

TRANSATLANTIC ISSUES IN ELECTRONIC COMMERCE

Catherine L. Mann

Senior Fellow, Institute for International Economics

October 2000

The global and dynamic e-commerce marketplace will increasingly impact the nature of national and international economic and government relations. This paper highlights three areas where the United States and European Union (EU) governments differ in their approaches as to how best to serve their domestic constituencies: treatment of trade flows, approach to tax regimes, manner of protecting personal data. Because the Internet marketplace is global but policy jurisdictions remain local, policy conflicts can develop. Policymakers on both sides need to harness technology and promote incentives for the private sector to help solve problems caused by the jurisdictional overlap. In addition to cross-border jurisdictional overlap, problems within a country can develop from issue convergence and policy overlap. That is, because the e-commerce marketplace is so integrated, the policy toward handling one issue, even within the national context, has implications for the policy set that is available to policymakers on other issues. Therefore, policies within a country must be more carefully meshed with each other with an eye toward consistency in the face of the forces of electronic commerce.

The topic of the paper was conceived in the context of the Working Group "WTO 2000", launched in 1998 within the Laboratory on International Political Economy of the IAI, Rome (Institute of International Affairs, www.iai.it) which has been supported by major corporation funding and a German Marshall Fund grant. The paper was written for and presented at an international conference, "Electronic Commerce and Multilateral Liberalization," organized by the IAI in Rome, 19 May 2000. It will be published in the monograph "Beyond Seattle: A New Strategic Approach in the WTO 2000," (in Italian) edited by Isabella Falautano and Paolo Guerrieri "IAI Quaderni" no. 11, Rome, October 2000.

Electronic commerce and the Internet will increasingly impact the nature of national and international economic and government relations. First, economic activity via the Internet, including electronic commerce, is global. Since the jurisdictions of government remain national at best, they will increasingly overlap. Second, within a nation, the integrated nature of the Internet and electronic commerce means that government policies exhibit greater “issue convergence.” That is, choices that policymakers make with regard to one issue, say trade policy, affect the choices that they can make with respect to another issue area, say tax policy. Consequently, policymakers have two challenges to address: cross-border jurisdictional overlap and within-nation issue convergence.

This paper highlights three areas where the United States and the European Union governments differ in their approaches as to how best to serve their domestic constituencies: (1) How trade in the Internet marketplace should be treated, particularly in the context of the World Trade Organization (WTO); (2) How to tax e-commerce transactions; (3) How best to address social concerns raised by e-commerce, particularly the issue of protection of personal data. These three areas are where the conundrum of issue convergence is also the greatest.

TRADE ISSUES ¹

The WTO has done a substantial amount of work with regard to electronic commerce. But, the crosscutting and rapidly evolving environment of electronic commerce challenges the functional treatment of trade within the WTO (General Agreement on Tariffs and Trade and General Agreement on Trade in Services) as well as the future work program of the WTO. The United States and the European Union are taking different tacks in these areas which have at their root the classification of electronic transactions as goods or services.

At the 1998 Geneva Ministerial, WTO members agreed to a temporary moratorium on customs duties for all products delivered over the Internet. A key motivation for the moratorium was the difficulty of distinguishing between the physical and electronic delivery of products purchased over the Internet and the blurring of the traditional distinction between goods and services. On the one hand, products purchased electronically but delivered physically (such as books from Amazon.com that reach their destination via DHL) would appear to be subject to existing WTO rules on trade in goods. On the other hand, a radiology scan delivered electronically would likely be a kind of service. Consider, though, software downloaded from the Internet (and which may or may not exist on a hard

¹ See Catherine L. Mann and Sarah Cleeland Knight. 2000. *Electronic Commerce in the World Trade Organization*. In Jeffrey Schott, ed., *The WTO After Seattle*. Washington: Institute for International Economics.

medium such as a CD). Is this a good or service? Should these products fall under the purview of the GATS, GATT, or neither?

To help clarify these issues, the Geneva Ministerial declaration mandated that the WTO General Council embark on a comprehensive analysis of all trade-related aspects of electronic commerce. The General Council assigned the work program in parts to the Goods Council, the Services Council, the TRIPS Council, and the Trade and Development Committee. In addition to examining the treatment of products delivered via the Internet, the work program more generally considered how the WTO should approach electronic commerce relative to the scope of work of other organizations like WIPO, the OECD, and regional trading groups.

Although much has been done, several significant questions remain. The United States and the European Union are approaching them in different ways, and are arriving at different answers. The issues are whether to extend the moratorium, how to classify e-commerce trade, and modalities for reconstituting the work program. It is clear that the main thrust should be on how best to utilize e-commerce to promote continued liberalization of global trade, rather than spending scarce resources figuring out whether or not to liberalize it.

On Extending the Moratorium

The WTO negotiators came to Seattle with a remarkably broad consensus to extend the moratorium on customs duties. Moreover, most WTO members agreed that they should refrain from imposing new barriers. First, the over-arching principles of the WTO toward liberalization command this view. Second, any such barriers would have to be negotiated away in the future. Finally, at this point, implementing customs duties on digitized products is rather difficult from a technological standpoint, and little revenue loss is apparent or even projected.²

Yet, since there was no agreement to launch a new round of trade negotiations at Seattle, the status of the moratorium is not clear. The United States has taken the position that the moratorium is still in effect since the meeting did not end, but was suspended. The European Union and others believe that the moratorium was in effect until Seattle, and whether the meeting was suspended or failed, there was no agreement to extend the moratorium. The fact is that neither region (and no others) has yet acted to impose new duties, although the European Union seeks to impose service-value-added tax (VAT) (see below).

Ideally, WTO members will make permanent and binding the practice of not imposing customs duties on digitized products. The longer countries keep electronic commerce duty-free, the more these activities will take hold and flourish and make apparent the benefits of a more liberal

domestic and international trade environment. If WTO members allow the moratorium to expire, they will encourage an environment fragmented by different international taxes and tariffs, leading to wasteful “forum-shopping” by business and consumers, which will discourage technological growth in countries where seamless global markets are most important. Even if the range of products that could be dutiable under GATT is relatively small compared to the range of products that could be “scheduled” under GATS (see more below)³, the WTO principle of liberalization should be embodied by making the duty-free moratorium permanent.

