

# **E-COMMERCE: THE TAXMAN'S NEMESIS**

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*An increasing number of commercial transactions are being conducted on the internet every year. While the potential tax revenues for governments who decide to tax e-commerce transactions are enormous, governments are experiencing difficulties in applying current taxation systems to electronic contracts.*

*This paper begins with an analysis of the infrastructure of the internet and the exact nature of transferring and receiving information. It then focuses upon the major arguments for and against the taxation of the internet, including the argument that the technology evolves much too quickly to have an effective taxation system. Furthermore, the argument that governments may be reduced to revenues that do not even support minimal spending if they are not able to collect e-commerce tax revenues is also explored.*

*The traditional international taxation system is then examined, with an emphasis on the principle of permanent establishment (PE) and the problems that exist in attempting to apply e-commerce to PE. Several possible solutions to the issue are then examined, the most notable being agency, the source-based system, and the resident-based system.*

*The paper concludes with the notion that the taxation of e-commerce is inevitable. The best solution to taxing e-commerce lies in utilizing the source-based system despite the fact that it ignores the established principle of PE. It is acknowledged, however, that PE seems to be an outdated principle, or at the very least incompatible with e-commerce transactions.*

## **I. INTRODUCTION**

**T**HE ABILITY TO TAX is fundamental to a country's sovereignty. The stronger a country's economy, the more revenue a government may collect through taxes. On the other hand, the weaker a country's economy, the more vital that revenue is to the country.

With the dawn of the century, sources of tax revenue are increasing. More and more commercial transactions are being completed on the internet, and many of these transactions are international in nature. This is forcing world governments to design and implement a policy that will

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enable them to collect tax revenue from such transactions, due to the difficulty in applying current tax systems to electronic commerce (e-commerce).<sup>1</sup>

This paper will first explore the arguments for and against taxing e-commerce. Second, the dynamics of the internet will be discussed. Third, the concept of permanent establishment (PE) will be examined. Finally, an analysis of the agency, source-based, and resident-based solutions will be canvassed.

## II. THE INTERNET

**T**O GAIN A BETTER UNDERSTANDING of this issue, it is imperative to first comprehend the structure of the internet. The United States (US) Treasury defines the internet as "a vast international network of networks that enables computers of all kinds to share services and communicate directly."<sup>2</sup> The internet consists of two networks: a physical network infrastructure and a logical network. The physical network is made up of the actual physical components. These include, among other things, the wires, cables, modems, and computers themselves. The logical network essentially refers to "laws that govern the movement of traffic down the network highways"... and the process by which information moves throughout the network."<sup>3</sup> The internet is accessible from almost anywhere and it is increasingly becoming a necessity for everyday life.

How is the information transferred? First, electronic information is broken down by the computer into small packets and each is labelled with the same address. The information is then sent. Depending upon the amount of traffic at any given time each packet may take a different route to get to its destination. The "routers," which are a part of the physical network, "act like post offices."<sup>4</sup> These components look at the destination address and determine which route to send the packets. These packets

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<sup>1</sup> Note the United Nations Commission on International Law defines e-commerce as "...commercial activities conducted through an exchange of information generated, stored, or communicated by electronic, optical, or analogous means...." C. W. Chan, "Taxation of Global E-Commerce on the Internet: The Underlying Issues and Proposed Plans" 9 Minn. J. Global Trade 233 at 237.

<sup>2</sup> B. Schaefer, "International Taxation of Electronic Commerce Income: A Proposal to Utilize Software Agents for Source-Based Taxation" Santa Clara Computer and High Tech. L. J. 111 at 116.

<sup>3</sup> *Ibid.* at 117.

<sup>4</sup> *Ibid.*

ultimately end up at a server which acts as a depository.<sup>5</sup> Servers store this information where it is accessed by users on the internet.

