found to be related more closely to expenses. In the case of banking and financial concerns, the proportion of total working capital

154 Article 7(4) of the OECD model provides, “Insofar as it has been customary in a Contracting State to determine the profits to be attributed to a permanent establishment on the basis of an apportionment of the total profits of the enterprise to its various parts, nothing in paragraph 2 shall preclude that Contracting State from determining the profits to be taxed by such an apportionment as may be customary; the method of apportionment adopted shall, however, be such that the result shall be in accordance with the principles contained in this Article.”

155 Paragraph 27 of the commentary on article 7 of the OECD model.
capital may be the most relevant criterion. At present, whether apportionment is adopted in a particular treaty is determined by the treaty countries. Canada does not generally use this method. If GFA is adopted as the method for allocating income from e-commerce, article 7(4) of the OECD model already provides a mechanism to accommodate its use.

- In addition to article 7(4) of the OECD model, different versions of formulary apportionment have been used in the context of transfer pricing. For example, profits from global trading may be allocated on the basis of the following factors: (1) the relative value of the trading location, which is measured by reference to the compensation paid to traders at the trading location; (2) the risk associated with the trading location, which measures the potential risk to which a particular location exposes the worldwide capital of the organization; and (3) the extent of the activity at each location, which is measured by reference to the compensation paid to key support people or the net present value of transactions expected at a trading location.156 Similarly, the profit-split method that has been widely accepted by OECD countries is essentially a formulary apportionment method: the entire residual profit of both related parties together is split according to a formula based on comparison of certain attributes of the parties.157

- The nature of e-commerce makes the traditional criticisms of GFA less relevant. GFA has been criticized on the grounds that (1) it is not transaction-based; (2) it is not based on separate accounting; (3) it is difficult to apply because of the difficulty in defining a “unitary enterprise”; and (4) it is difficult to implement because of the difficulty in computing global profits when different accounting methods are used in different countries. Since GFA is proposed in this article to allocate e-commerce income of a single enterprise, the first three arguments are not relevant. What is to be allocated is the total income of an enterprise from e-commerce. It is not essential that the income computation be based on each transaction or based on the concept of separate accounting for each business presence in relevant jurisdictions. Because the Internet is a single gigantic marketplace, the computation of an enterprise’s income derived from this market should presumably be fairly straightforward. The technology that makes e-commerce possible should make it possible for e-commerce companies to keep track of their transactions for accounting and tax purposes. In order to avoid the creation of income tax liability for small amounts of sales, a threshold could be established below which source taxation would not be imposed.

- GFA would allow utilization countries to tax e-commerce by using sales as a factor. GFA could also be designed to deal with the tax-haven problem where the formula allocates some of the income to a tax haven.


157 Avi-Yonah, supra footnote 119, at 1346.
A “throwback rule” could be used. Under this rule, if income were allocated to a jurisdiction with a tax rate below an acceptable minimum, the income would be “thrown back” into the general pool to be divided pro rata among the other countries.\textsuperscript{158} For example, if a company was resident in a tax haven and employed computer programmers residing in Canada, the salaries would not be allocated to the tax haven, but instead to Canada.

There are two main arguments against GFA. One is that the use of this method requires strong international consensus; otherwise, double taxation will result. It is difficult to predict whether such consensus is possible. The Revenue Canada advisory committee suggested that the adoption of GFA would not adequately address issues raised by e-commerce.\textsuperscript{159} The OECD and its member countries have so far rejected GFA in the context of transfer pricing. Another argument is that GFA cannot totally replace source rules. To the extent that formulary apportionment depends on the determination of the place of sales or the location of property and employees, source rules will still be needed.

\textit{The Place-of-Payer Rule for Digital Income}

Using the place-of-payer rule to tax digital income means that the source of income is based on the location of the person who purchases goods or services on the Internet. The purchaser may be a business or an individual consumer. The purchaser’s location can be determined by the purchaser’s residence or billing address. In cases where a non-resident is a purchaser and deducts the cost of the purchase in computing income for Canadian tax purposes, the non-resident would be deemed to be a resident in order to protect the Canadian tax base.