On the Issue of Classification

Going forward, because of the global reach of electronic commerce and of the essential infrastructures on which it depends (communications systems, financial systems, and distribution and delivery systems), it is essential that WTO members commit to the deepest level of liberalization. While the electronic world poses certain challenges to the current trade policy framework, traditional WTO principles of non-discrimination, transparency, and market openness remain valid and should be applied to electronic commerce.

The European Union has asserted that “all electronic transmissions consist of services;” and, therefore, these products should fall under the purview of GATS.⁴ Most countries, including the United States, agree that services delivered over the Internet are covered by GATS, but other products are more like a good or are a hybrid between a good and a service (electronic books and downloaded software are popular examples). Thus the United States has argued that more time is needed to monitor the development of electronic commerce before any final classification takes place.

The fact is that electronic commerce is still in its infancy and is evolving rapidly; it is premature to assign digitized products delivered over the Internet into the traditional classification of goods or services. Classifying these products under GATS could make their treatment under the WTO less liberal, because market access in GATS exists only in sectors where members have made specific commitments. Moreover, whether existing commitments include electronic transmissions as a mode of delivery is itself under contention.⁵ It is quite clear that extensive resources have been spent on an

² See UNCTAD. June 2000. *Building Confidence: Electronic Commerce and Development*, 33.

³ This is the point made in Aaditya Mattoo and Ludger Schknecht. *Trade Policies for Electronic Commerce*. 20 April 2000. Photocopy. Washington: World Bank.

⁴ World Trade Organization. *Communication from the European Communities and their Member States on the WTO Work Programme on Electronic Commerce*. 9 August 1999.

⁵ *Ibid.*

issue that may not be resolvable, in that e-commerce products often span aspects of both goods and services.⁶

One possible compromise between the European Union and United States on this issue would be to classify digitized products as services, but to make all such products subject to most-favored nation and national treatment provisions; on its face, this would transform GATS commitments into something similar to GATT. A somewhat different compromise that also would be liberalizing, sidesteps the classification issue. Following the basic commandment of liberalization under the WTO, members should follow the course of most liberal treatment of e-commerce transactions, either under GATT or GATS, particularly when a specific transaction does not fit neatly within a negotiated service sector commitment.

Where confusion exists on the application of these agreements to electronic commerce, the most liberalizing treatment should prevail. In some cases, this could mean that electronic delivery of goods and services would be treated more favorably than other modes of delivery as currently scheduled in GATS. For example, digitized software could be sold over the Internet without incurring customs duties applied to “shrink-wrapped” product. Or, insurance products could be sold over the Internet even if the physical presence of a foreign insurance firm had not yet been scheduled for liberalization under GATS. Or, an architectural drawing could be transmitted between offices so long as the licensing agency applied a mutual recognition agreement. This liberalization bias engendered by electronic commerce would act as a positive force, stimulating further the development of electronic commerce, as well as encouraging deeper liberalization and deregulation throughout the economy.⁷

On the Issue of Work Program

WTO members need to decide the modalities for continuing the WTO’s work program on electronic commerce. It is clear that members need time to debate how electronic commerce issues are unique, yet also part of the existing WTO mandate for liberalization. The current WTO work program has just scratched the surface of understanding how electronic commerce is changing the global economy.

⁶ For a further discussion of the economic characteristics of e-commerce products, see chapter 2 of *Global Electronic Commerce: A Policy Primer*, by Catherine L. Mann, Sue E. Eckert, Sarah Cleeland Knight. July 2000. Washington: Institute for International Economics.

⁷ According to other students of this topic, such an approach would imply a reneging on GATS commitments agreed to in the Uruguay Round. See William Drake and Kalypso Nicolaidis, *The Information Revolution and Services Trade Liberalization After 2000*. Photocopy prepared for “Services 2000: New Directions in Services Trade Liberalization. 2 June 1999. See also Claude Barfield and Mark Goombridge, *E-Commerce and the GATS 2000*, photocopy, June 1999, American Enterprise Institute.

Yet the institutional aspects of how the work program should be revived, as well as its coverage, remains unclear. The difference between the United States and the European Union with regard to classification is reflected in different suggestions for the work program. The European Union asserts that because all electronic deliveries are services, the work program must proceed under the auspices of the Services Council. In contrast, to promote the cross-cutting nature of electronic commerce, the United States has proposed that a “non-negotiating working group” be set up in the WTO’s General Council.

The United States and the European Union also differ with regard to what issues the work program should consider. The European Union wants the work program to have a more extensive coverage of trade-related aspects, including authentication, contracts, privacy, consumer protection, and content. The United States, on the other hand, asserts that these issues are already being addressed through other international groups such as the Global Business Dialogue on E-Commerce, the OECD, UNCITRAL, WIPO, and others.⁸

A future WTO work program on electronic commerce should have the following two features: First, the work program should be constituted under the General Council rather than fragmented throughout the WTO, and rather than proceeding under the auspices of the Services Council. While input from the different councils and committees is important, the cross-cutting nature of electronic commerce means that leadership from the General Council is key. Moreover, close coordination of the work program under the General Council will help developing countries, which have smaller negotiating staffs, participate more fully. In addition, it is quite clear that this work program should proceed as a “non-negotiating” forum, as the United States has suggested. Mixing education and negotiations is a recipe for failure of both.

Second, private sector participation has been the hallmark of all the regional trade forums’ discussions of electronic commerce (including those proceeding under APEC and FTAA). The private sector is leading the way in setting global technological standards for electronic commerce; it can also help resolve policymaking concerns such as tax administration and privacy protection. The contribution the private sector can make to the WTO work program is therefore vital.

The Liberalizing Potential of Electronic Commerce

At the November 1999 Seattle Ministerial, there was a general convergence of views that WTO members should continue to refrain from imposing new barriers to electronic commerce. Had the

⁸ David Aaron, speech on the US objectives for the Seattle Ministerial to the Institute for International Economics, 26 October 1999. While this may be true, clearly it is superior to gain the benefits of liberalization than to spend resources on trying to avoid it.

overall package of issues regarding a new round been resolved, it would likely have included an e-commerce statement that extended the moratorium on duties, as well as reinforced the principle of forbearance regarding regulation of e-commerce. What that would mean in terms of classification, however, was and has continued to be side-stepped. With prospects for the resolution of this issue dimming, the different approaches taken by the United States and the European Union are hardening rather than converging.