In order to retrieve information stored at the servers the logical network goes to work. This network is based on the "domain name system."<sup>6</sup> The packets that are located on the servers are defined by numerical addresses. Because these addresses are long and difficult to remember the logical network associates the numerical addresses with domain name addresses that are easy to remember (i.e. <www.downey.com>). Therefore, the user merely has to type in the domain name, the computer will translate it into the numerical address, and the information will be retrieved from the server.<sup>7</sup>

While the previous discussion explored the basic makeup of the internet, it is important to keep in mind the following considerations:

- a server is tangible, and therefore can be located in any country in the world;
- a company may have a website on a server that is located in the US, but when trying to reach that website, a web surfer may actually end up on a mirror website located on another server in the United Kingdom (UK).<sup>8</sup>

These considerations are very important when dealing with the issue of taxation and the internet.

### III. TAXING: FOR AND AGAINST

**B**EFORE EXAMINING THE PROBLEMS AND POSSIBLE SOLUTIONS to taxing the internet, one must be cognizant of the fact that there is a debate over whether or not governments should actually tax e-commerce. Those in favour of taxation argue that taxing the internet could put an end to the many smaller start-up companies that conduct their business by way of e-commerce.<sup>9</sup> Because these business do not have a lot of capital e-commerce permits them to start with a smaller up-front investment while maintaining access to the internet's large network of customers. As a start-up company these new businesses will likely make little profit in the beginning - if any at all. Taxing companies such as

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<sup>5</sup> *Ibid.* at 117-118.

<sup>6</sup> *Ibid.* at 118.

<sup>7</sup> *Ibid.*

<sup>8</sup> This may occur due to the amount of traffic on the internet at any particular time. *Ibid.* at 127.

<sup>9</sup> P. Cobb, S. J. Kobrin & E. Wagner, "Taxing E-Commerce: The Landscape of Internet Taxation" U. Pa. J. Int'l Econ. L. 659 at 663.

these, that may not be capable of meeting their tax expenses, may lead to fluctuations in the economy as smaller start-up companies are essentially run out of town.

This argument seems weak, however, as all businesses have a "rough start" in the beginning. If it were easy everyone would become an entrepreneur. In addition, why should new businesses be exempt from taxation solely on the basis that they use e-commerce? There are many companies that do not require e-commerce to be successful. It would seem unfair that these companies are forced to pay taxes whereas others are not, thereby violating one of the major principles of tax policy – equality.

An alternative argument against taxation centres around the private nature of the internet. It is argued that the internet is a private, entrepreneurial space beyond the reach of public authorities and public policy,<sup>10</sup> with one exception: situations where those involved in e-commerce transactions require assistance from public authorities. In other words, the government can only intervene when those who use e-commerce stand to benefit.

The US government is greatly opposed to this argument. Government officials point out that the internet was created by the Advanced Research Projects Agency (ARPA) of the US Defense Department in the 1960s and 1970s and was not privatized until the late 1980s with the final wave in 1995. Therefore, the internet was originally a public good with public funding, and was delivered by the government.<sup>11</sup> In essence, taxing is not beyond the scope of the government on the basis of this argument.

The most compelling argument for those against the taxation of e-commerce concerns technology. Internet and e-commerce technology is moving much too fast for governments to keep pace. Even if the government were to establish a taxation plan it would in all likelihood be outdated by the time it was implemented. This causes great uncertainty for taxing initiatives as the federal government remains unsure what tomorrow's e-commerce industry will bring.

The best argument available to governments (especially those with weaker economies) concerns the consequences of failing to collect net revenues. E-commerce accounted for four percent of world trade in 1997. This figure is expected to increase tenfold in 2002.<sup>12</sup> If governments are not permitted to collect these tax revenues, taxable net income will be reduced to a level that may not even support minimal spending.<sup>13</sup> This is of especially great concern when one considers the pace at which tech-

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<sup>10</sup> *Ibid.*

<sup>11</sup> Chan, *supra* note 14 at 235.

<sup>12</sup> Schaefer, *supra* note 2 at 120.