This rule could apply to all income from e-commerce transactions. Alternatively, it could apply only to income from digital transactions. As explained further below, limiting this rule to digital income would make better sense from a tax policy perspective. As in the case of passive income, taxes imposed by the source country on digital income can be deducted by the payer and remitted to the government. Digital income can be included in the provisions of subsection 212(1) and taxed at the rate of 25 percent. If an amount is paid to a beneficial owner who is a resident of a treaty country, the tax rate can be reduced. Alternatively, the non-resident can have the option of filing a Canadian tax return under part I and paying tax on a net basis.\textsuperscript{160} Canada’s tax treaties should ensure

\begin{footnotesize}
\begin{enumerate}
\item This solution is based on the same concept advocated for purposes of formulary apportionment for state taxation in the United States. See Walter Hellerstein, “Taxing Electronic Commerce: Preliminary Thoughts on Model Uniform Legislation” (May 12, 1997), \textit{75 Tax Notes} 819-29.
\item Revenue Canada advisory committee report, supra footnote 1, at 4.1.
\item There is no reason why such a tax cannot be regarded as “income tax” for treaty purposes and be creditable against the residence country’s tax under article 23 of the OECD model.
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that the Canadian tax on digital income is creditable against income tax payable in the recipient’s residence country.

The case for the place-of-payer rule for digital income can be made on the following grounds:

- The rule is consistent with Canadian domestic tax policy. Under the Act, the source rules for passive income (that is, dividends, interest, and royalties) are based on the residence of the payer. As discussed earlier, in cases where the Canadian tax base is eroded by a deduction of payment, deeming rules apply to preserve Canadian source taxation. The nature of digital income is more like passive income than active business income. A non-resident vendor’s only presence in Canada is the exploitation of the Canadian market by selling goods and services via the Internet to Canadian customers. There is no “active” presence in Canada. The vendor’s economic presence in Canada is no different from that of an investor who lends capital to Canadian borrowers or licenses property to be used in Canada. Applying the same place-of-payer rule to traditional passive income and digital income would not represent any change in Canadian tax policy.

- The rule is consistent with Canada’s tax treaty policy. Under Canada’s tax treaties, the source rules for dividends, interest, and royalties are generally based on the residence of payer. The same rule is extended to income derived by artistes and athletes. Although income derived by artistes and athletes is generally characterized as either business income or services income, Canada’s tax treaties do not apply the “permanent establishment” or “fixed base” test to determine the source of the income. Instead, the source of income is deemed to arise in the country where the services are performed, even in the absence of a permanent establishment or fixed base. In other words, if the services are consumed in Canada or paid for by Canadian consumers, the income is deemed to be sourced in Canada. The rationale for this rule is a recognition that artistes and athletes are able to earn large incomes from Canada even though they do not establish a permanent establishment or fixed base in Canada. By analogy, entrepreneurs engaged in e-commerce can earn income from Canada in the same manner. They may be able to sell goods or services to Canadian consumers, earning significant income, even though they have no permanent establishment in Canada. It is the access to the market that determines the source of income.

- The rule will help to ensure source taxation in the utilization country and prevent double taxation and double non-taxation. Double taxation can be prevented by requiring the residence country to provide relief for source taxation. Double non-taxation can be prevented to the extent that taxes are levied at least in the utilization country on the income derived by tax-haven entities. Since the market for the majority of goods and

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161 See subsection 212(13.2) and paragraphs 212(1)(b) and 115(1)(c) of the Act.
162 This rule is based on article 17 of the OECD model.
services sold on the Internet is in high-tax countries, source taxation can at least reduce the double non-taxation problem.

- Since the place-of-payer rule will apply to income from different types of digital transactions, there will be more neutrality in taxing different types of e-commerce transactions. To the extent that digital income is akin to traditional passive income (that is, the earning of income in the source country does not involve a physical presence), this source rule is also neutral in taxing traditional transactions and e-commerce transactions. It removes the potential tax advantages afforded by e-commerce to businesses in avoiding source taxation through different arrangements of e-commerce transactions.