WTO members face an important watershed—to establish a liberalizing environment in which electronic commerce can thrive or to limit its potential by enmeshing it in the fragmented and ill-liberal schedules of GATS commitments. The stakes are enormous. In the United States, where electronic commerce has its strongest hold, the information technology sector contributes to approximately eight percent of the economy and over the last four years the output of IT-related industries has contributed to more than one-third of the growth of real output for the US economy.⁹

Such gains are available to all countries, not just first-users like the United States and Europe; liberalization via electronic commerce is not a “zero-sum game.” In fact, electronic commerce offers particular promise to developing countries. Market innovations and improved market efficiencies gained through electronic commerce and its prerequisite infrastructures will have the greatest impact in those sectors and countries where coordination and transactions costs are highest. Research suggests that comprehensive liberalization of the services on which e-commerce depends—and which would be liberalized by the approach advocated here—could raise global GDP by 4 to 6 percentage points, as well as raise the long-run global growth rate from 3.2 to 5.0 percent.¹⁰

The failure to acknowledge the way electronic commerce fully integrates both services and goods sectors, to treat it as a separate sector, or to tax it as a service will undermine the WTO objective of liberalization; will hinder the exploration into new processes, products, and markets; and will squander the opportunity to leap forward in economic development.

TAX ISSUES¹¹

“Death and taxes...”. It should come as no surprise that the question of how the Internet and electronic commerce will affect taxes has received such early and intense policy attention. Most analyses of e-commerce and tax tend to focus on the specifics of how to implement existing regimes

⁹ See the Department of Commerce’s *Digital Economy 2000* (June 2000) at www.ecommerce.gov/ede for a comprehensive study of the impact of information technologies on the US economy.

¹⁰ See *Globalization of Services: What has happened? What are the implications?* by Gary Clyde Hufbauer and Tony Warren, Working Paper no. 99-12, Institute for International Economics, October 1999 and OECD, *The World in 2020: Towards a New Global Age*, Paris: OECD, 1997. See also, Martin Brookes and Zaki Wahhaj, *The Shocking Effect of B2B*, Goldman Sachs Economics Paper no. 37, 3 February 2000.

¹¹ This section draws on chapter 6 of *Global Electronic Commerce: A Policy Primer*, op cit.

given the changing environment. This is understandable since business tax accountants and government revenue authorities have to deal right now with the very real questions of, on the one side, what taxes do I owe to whom, and, on the other side, how much revenue are we likely to receive into government coffers.¹²

Governments generally do not want to take precipitous action when it comes to tax regimes. Maintaining an environment with clear and certain rules is important for business, consumers, and government. Policymakers see the potential for an erosion of their tax revenue, so are concerned, although calculations suggest that revenue losses are likely to be small.¹³

The evolving Internet marketplace has some important attributes that are of importance for tax regimes: Global reach; value-creation through information rich bundling of products in time and space; fragmentation of the production process to far-flung locations. Moreover, greater mobility and potentially greater anonymity of economic activity among participants in the Internet marketplace are of particular salience for tax. All told, e-commerce and the Internet challenge tax regimes that build from identifiable cross-border flows, that depend on transactions-based value-added schemes, or that allocate income earned based on “permanent establishment”.

Among international organizations, the OECD membership, in conjunction with non-member governments and private sector groups representing business and tax accountants, has been analyzing since 1997 how electronic commerce might impact international and domestic taxes. The outcome of that effort was the “Tax Framework Conditions” which reaffirms five key principles that guide governments generally in the application of taxes within the overall regime: neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility.¹⁴ In their conduct, tax neutrality, and perhaps fairness, appear to be the overarching principles for policymakers as they face e-commerce, although their interpretation of neutrality has yielded different outcomes.

The conclusion from the OECD’s initial assessment was that, generally, existing domestic and international tax systems could cope with the networked world.¹⁵ The areas targeted for further

¹² See *International Tax Review*, September 1999, for a review of how the following countries and regions are addressing interpreting existing tax law for electronic commerce: Australia and New Zealand, Canada, Germany, India, Ireland, Israel, Japan, Latin America, the Netherlands, Singapore, South Africa, United Kingdom.

¹³ Efforts to measure the potential loss of tax revenue are difficult because of dynamic response. For the United States, Austan Goolsbee and John Zittrain, “Evaluating the Costs and Benefits of Taxing Internet Commerce,” mimeo, University of Chicago, May 20, 1999 calculate a loss over the next few years of less than 2 percent of sales tax revenues. For the full range of countries around the world, Susan Teltscher, “Revenue Implications of Electronic Commerce: Issues of Interest to Developing Countries,” mimeo, UNCTAD, April 2000, also finds loss of tax revenues of less than 1 percent overall, although the figure is higher for some countries.

¹⁴ http://www.oecd.org/daf/fa/e_com/e_com.htm#top_e_commerce.

¹⁵ OECD, Committee on Fiscal Affairs. 1997. *The Communications Revolution and Global Commerce: Implications for Tax Policy and Administration*.

examination in the area of indirect taxation were cross-border application of consumption and value-added taxes, particularly given the different treatment of goods and services by governments. In the area of direct taxation, the OECD's Model Tax Convention (which serves as the basis for many bilateral international tax treaties)¹⁶ was generally viewed as applicable, with further analysis targeted at how electronic commerce activities might be treated under the rules of permanent establishment, how transactions might fall into business profits vs. royalty income, and how transfer-pricing rules might be affected. In fact, the areas that the OECD determined would require additional analysis are exactly the areas where governments are trying to extend existing tax law to e-commerce transactions, leading to inconsistent treatment of transactions, both within countries and across their borders.

US and EU Approaches to Indirect Taxation

Many tax systems depend on indirect taxes, such as sales taxes, value-added taxes (VAT) or goods and services taxes (GST) to raise a substantial share of government revenues.¹⁷ Both the United States and the European Union have been struggling with how to apply sales and VAT to e-commerce transactions, both within and across borders.¹⁸ Neither body fully recognizes that decisions taken in the domestic arena have implications for cross-border application of these types of taxes. Inconsistent tax treatment of transactions between the United States and the European Union, and within each country as well, already has surfaced.