<sup>13</sup> Cobb et al., *supra* note 9.

nology is advancing. As more and more businesses transact through e-commerce and less business is done using traditional means, the government suffers from a reduced tax base with which to draw expenditures. A further consideration involves the displacement of workers by the new technology, resulting in an inability of the government to collect employment revenues from these workers.

While these considerations give rise to great concern for weaker economies, stronger economies also stand to suffer. For instance, US e-commerce is expected to reach \$1 trillion in the next seven years.<sup>14</sup> According to the Organization for Economic Cooperation and Development (OECD), the European Union (EU) could stand to lose 2 billion European currency units in 2001 if there is no value added tax applied to e-commerce transactions.<sup>15</sup> As such, individual governments and the international community are desperately trying to resolve this important issue.

#### IV. PERMANENT ESTABLISHMENT

**W**HILE THE INTERNATIONAL TAXATION SYSTEM has traditionally been largely based on the actual geographic location of the business and the consumer, in e-commerce transactions this task would be highly difficult, and as such seriously undermines the concept of permanent establishment. The US Department of Treasury stated:

[f]rom a certain perspective, electronic commerce doesn't seem to occur in any physical location but instead takes place in the nebulous world of cyberspace.<sup>16</sup>

PE has long been used as the test in determining whether a country has the jurisdiction to tax a non-resident company. The 1992 OECD Model Tax Convention states that there are three requirements that must be met in order to constitute PE. First, the company must establish a place of business in the country. "Place of business" includes facilities such as "premises" on the one hand, or merely the gathering of certain equipment (i.e. gaming and vending machines) on the other. Second, the place of business must be fixed. That is, the place must be established with a "certain degree of permanence."<sup>17</sup> Finally, there must be a "carry-

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<sup>14</sup> Chan, *supra* note 1 at 236.

<sup>15</sup> *Ibid.* at 250.

<sup>16</sup> Schaefer, *supra* note 2 at 114.

<sup>17</sup> *Ibid.*

ing on of the business of the enterprise through this fixed place of business."<sup>18</sup>

Keeping these requirements in mind, the greatest difficulty in establishing a PE in the e-commerce sense lies in locating a component of the internet that can effectively meet all three requirements. Some experts have attempted to argue that a website could be considered a PE, as websites could be installed or exist in a facility, thereby meeting the requirements of the Convention.<sup>19</sup> A problem occurs when the site is maintained solely for storage, display, or delivery of goods and therefore is not considered a PE,<sup>20</sup> and does not satisfy the "place of business" requirement. Even if the site were sophisticated enough to be considered a place of business, yet another problem lies in mirror websites. Due to heavy traffic a user could be sent to any mirror website, making it nearly impossible to determine which website was actually used or where a transaction actually occurred, and therefore making it impossible to establish a fixed place of business.

Another difficulty lies in third party benefits. Even if the location of a particular website could be established, if the site were located in a country with no connection to the consumer or business, that country would be permitted to tax the transaction solely because it met the PE requirements, resulting in unfair taxing practices. Essentially, the impossibility of determining geographic location on the internet destroys the argument that a website is or could be considered a PE.

It has also been suggested that a server could act as a PE. The US Department of the Treasury has rejected this view stating that "...the server is like the owner of a warehouse, which is a passive activity."<sup>21</sup> Hence, passivity does not fulfill the requirements for a PE. Although a server's functions are limited, it can be programmed to do much more work, including processing its own name, address, payment, collection, and shipping information. This suggests, therefore, that the server could be characterized as a place of business. A recent German decision, the *Pipeline Decision*, considered this argument and ruled that a server could in fact be characterized as a PE.<sup>22</sup> Several problems also underlie this solution. For example, servers may be linked with other jurisdictions and,

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<sup>18</sup> "United States: When Does E-Commerce Result In A Permanent Establishment? The OECD's Initial Response" Mondaq Bus. Briefing 2000 WL 9240028.