There are probably two policy concerns with the place-of-payer rule for digital income. One concern is tax equity between digital transactions and physical transactions. This issue is addressed below. Another concern is the implementation of this rule. Assume that the new source rules require Canadian taxes to be withheld by a resident who purchases goods or services on the Internet. If the purchaser is a business, enforcement will not be a problem. Because the cost of purchases is deductible in computing income for Canadian tax purposes, business purchasers would have little incentive not to withhold taxes from their purchases. Businesses generally are better record keepers than individual consumers. The mechanism of withholding will be the same as that for the current part XIII tax. If the purchaser is an individual consumer, enforcement difficulties may arise. The purchaser may be unaware of the withholding obligations, and Revenue Canada would likely be unaware of any failures to withhold taxes. Even if the individual is aware of his/her withholding obligations, it may be cumbersome to deduct taxes from a small purchase and remit the taxes to Revenue Canada. Compliance is likely to be poor. The compliance problem can be addressed by exempting individual consumers from the withholding obligation or relying on intermediaries or technology. The withholding obligation can be limited to businesses that have the capability to withhold taxes and less incentive to avoid compliance. Because e-commerce between businesses is at present the most dominant type, withholding by businesses can generate some source taxation. Alternatively, if individual customers purchase goods or services with credit cards, credit card companies may be used to facilitate the withholding of taxes from each purchase (assuming that information...
is available to identify purchases made through e-commerce transactions. If the purchase is paid for with digital cash, software technology may be available to automatically deduct the tax before the payment is deposited in the account of the vendor.

A common problem facing all online purchasers, businesses and individuals alike, is that in many cases they have no or little indication as to whether they are dealing with a non-resident party. This problem can be overcome by requiring withholding taxes from all online purchases. If the vendor is a resident or a non-resident that is subject to tax under subsection 2(3) on its Canadian source business income, the amount of taxes withheld can be credited against the Canadian tax payable. Another possibility is to allow a non-resident vendor the option of filing Canadian tax returns and paying Canadian tax on a net basis on income from its e-commerce transactions with Canadian customers. If the vendor is not otherwise subject to tax in Canada, the withholding tax will be a final tax.

**Residence-of-Vendor Rule**

Using the residence-of-vendor rule to tax e-commerce means that the source of income is determined by the residence of the company that sells goods and services. A similar rule is used in article 8 of the OECD model in respect of income from international shipping or air transportation. Article 8 denies taxing authority to a source state and limits taxation of this type of income to the country in which the place of effective management of the enterprise is situated. The policy concern is the likelihood of double taxation since such income is generally derived in multiple jurisdictions. The same concern may apply to income from e-commerce. Once a company establishes a Web site, customers throughout the world that have access to the Internet can access the Web site. Like international transportation, e-commerce has the potential of attracting multiple taxation because of the number of countries that may be involved. Therefore, it could be argued that the rule in article 8 applies to e-commerce.165

Assigning tax jurisdiction to the residence country of the vendor has the virtue of being simple. It is difficult to support this rule on any other policy grounds. The loss of source taxation will not be politically popular with the utilization countries of the world. In the absence of effective anti-tax-haven rules in high-tax countries, double non-taxation will be a serious problem if e-commerce companies reside in tax-haven countries. Moreover, e-commerce will be treated more favourably than traditional commerce since the latter may be subject to source taxation and the former is not. For these reasons, it seems unlikely that the residence-of-vendor rule will be adopted as a general source rule for e-commerce. The rule could, however, be applied solely to ISPs, which, like shipping and air transportation companies, provide services globally. In that case, article 8 of the OECD model could be amended to include this type of income.

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165 See Hinnekens, supra footnote 115, at 194.
Revised Concept of Permanent Establishment

The current threshold of permanent establishment could be lowered to accommodate e-commerce. For example, a Web site or a server could be deemed to be a permanent establishment. The concept of “agency” could be extended to “software agent” or ISPs in certain circumstances.

Because the permanent establishment concept has existed for a long time, this approach will involve little change to the existing system. That is, in itself, both an advantage and a disadvantage. The advantage is its longevity and familiarity. The disadvantage is that it will result in little source taxation and will likely be rejected by utilization countries. Another disadvantage is that e-commerce is revolutionary and requires more fundamental changes to the tax system. The permanent establishment concept is inherently ill suited to the e-commerce environment since e-commerce requires virtually no “establishment,” let alone a “permanent establishment” in the traditional sense.

Status Quo

Choosing the status quo approach means that the existing source rules will apply to e-commerce. Income from e-commerce will be pigeon-holed into various categories. No new rules are needed. Why jettison a system that has served the world so well for more than 70 years? This is the prevailing global position, including that of the Revenue Canada advisory committee and the US Treasury. This approach has been defended on grounds that it achieves tax neutrality between traditional and electronic commerce, that it is consistent and integral to most countries’ tax laws today, and that it is sufficiently flexible to accommodate e-commerce. Advocates of the status quo do not preclude the need for new interpretation or technical adaptation of existing rules to clarify and fortify their application to e-commerce. For example, as noted earlier, the Revenue Canada advisory committee recommended that Revenue Canada issue interpretation bulletins to clarify areas of uncertainty and renegotiate Canada’s tax treaties to incorporate changes proposed by the OECD.