In the United States, when the Congress passed the Internet Tax Freedom Act in 1998 (which kept domestic Internet transactions free from any "new" taxes for three years but did not revoke existing sales or use taxes), it mandated review of the implications of electronic commerce for domestic sales taxes. A majority of members of the Gilmore Commission proposed (they could not formally recommend to Congress, because no super-majority view was agreed to) that digital products downloaded over the Internet (including software, books, or music) should not be taxed.

¹⁶ The OECD Model Tax Convention is a blueprint that many countries have used as a framework for bilateral tax treaties, which apportion tax responsibility and revenue so as to avoid double taxation of income earned through foreign investment. An overview is available at <http://www.oecd.org/daf/fa/treaties/treaty.htm>. See also http://www.oecd.org/daf/fa/material/mat_07.htm#material_Model for the most recent information on the articles of the model convention.

¹⁷ In the OECD, all the countries except the United States have or will soon have a VAT/GST system. In the countries of the European Union, VAT revenues account for about 30 percent of total tax revenues. In the US states, sales and goods taxes account for about 12 percent of total revenues, but range to much higher percentages in some states.

¹⁸ The VAT is a tax on supplies of goods and services applied at all stages of the production process. It is charged by the supplier and then credited by the users of the inputs in the course of doing business. Each transaction leaves an invoice path, so the VAT system essentially relies on "double-entry" book-keeping by VAT-registered businesses on both sides of a transaction. The final consumer is not a VAT-registered entity, so ultimately pays the tax. The US sales tax system is different in that final users (usually retail) pay the taxes,

Moreover, in the interests of tax neutrality, their tangible equivalents also would be tax exempt. This represents a “harmonizing down” approach, which could generate inconsistent treatment of purchases over the Internet via and through other means for products not explicitly exempted. While still being reviewed, one objective of this proposal was to encourage states and localities to harmonize their own rates and reduce the myriad state and local taxes (some 30,000 within the United States) which are both administratively cumbersome and encourage tax-strategizing behavior.

In contrast to the United States, the EU tax authorities are drawing a bright line between goods and services purchased over the Internet, and to a greater extent than the United States already have captured these transactions in their tax orbit. All electronic transmissions (those under the general term “soft goods”, such as software, books, or architectural drawings) have been deemed services and, therefore, should be taxed at the appropriate VAT rate.¹⁹ Whereas the European Union ruling would seem to simplify and increase certainty in the tax environments, there are many different rules governing applicable location and rates for taxing services so the simplicity is an illusion.

Moreover, recognizing the cross-border nature of Internet activity, the European Union has proposed that businesses both within and outside the European Union apply, collect, and remit VAT taxes on products (including software, books, and music) purchased or downloaded from the Internet by non VAT-registered entities (which are usually individuals).²⁰ The European Union has suggested that non-EU firms should establish their tax identity within an EU locality in order to determine which rate of tax to charge when selling such products business-to-business.²¹ In essence, using the argument of tax neutrality, the European Union is “harmonizing up” by applying service-VAT rates to sales of all digital products and is proposing that non-EU firms become EU firms to establish a tax presence even if they do not need to establish such a presence for any other economic reason.

E-commerce Challenges to Indirect Taxation

Fifty years ago, VAT was a simple system to administer and audit—thus its popularity as a tax system. However, times have changed, and by and large, VAT has not. Services transactions unravel

principally only on tangible property (with exceptions) and usually not on services. Business inputs generally are exempt from the tax.

¹⁹ For an overview of the treatment of e-commerce transactions see <http://europa.eu.int/scadplus/leg/en/lvb/l31041.htm>.

²⁰ See “Europe Plans to Collect Tax on Some Internet Transactions” by Edmund L. Andrews, *New York Times*, 2 March 2000; <http://www.nyt.com/library/tech/00/03/biztech/articles/02tax.html>. The amount to date of “lost” tax revenue from such cross-border sales appears by all accounts to be miniscule. Of greater import, it appears, is the argued disadvantage of bricks-and-mortar stores vis-à-vis on-line merchants who have not had to collect VAT.

²¹ Document of the EU commission regarding electronic commerce and indirect taxation: <http://www.europa.eu.int/scadplus/leg/en/lvb/l31041.htm>.

the clarity and simplicity of the VAT system, and it is instructive to examine this more closely for the difficulties that e-commerce, when it grows more significant, will create for a VAT system.

For many services, VAT is collected by the supplier under the presumption that the customer for the services needs to be relatively geographically close to receive the services. However, for intangible or intellectual services (copyrights, licenses, advertising, professional and consultant services and financial transactions) VAT is already paid by the customer. If the customer is not VAT registered, he is supposed to declare the transaction and pay the tax.²² Certain types of service firms, including financial intermediaries, and looking forward, possibly Internet service providers, often cannot recover VAT and end up paying it as if they were final consumers.

If digitized products are treated as services, the inconsistencies created by the VAT increase. Some products, such as books and music, when they are purchased as tangible goods have lower VAT than if they are digitized and therefore treated as services. On the other hand, a digitized product that is downloaded from a site outside the European Union often generates no tax revenue unless the customer declares and pays it.²³ In this simple example, a single product yields three possible tax rates depending on the form and geography of the transaction—hardly the OECD goal of “neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility”.

Under these circumstances, it is not surprising that businesses expend time and effort tax strategizing. For example, Internet service providers are the “portal” or starting point for many activities on the Internet. Looking forward, Internet service providers (ISPs) could end up playing the role of tax collector (as the delivery man does with flowers) or might have to pay the service VAT themselves (as in the case of financial intermediaries). The clear incentive is to move the ISP activities off-shore so as to blur responsibility for paying or collecting VAT, and indeed some European ISPs have been set up in low-tax jurisdictions.