<sup>19</sup> *Ibid.*

<sup>20</sup> "Selected Tax Policy Implication of Global Electronic Commerce," (November 1996), online: Department of the Treasury Office of Tax Policy <<http://www.ustreas.gov/taxpolicy/internet.html>>.

<sup>21</sup> *Ibid.*

depending on the volume of traffic, may be switched from one server to another. This leads to the same difficulties experienced with respect to websites, specifically in determining which server was actually used, making it next to impossible to meet the fixed place requirement.

Yet another suggestion lies in equating e-commerce transactions with gaming and vending machines – machinery which has been accepted as meeting the requirements of PE,<sup>23</sup> as business is carried on entirely with automated machines. Proponents of this suggestion argue that an e-commerce customer interacts completely with the server and should, therefore, be treated similar to users of vending machines. One problem with this argument, however, concerns the fact that these vending and gaming machines are actually located in particular countries. Servers, as stated above, can similarly be located anywhere, however it is not possible to determine precisely which server was in fact used.

## V. AGENCY

ONE POSSIBLE SOLUTION TO THE PE DILEMMA involves creating a website on a server as an agent of the non-resident business. Article 5 of the *Model Tax Convention* states that a PE “may be created in a country by means of an agent, broker, or general commission agent.”<sup>24</sup> The non-resident business then programs the site to do a number of tasks, similar to a principal giving instructions to an agent.<sup>25</sup> These sites, if sophisticated enough, can solicit customers through sending emails. If the site has been programmed with artificial intelligence it can refine the list and target certain customers based on past responses. In Europe, Italy seems to have embraced this suggestion and espouses that with artificial intelligence it can conclude simple contracts as an agent and may very well be sufficient to establish PE.<sup>26</sup>

The suggestion, however, ignores basic legal principles. For instance, paragraph five of Article 5 of the Convention states that in order to be an agent you must be a person acting on behalf of another. Article 3, paragraph one, defines a person as “an individual or company or other body of persons.”<sup>27</sup> Clearly, a website or a server does not fall under this defi-

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<sup>22</sup> *Supra* note 18 (pagination unavailable.)

<sup>23</sup> *Ibid.*

<sup>24</sup> Chan, *supra* note 1 at 248.

<sup>25</sup> *Supra* note 18 (pagination unavailable.)

<sup>26</sup> *Ibid.*

<sup>27</sup> *Supra* note 18 (pagination unavailable.)

nition. Taken alone, this cannot be the sole reason for dismissing the agency argument as it may not be all that problematic to include a website under the definition of an agent with respect to the Convention. In fact, due to the advances in technology and the exponential increase in e-commerce, the reality of the times we live in may demand its inclusion. Underlying problems exist in other areas however.

The suggestion that a non-resident's business website is analogous to an agency-principal relationship and other suggestions discussed above, while certainly crafty and technically sound, are not feasible in reality. Locating websites and servers is something that only experts are capable of doing. As such, if any of these suggestions were implemented, all companies engaged in the e-commerce industry would be expected to hire experts, while the funds required in exchange for their services may not be available to many middle and small-sized companies, and perhaps even some large corporations. As a result, two alternative proposals that essentially ignore the website and server dilemma have emerged.

## VI. THE SOURCE-BASED CONCEPT OF TAXATION

**T**HE SOURCE-BASED TAXATION SYSTEM permits the country in which the economic activity occurred to collect the tax revenue generated.<sup>28</sup> For example, when a Toronto-based company completes a transaction with a London consumer, England is entitled to collect revenue from the taxes. This system favours both developed and developing nations. It is advantageous for developed countries due to the simple fact that there is more money to be spent on goods and services in such countries and as a result there are more consumers. It is advantageous for developing nations simply because these nations generally import more than they export (hence they are often called "source-based nations") and will receive more revenue as a result of this system of taxation.