The policy implications of maintaining the status quo were discussed above. Because of these implications, this approach is not recommended here as a realistic solution to the problems associated with the taxation of e-commerce.

Tax Policy Justifications for Different Source Rules for E-Commerce and Traditional Transactions

The proposed source rules aim to improve Canada’s revenue position as a source country. This objective is consistent with Canada’s strong commitment to source taxation in its international tax policy. The proposed rules will also achieve more certainty in Canada’s international tax system through statutory codification. As discussed below, there are compelling policy justifications for introducing new source rules for e-commerce that differ from the traditional source rules.
On the surface, enacting separate source rules for e-commerce violates the principle of neutrality and equity because income from e-commerce will be sourced differently from income from traditional transactions. Failure to achieve neutrality and equity will affect the choice of means of doing business. In practice, however, neutrality between the taxation of traditional commerce and the taxation of e-commerce is unattainable. Traditional source concepts are often difficult, if not impossible, to apply in the technologically advanced world of e-commerce. The result is substantive inequity between the source taxation of traditional commerce and of e-commerce because e-commerce can virtually escape source taxation. The new source rules will recognize the unique features of e-commerce and ensure that source taxation is viable, whether income is derived from traditional or e-commerce transactions.

If Canada and other countries wish to receive a fair share of the e-commerce “tax pie,” sacrificing the goal of creating totally neutral source rules for e-commerce and traditional transactions is worthwhile—and may even be necessary. As long as major utilization countries act in concert, protecting the revenue bases of these countries in such a manner will not impede the development of e-commerce.

New source rules for e-commerce can also be justified as reflecting the principle of avoiding double or multiple taxation and preventing international tax avoidance or evasion. If implementing the new source rules leads to effective source taxation, double taxation can be avoided through tax treaties. Treaty countries can coordinate their source rules so that there is no source-source double taxation (double taxation caused by the overlapping of source taxation). The source-residence type of double taxation (double taxation caused by the overlapping of residence taxation and source taxation) can be eliminated by using the existing foreign tax credit method or the tax exemption method specified in article 23 of the OECD model. More important, effective source taxation will reduce international non-taxation of income from e-commerce. Where a tax-haven-based e-commerce company conducts business with customers in Canada, Canada can tax its income on the basis of the new source rules. Therefore, even if the company does not pay tax anywhere else, it must pay tax at least in Canada and other utilization countries.

New source rules are unlikely to reduce the competitiveness of Canadian-based e-commerce companies. Any income taxes levied by a foreign country on the sale of goods and services by Canadian companies in that country can be credited against Canadian income tax. If Canadian source taxation reduces the attractiveness of Canada as a market for foreign companies, the market evacuated by these companies may be picked up by Canadian firms. The creation of a level playing field for Canadian e-commerce businesses and non-resident businesses to compete in the Canadian market will also increase the competitiveness of Canadian businesses.

No matter what source rules are used to tax e-commerce, international consensus will be critical to their success. E-commerce creates a global tax problem that needs a global solution. Until a consensus on a new
CONCLUSIONS

This article has constructed source rules from various provisions of the Act, some of which function as source rules without specifically stating that they do. Where statutory provisions are absent, this article has examined the jurisprudence and Revenue Canada’s administrative pronouncements in order to find source rules. The lack of specific source rules in the Act may cause uncertainty for taxpayers and tax authorities. The uncertainty will be increased by the rapid growth of e-commerce. In fact, this article has argued that the existing source rules, which were designed for a physical commercial world, are no longer viable in the age of e-commerce. Unless these source rules are re-examined and reformed, international double taxation or non-taxation will occur and Canada will lose its revenue base as a source country. As e-commerce is a revolutionary way of doing business, it warrants some new thinking about how that business should be taxed. This article has advocated a redefinition of the concept of “source” in the context of e-commerce and has proposed several new source rules. It is hoped that these proposals and their supporting analysis will make a useful contribution to the search for better ways of taxing e-commerce.