The issue facing the United States vis-à-vis sales taxes offers similar examples of tax strategizing. For example, BarnesandNoble.com is incorporated as a separate business entity from the parent stores so as to avoid “nexus” (or physical presence) and the requirement to apply sales taxes on all purchases through the Internet. However, because these entities must remain separate, business synergies and brand-extension cannot be exploited. For example, someone who prefers to shop and buy a book on-line (because they like the additional features of book reviews available on-line) cannot go and pick up the book at a local store branch.

²² OECD, “Electronic Commerce: The Challenges to Tax Authorities and Taxpayers” An informal Round Table Discussion between Business and Government, Turku, Finland, 18 November 1997, 15-19.

²³ Pending the acceptance of the proposal of the European Union, discussed earlier.

In sum, the Internet marketplace characterized by cross-border trade in information-rich products will increasingly strain systems of indirect tax both because of diminishing coverage and because myriad tax rates are costly to administer and invite strategizing. In particular, economic transactions created from various international and domestic locations make it increasingly difficult to make sense of or to apply the credit-invoice method of accounting for VAT at each stage of the value-chain; there is not a value-chain but a network creating value. Because governments do need to raise revenues, they need to look at other ways of doing so.

US and International Approaches to Direct Taxes

The other major form of taxation is direct taxation of labor and business income. Whereas sales and use taxes have received the most attention, properly accounting for the global distribution and origin of business income is an on-going tax issue facing policy-makers in both industrial and developing countries. E-commerce will make this issue even more salient.

In the United States, income taxes account for 60 percent of total tax revenues at the federal level, with about 80 percent of that raised from individual income taxes. As a general statement, income earned by US firms and individuals are taxed at US rates regardless of where the income was earned—so-called “residence” based taxation. Developing countries to varying degrees also depend on income taxes, including taxation of income earned by non-resident firms operating in the country—so-called “source” based taxation.

Because source and residence based taxation schemes must yield double-taxation of some income, bilateral and multilateral tax treaties attempt to allocate income earned to the source and to the residence according to “permanent establishment” and give tax credits accordingly to minimize double-taxation.²⁴ Under the OECD Tax Convention, the authority to tax income earned in a particular country is limited to income earned by a “permanent establishment” in that country. International income tax treaties are designed to allocate income among the parties to the treaty and to avoid double-taxation of income streams. However, many non-OECD countries do not subscribe to this Convention, are not participants in international tax treaties, and view income earned by any assets in their country as falling within their tax jurisdiction.²⁵

Moreover, the “character” of income earned (business profits or royalty income) is not classified in a consistent manner across countries. In March 2000, the OECD Technical Advisory Group (TAG), which included OECD member governments, non-member governments, as well as

²⁴ See Aaron Lukas, *Tax Bytes A Primer on the Taxation of Electronic Commerce*, Cato Institute, 17 December 1999, 26-27, and Judd A. Sher, A Band-Aid or Surgery: It is time to evaluate the health of the permanent establishment concept, *Tax Management Journal*, Washington, 9 July 1999, 415-26.

²⁵ Ned Maguire, Taxation of E-commerce: An Overview, *International Tax Review*, 3-12.

business advisory groups, tabled for comment “Treaty Characterization of E-Commerce Payments.”²⁶ It does not resolve the issues, although it presents the majority and minority views on how to treat income earned by selected e-commerce transactions. Notably, the TAG’s mandate was to interpret existing tax codes, not modify the tax code.

E-commerce Challenges to Direct Tax Systems

The characteristics of value-creation in the global, networked marketplace will increasingly strain the definition of permanent establishment, and will make the allocation of income to different governmental jurisdictions increasingly difficult. The threat of double taxation increases, along with the incentives for non-compliance, particularly by mobile firms.

The definition of a permanent establishment rests on two foundations: fixed place of businesses or physical presence²⁷ and dependent agents who, among other activities, must be able to conclude contracts on behalf of the corporation as a normal course of business. Permanent establishment runs into trouble in the networked world from the fundamental factors that define this marketplace.

First, for information-rich and network-based production, physical presence is much less important for value-creation (consider software code). Second, the mobility of information-based firms further undermines physical presence as well as calls into question the characterization of dependent agents. Finally, the complexity of Internet marketplaces (consider the examples of virtual auctions and exchanges for business-to-business transactions) challenges the notion that there is a single “head” to the organization which could help define either physical presence or dependent agent.

Most practical attention to this question has focused on Web sites and servers: do they constitute physical presence if located within a country or do they constitute a dependent agent even if they are not located in a country but are “open for business” there? There is no consensus yet, but arguments revolve around the range of activities that a user can do on a Web site and the extent to which a server is tied to a firm.

Servers control data flow among computers on a network and Web sites are the presentation of information or locus of activity for a firm. Data flows can be initiated by the server and channeled to a Web-site (for example, targeted advertising) or can be remotely accessed by the user (for example, information gathering). Does either of these activities represent permanent establishment?²⁸

²⁶ See <http://www.oecd.org/daf/fa/treaties/tcecommpay.htm>.

²⁷ However, facilities for inventory or for collecting information do not confer physical presence.

²⁸ The analogy for the US sales tax is nexus.

If the server or Web-site merely broadcasts information or advertising, then neither contacts the purchaser, but the purchaser contacts the Web site that then contacts the server. In this case, it would seem impossible that the physical location of the server and/or the Web-site would constitute a dependent agent or nexus.

Looking forward, however, what if the server can individually target a consumer in another country? Does this change the notion of permanent establishment, dependent agent, or nexus? Consider two buyers both from the same country and buying the same product and digitally downloading it from the server. Suppose one buyer was contacted individually by the server in a targeted effort; the other buyer happened upon the Web site and downloaded the product. How can it make sense (and what kind of incentives result) when the two purchases are afforded different tax treatment? One can imagine a sort of “route-around” service whereby the server would automatically route purchases through the least taxed environment, much as “call-back” telephone services re-route and reduce telephone charges for users in countries with high telephone tariffs.

Two other issues facing the direct tax system on corporate income are treatment of royalty income and transfer pricing. Income earned from sales and income earned from licenses or royalties are taxed at different rates, and the nature of network transactions that give rise to royalty income differs by country, as discussed earlier. The higher information content of network products highlights these disparities and creates incentives for tax avoidance.