Those in favour of this proposal argue that nations should not be concerned with the location of servers or websites and should instead adopt the view that the source of income is the location of the consumer. In fact, the EU's latest proposal on dealing with the e-commerce taxation problem is essentially the adoption of the source-based concept. The European Commission has stated that the EU's proposal is simply implementing "the existing tax system in the case of e-commerce."<sup>29</sup>

This may seem like a quick fix to a complex problem. Indeed, one

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<sup>28</sup> Schaefer, *supra* note 2 at 113-114; Chan, *supra* note 1 at 248-249.

<sup>29</sup> J. P. Cunard & J. B. Coplan, "Selected Topics in e-Commerce Law" 86 PLI/NY 333 New York Practice Skills Course Handbook Series at 431.



basic but important principle is overlooked with the adoption of this solution. Traditional source-based systems are deeply connected to PE. Traditionally, the non-resident company was required to have a PE in order to be subject to foreign taxes. It was only fair that the company participate economically in the country before it was required to pay taxes. This proposal abolishes that requirement with respect to e-commerce. If this solution is to be effective, countries must be willing to accept this abolishment. Although the EU is prepared to do so, the US does not share the same opinion.<sup>30</sup>

## VII. RESIDENT-BASED CONCEPT OF TAXATION

THE ESSENCE OF A RESIDENT-BASED SYSTEM is that the country with jurisdiction to collect taxes from e-commerce transactions is the country where the company resides. That is, if a company based in New York completes a transaction with a customer in Paris, the US government has a right to collect the tax revenue. The simplicity of this system is advantageous as all that need be determined is the location of the company, thereby avoiding the confusion of determining the location of the server or website. Perhaps that is why this system has received support from the US Department of Treasury.<sup>31</sup>

The risk that companies may flee to tax haven nations is always a tax policy consideration. For example, if Japan has the most favourable taxation system for businesses using e-commerce strategies, a massive influx of companies to Japan may result, thus having lasting negative effects. If the company were originally based in Toronto unemployment due to relocation would result, causing a potentially drastic increase in the city's unemployment rate. In addition, the Canadian government would lose tax revenue from the company and the displaced workers. Furthermore, if employees were expected to transfer with the company, many would be forced to uproot their families, sell their homes, and move to foreign countries.

While these considerations may seem extreme, perhaps the biggest concern lies in the reality that the residence-based system greatly favours one nation, the US.<sup>32</sup> The vast majority of e-commerce businesses are located in the US. If this system were to be adopted by the international

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<sup>30</sup> *Ibid.*

<sup>31</sup> Schaefer, *supra* note 2 at 113-114; Chan, *supra* note 1 at 248-249.

<sup>32</sup> *Ibid.*

community, the US would be entitled to a very large portion of the taxes generated by e-commerce. Also, many of the poorer nations of the world that serve e-commerce consumers would not be permitted to collect taxable income. Since this outcome is not desired globally, the likelihood of it being adopted is not great.

## VIII. CONCLUSION

THE DEBATE OVER WHETHER OR NOT E-COMMERCE is a taxable commodity appears to be futile. Governments are well aware of precisely how much income is generated on the internet and how much that income will increase in the very near future. As such, e-commerce is a potentially major source of revenue. Arthur Cordell of the Canadian Department of Industry stated: "... the 'new wealth of nations' is to be found in the digital bits of information 'pulsing through global networks.'"<sup>33</sup> While it is only a matter of time before a taxation system is implemented, the exact nature of the system remains unknown. The suggestions put forth in this paper are filled with questions that are nearly impossible to answer. Even if the international community were to agree on any particular system, it would still have to reach further agreement on a multilateral treaty. That in and of itself raises many new issues when taking into consideration the vast cultural, political, and social differences across the nations of the world. On a balance the source-based system appears to be the best proposal to date. While this system seems to ignore PE, reality suggests that perhaps PE is an out-dated concept, or at the very least incompatible with e-commerce. In any event, due to opposition from the US, it may be some time before there is an effective international solution to the taxation of e-commerce.

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<sup>33</sup> *Ibid.* at 249.