Transfer pricing is potentially a larger issue in the Internet marketplace, but not necessarily as a form of tax avoidance. Transfer pricing, or more generally the pricing of transactions at non-transparent, arms-length rates, is more likely in the context of complex information-based products where network effects are a key component of prices. Or consider auction-type environments where prices are endogenous to the number of participants in the market.²⁹

Technology and the Effort to Shore Up Existing Tax Systems

Is technology itself the answer to shoring-up the existing tax systems? Governments could use the Internet’s information-tracking capability to track the origin and destination of each transaction or of each element of a product bundle, and apply the appropriate tax. Would such application of technology to satisfy the needs of the tax authorities violate other rights of the citizen? Would it require extra-territorial reach of the taxing authority or lead to trade barriers at the border?

One approach to improving the yield of existing tax regimes focuses on proprietary software and “trusted third parties” (TTP) to stand between the buyer and seller to calculate, collect, and remit

²⁹For more on practical analysis of existing transfer pricing rules, see Brad Rolph and Jay Niederhoffer, Transfer Pricing and E-commerce, *International Tax Review*, September 1999, 34-39.

the tax to the appropriate jurisdiction. In the United States, this proposal surfaced in the context of the Gilmore Commission and the investigation of alternative approaches to state sales-tax administration. The European Union proposed a narrow variant of this idea when it argued that international credit card companies should collect and remit VAT. More broadly, a World Tax Organization could be the venue for discussing these and other issues.³⁰

While technology and TTPs could be the tax collector, to do so with sufficient depth and care would yield a lot more information about the details of the transactions and the activities of the participants than when the retail store or delivery truck driver collected the VAT. An individual's identity and purchasing habits would be in the hands of a TTP. The information collected by the TTPs for purposes of business profits taxes could reveal details of proprietary business strategies or alliances. At least some of the TTPs would have to have international reach, since the most difficult aspect of e-commerce taxation comes from cross-border activities.

The dependence on TTPs to administer taxes raises numerous issues, going far beyond tax regimes, and with which governments already disagree. First, having a private institution administer taxes should give governments pause. If TTPs work for e-commerce, why not privatize the whole of the tax system? Second, what about the jurisdiction of such entities? They operate on behalf of a government, yet outside its political jurisdiction. Therefore, international agreements as to the scope of their activities would be required. Third, what about enforcement? In other contexts, such as the World Trade Organization, countries have found such inside-the-border interference by a multilateral authority to be anathema³¹; and the objective of this entity would be to tax!

Moreover, the European Union and the United States (and other governments as well) already differ over the cross-border transfer of data, particularly personal information (see more below). In the international tax context, the European Union would have to allow the collection of such data by the TTP. Yet the European Union has already put significant restrictions on the collection of such information by firms for commercial purposes. In contrast, the United States allows the collection of these data for commercial use, but prevents the US Internal Revenue Service from collecting such information as a matter of course.

The conflicts over what data would be collected for tax purposes could impact business strategies, much as tax-rate differences now do. Trying to fit Web sites or servers or royalties into the existing definitions of permanent establishment or character of income represents "fingers in the

³⁰ See Tanzi, Vito. 1999. Does the World Need A World Tax Organization. In Assaf Razin and Efrim Sadka, eds. *The Economics of Globalization*, 173-86. London: Cambridge University Press.

³¹ Consider the difficulties wrought in Seattle in November 1999 on issues of labor and the environment. Competition policy, another "inside-the-border" issue has regularly been rejected as outside the purview of the WTO.

dike.” As Internet products and activities increasingly are composed of information and intellectual property, the character of income will be more difficult to determine. As technology increases the range of delivery devices and Web presence for Internet activities to telephones and TVs, permanent establishment will be eroded by the realities of the Internet marketplace. Consequently governments need to look at single tax rates for all types of business income, and for ways to obviate needing to allocate income to different countries.

Alternatives—Labor Income Taxation

The new international marketplace is network driven and information rich. Value is created from around the globe in complex, real-time interactions. In contrast, tax and tariff laws are based on domestic jurisdiction, geographical boundaries, simplistic notions of the value chain, and contiguous production and consumption. The systems are static, founded on rules that are formed incrementally by case law or infrequent multilateral negotiations.

The validity of domestic-based tax systems increasingly is stressed by the global environment. Attention should focus on what an international-based tax system might look like. Incrementalism founded on current tax regimes will breed trade distortions, tax avoidance, and undermine the economic benefits that the Internet and e-commerce can bring to countries.

Complete review of the tax systems is therefore necessary. New ways of creating value and jurisdictional overlaps will demand more international cooperation and tax regimes that focus taxation on the bigger targets (income not transactions) and at the ultimate source of value (people not firms).

The human element is at the center of both government jurisdiction and global value added. Although e-commerce increases the mobility of much economic activity, people generally remain relatively less mobile than firms. Moreover, government services generally are targeted toward people within the jurisdiction and who vote. With these factors in mind, it makes sense to consider labor income taxation as a way to raise revenues and to differentiate legislation.

Labor income tax does not solve all problems. Evasion of such taxes is legendary, although technology should improve administration. Moreover, increasingly, global value-added can be created with the intellectual effort of labor without changing its geographic location (consider software for example). Governments should enlist the assistance of global firms in reporting wage and compensation data to them, which keeps the burdens of collection and enforcement with the government of the jurisdiction in which the people reside. Private firms should not be the taxing authority, but they should cooperate with it.

Overall, the new tax regime should have a lower and uniform rate on business earnings, a downward bias for tax rates on transactions, and broad-based taxation of personal income. A country's tax regime then would be differentiated by the preferences of its constituents for progressivity, as well as for tax rates and delivery of social services.

TREATMENT OF PERSONAL DATA ³²

With the many benefits of electronic commerce also comes the challenge of how to manage personal information. Electronic commerce creates information trails that track, collect, and compile customer information, thus providing vast amounts of information about the personal details of people's lives. Data collection on the Internet has become a widespread practice (and a big business), with 92% of all commercial Web sites engaging in some form of collection of personal identifying information.³³ While the tracking of personal information has been ongoing for years, through barcode scanner, credit cards and the like, what is fundamentally different about today's electronic world is the ease with which data can be manipulated and used for a variety of purposes.

While the online market is still growing, there are indications that consumers increasingly are concerned about the vast amounts of personal information available in the electronic world, and how it is used. According to a recent poll, 85 percent of those surveyed regarded the privacy of information transmitted online as the most important issue regarding the Internet (overtaking censorship as the most important issue).³⁴ If consumers are fearful that the information they provide online may be used inappropriately, they will hesitate to participate, thereby slowing the growth of electronic commerce and limiting the many benefits of its full realization.

Industry, on the other hand, in trying to produce better-tailored products, highly values the collection of information. Firms want to collect information from everyone, and will tend to ignore the entreaties of users who want less personal data collected. But industry does not want to scare away users, thereby reducing the benefits of detail that a cross-section of information will reveal.

How governments respond to this lack of consumer confidence – specifically, whether they adopt market-oriented or mandate-oriented policy approaches will have a significant effect on the future of electronic commerce. The key questions are: Will self-regulation and technical innovation

³² This section draws on Chapter 7 of *Global Electronic Commerce: A Policy Primer*, op cit.

³³ Georgetown Internet Privacy Policy Survey, <http://www.msb.edu/faculty/culnanm/GIPPS/mmexs.PDF>, prepared for the Federal Trade Commission's Report, *Privacy Online: A Report to Congress*, June 1998, available at <http://www.ftc.gov/reports/privacy2/toc.htm>.

³⁴ Press release of @plan, "@plan Internet Poll™ Reveals Privacy as Most Important Internet Issue Among Online Users", 6 March 2000; and John Schwartz, "Poll: Hack Attacks Dent E-Confidence", *Washington Post*, 2 March 2000. Similar figures have come out of other surveys. If anything, the percentage of people concerned about privacy has increased in the last several years.

meet the demand for privacy protection? If the answer is no, how can the threat to electronic commerce posed by government-mandated solutions be minimized?

The Market-oriented versus the Mandate-oriented Approach to Privacy

To the extent that there is international consensus on privacy protection, it generally centers on the OECD's "Guidelines on the Protection of Privacy and Transborder Flows of Personal Data." Issued in 1980, before the advent of the Internet, the OECD Guidelines embody well-established principles of fair information practices. At the 1998 Ottawa conference, for example, Ministers adopted the *Declaration on Protection of Privacy on Global Networks*, reaffirming their commitment to effective privacy protection and committing to "build bridges between different national approaches based on law and self-regulation."³⁵

Despite consensus on the OECD Guidelines, countries have implemented the principles differently. The European Union has taken a comprehensive approach, generally involving omnibus data protection legislation that governs the collection, use, and dissemination of personal information. Explicit laws require gatherers of data to register with government privacy offices and prohibit or impose limits on various data uses such as direct marketing that are routine in the United States. In 1995 the European Union adopted the "Directive on the Protection of Personal Information" (95/46/EC), which required EU member states to enact laws prohibiting the transfer of personal data to non-member states that fail to ensure an "adequate" level of privacy protection.³⁶ The Directive gives European consumers unprecedented control over the data collected about them and requires companies to get explicit permission from consumers before using personal data. European countries are still in the process of passing laws to implement the Directive, and questions persist as to the enforceability of the Directive since it is still to be implemented.³⁷

The United States has encouraged self regulation in which companies and industry bodies establish codes of conduct. In addition, there is specific legislation to protect certain areas such as financial information, information about children, and to restrict certain practices such as unauthorized use of IDs and passwords. The US system polices self-regulatory commitments through oversight and enforcement by the Federal Trade Commission (FTC).

³⁵ See "Progress Report on the OECD Action Plan for Electronic Commerce", 23 September 1999 at http://www.oecd.org/dsti/sti/it/ec/act/paris_ec/pdf/progprep_e.pdf.

³⁶ See http://europa.eu.int/eur-lex/en/lif/dat/1995/en_395L0046.html for the text of the Directive on the Protection of Personal Information.

³⁷ See Swire, Peter P. and Robert E. Litan. 1998. *None of Your Business: World Data Flows, Electronic Commerce, and the European Privacy Directive*. Washington: Brookings Institution Press, for a thorough discussion of issues related to the European privacy directive.

Consistent with the expected response to market-driven incentives, the self-regulatory approach has yielded user-friendly mechanisms for facilitating awareness and the exercise of choice online, private sector adoption and adherence to fair information practices, and dispute resolution procedures. The objective of these efforts is to ensure that consumers know the rules, companies comply with them, and consumers have appropriate access to personal information in companies' possession, as well as recourse when injuries result from noncompliance.

A number of initiatives to protect private information transmitted electronically have been organized by private sector groups, led by the Online Privacy Alliance. Companies and business associations have adopted guidelines for posting privacy policies online, and led a campaign to inform Internet users how to shield their personal data on the Internet. Several organizations such as *BBBOnline* and *TRUSTe* provide an enforcement mechanism through the use of Web-site privacy seals. Nevertheless, too many "choices" and "information" facing users may undermine the market-oriented approach to privacy protections.

US and the EU Efforts to Bridge the Different Approaches

The cross-border implications of alternative data privacy approaches are large. If US firms were embargoed from cross-border data flows, the economic effect for US firms would be substantial and fewer products would be tailored to European consumers, thus reducing the benefits of electronic commerce for them. To prevent this outcome, the United States and European Union have negotiated for more than a year and half following the Directive's implementation in 1998.

The so-called "safe harbor" agreement (agreed to on March 14, 2000) includes principles, the effect of which is to allow American firms receiving personal data from the European Union to subscribe to self-regulatory organizations such as *BBBOnline*, provide reports to a European data protection authority, and be subject to legal action by the US FTC if they do not adhere to the rules.³⁸ Europeans will continue to be able to inspect and change data that are collected about them, and to veto any transfer to third parties.³⁹

Despite the accord, the issue is not fully resolved. Key questions concerning compliance, enforceability, and the effect on non-US firms must still be addressed. The compromise also has been criticized by both consumer and industry groups – for lessening protections Europeans are guaranteed by their law, and for importing EU privacy laws into the United States. The National Business Coalition for E-Commerce and Privacy has raised questions of national sovereignty and characterized

³⁸ Brandon Mitchener and David Wessel, "US in Tentative Pact Protecting Europeans' Privacy", *Wall Street Journal*, 24 February 2000.

³⁹ Glenn R. Simpson, "US, EU Negotiator Reach Agreement on Electronic Commerce Privacy Rules", *Wall Street Journal*, 15 March 2000.

the agreement as of kind of non-tariff barrier. The issue will be revisited as part of further negotiations with the EU to address data privacy for the financial services sector.⁴⁰ Thus, finding a bridge between these two approaches is necessary.

Economic Implications of the Two Approaches

Does the comprehensive model of the EU better protect privacy online, or is the combination of laws and self-regulation employed by the United States preferable since it allows for the private sector to continue to innovate in search of technologically superior solutions to satisfy government and consumer needs, as well as to bridge the different approaches across the Atlantic?

There is no one right answer. Privacy involves individual values and, more broadly, the ways in which different societies perceive themselves. Moreover, the economics of privacy in electronic commerce is marked by market imperfections, including the difference in market power between those collecting information (industry) and those using the Internet (individuals), and also by the divergence between social value of information and private value of information (public goods or spillovers).⁴¹

When social and private values diverge, intervention through government mandate is one approach, although it also is possible to allow the market itself to seek solutions that close the gap between social and private valuation of information. The economic theory of the second best shows that the market and mandated solutions cannot be ranked as to which one comes closer to achieving the highest levels of economic well-being for a country as a whole. And in neither case are all individual demands met. However, government mandates as to how industry should treat personal data likely will mean less innovation by industry and, as a result, an Internet that might not promote individualistic user values as much as if government intervention was avoided.

On the other hand, increased government intervention may meet important societal demands yielding pressures both political and for expediency--even if the result is slower development of electronic commerce and possibly Balkanization of the Internet environment to the detriment of everyone. Can the threat to electronic commerce of such government intervention be managed and, hopefully, minimized?

⁴⁰ US negotiators had argued that financial services should not be subject to the data privacy accord since there is specific legislation, the Financial Service Act that provides for “adequate” protection. EU officials, however, did not agree that financial services are excluded from the safe harbor arrangements. See *Inside US Trade*, 31 March 2000.

⁴¹ This “economics of information” in the context of privacy is addressed in more detail in Chapter 2 of *Global Electronic Commerce: A Policy Primer*, op cit.

Technology as a Solution?

Technology is both the origin of the problem and an important way to ameliorate it. Without question, the increasingly sophisticated means of collecting personal data exacerbates privacy issues. Yet, increasingly technology empowers individuals to make their own choices regarding the degree of privacy they demand. For example, the World Wide Web Consortium (W3C)'s Open Profiling Standard allows users to determine what type of information to reveal to Web sites. Widely available and inexpensive software programs such as Guard Dog, Internet Junkbuster, Anonymizer, and others permit users to block sites from sending cookies.

When finalized this year, P3P, a specification under development by W3C, will translate privacy statements on Web sites into machine-readable form. Users will then be able to specify the types of information they are willing to divulge, as well as whether such information can be shared with third parties. When users visit a site that fails to meet the user's criteria, notice is given, thereby allowing users to block access of such sites. It represents an important development in allowing privacy protections to be built into the online experience. Microsoft's announcement that it would include P3P in free Internet tools to be released in 2000 may go a long way in promoting its widespread use.

Technology is not "the" answer to the privacy dilemma. It is a tool that allows individuals to make decisions based on their own preferences. The self-regulatory approach generates greater incentives for business to find these user-self-directed approaches to solve the privacy problem. The private sector working with these user-directed approaches can bridge the differences in governmental approaches that serve the majority within each country, while also satisfying the needs of the individualistic user within each country.

CONCLUSION: JURISDICTIONAL OVERLAP AND ISSUE CONVERGENCE

Trade, tax, and privacy are three areas where the potential conflict between the global economic marketplace with the local governmental jurisdiction is most obvious. What should policymakers do? Ignore the global marketplace and impose national regulations and mandates? Ignore their national responsibilities and open the border wide with no regulations? Obviously neither is satisfactory.

Policymakers should have objectives and do have influence. But in this fast-paced technologically dynamic environment they must avoid predetermining approaches or codifying exclusionary rules. The key is to create incentives for the private sector to help manage the problems of the jurisdictional overlap. Because the private sector reaps the rewards from network benefits as well as niche markets, it will seek interoperable approaches to solving the problems of jurisdictional overlap. Interoperable policies allow national policies to reflect differences in national attitudes yet

also allow the network benefits of the global marketplace to shine through. Imposing policies of rules and mandate run the risk of locking in sub-optimal solutions. Instead, policymakers should pose objectives (and backstop them with enforcement) which helps to create the right incentives for firms to respond to this challenge and thus work toward a solution instead of working to evade the national constraints.

In addition to cross-border jurisdictional overlap, there is issue convergence and policy overlap within countries. Policies within a country must be more carefully meshed with each other with an eye toward consistency in the face of the forces of electronic commerce. For example, the decision of how to classify trade transactions impacts the policy choices on tax regimes; the question of whether to use TTPs to support the existing tax regime affects the policies toward treatment of personal data; the issue of whether to mandate a particular approach to personal data can threaten a trade barrier. The policy toward handling one issue, even within the national context, has implications for the policy set that is available to policymakers on other issues.

To be concrete, if the European Union wants to treat all e-commerce transactions as services, so as to preserve the VAT system, this almost necessarily leads to the decision to classify e-commerce as services and put it under the GATS umbrella. If the United States wants to use TTPs to assist in supporting the current system of sales-and-use taxes across state lines, it must allow the collection of much more data for tax purposes than is currently allowed by law. If the European Union mandates a particular approach to managing personal data, and does not allow any private sector bridge to the US market-oriented approach, the United States might threaten a trade suit.

In sum electronic commerce is causing increased overlap in areas of policymaker jurisdiction not only across borders, but within countries as well. How policymakers approach the Internet environment is crucial for whether citizens and businesses will be able to participate in and benefit fully from this new global environment. Policymakers can use the power of innovation to improve how businesses and consumers interact within the Internet environment; or they can regulate and undermine innovation. Policymakers should work with the power of the new technologies, being mindful of how it changes the environment in which they do their business, both at home and abroad.