

The Taxation of Electronic Commerce: Background and Proposal

Charles E. McLure, Jr.
Hoover Institution
Stanford University

Prepared for discussion at a Hoover conference on "Public Policy and the Internet: Taxation and Privacy," October 12, 1999; forthcoming in Nicholas Imparato, editor, *Public Policy and the Internet: Taxation and Privacy* (Stanford: Hoover Press).

[Note: Only Sales and Use Tax Materials Included.]

The Taxation of Electronic Commerce: Background and Proposal

Charles E. McLure, Jr.
Hoover Institution
Stanford University

Survey of Issues

The rise of electronic commerce raises fundamental questions of tax policy. Most fundamentally, should electronic commerce be taxed? Is the answer the same in the short run as in the long run? How about arguments that electronic commerce should not be taxed during its infancy? How would the exemption of electronic commerce affect Main Street merchants? What are the implications for tax revenues of exempting electronic commerce? For the distribution of income?

Whether a decision is made that electronic commerce should be taxed or should not be, additional questions arise. If electronic commerce is to be taxed, how should it be done? Can electronic commerce actually be taxed as it should be? What are the technological, legal, and political impediments to taxing electronic commerce? What simplifications of tax laws and administration are required for taxation of electronic commerce? Are there “technological fixes” for the problems?

If it is decided that electronic commerce should not be taxed, what technique should be used to effect the exemption? How is electronic commerce defined? How can the benefits of an exemption be limited to the intended beneficiaries?

There are also questions of relationships between governments. What are the implications for fiscal federalism of exempting electronic commerce? For international fiscal relations?

This chapter provides background for a discussion of these and other issues and summarizes some of the author’s views. While the chapter touches on questions of international income taxation, it focuses primarily on the state sales and use tax. (A use tax is levied on the purchaser’s use of a taxed good in the taxing state; it is intended to compensate for the constitutional prohibition against requiring vendors to charge sales tax on interstate sales.) Most of the first part of the chapter is intended to provide a neutral survey of issues, but at times — commonly quite clear to the reader — it expresses the author’s personal view that electronic commerce should not permanently be exempt from sales and use tax. The second part reproduces the proposal the author presented to the Advisory Commission on Electronic Commerce in December 1999. It indicates how he thinks the issues raised in the first part should be resolved. The third part, a concluding commentary on the application of state sales and use tax to electronic commerce, ends by

challenging state and local governments to simplify those taxes, so that collecting them would not unduly burden electronic commerce.

Types of Electronic Commerce Considered

Electronic commerce can usefully be defined as “the use of computer networks to facilitate transactions involving the production, distribution, and sale and delivery of goods and services in the marketplace.”¹

This chapter discusses three types of electronic commerce:

- commerce in *tangible products* (e.g., books, computers, and wine),
- commerce in *digitized content* downloaded from the Internet (e.g., software, music, games, and videos), and
- *Internet access*, which is usefully discussed with telecommunications, for reasons to be explained below.

The chapter does not consider the taxation of travel or of financial services, among the largest components of electronic commerce, because the issues encountered in these industries are unique to them.

Terminology. References to “remote sales” and “electronic commerce” are to transactions that cross state or national boundaries, as it is those that raise questions of the constitutional taxing powers of the states and of international relations in the tax field. For most purposes traditional remote commerce means mail-order, but it also includes sales made across the counter for shipment to another state, as well as telemarketing and TV shopping. Electronic commerce is a (non-traditional) form of remote sale.

Arguments for and against Preferential Taxation of Electronic Commerce

Some believe fervently that, as a matter of principle, electronic commerce should not be taxed, while others believe as strongly that it should be.²

For Preferential Tax Treatment. Arguments for preferential tax treatment of electronic commerce are not always well-specified. One encounters the following.

Fear that a “bit tax” might be imposed on every bit of information transmitted over the Internet — and that a variety of other novel taxes might be targeted at the Internet — gave rise to the cry of “no new taxes” on the Internet.³ Logically implicit in this view, but rarely explicit, is agreement that existing taxes can and should be applied to electronic commerce.

Some, making an “infant industry” argument, favor no taxes whatsoever on the Internet, justifying preferential treatment as a way to stimulate development of electronic commerce.⁴ They suggest that taxing electronic commerce would throw sand in the gears of economic progress. To support their position some cite recent studies by Austan Goolsbee

of the University of Chicago reporting on the importance of network externalities and the negative effects taxation has on electronic commerce.⁵ They generally do not specify whether preferential treatment is to be temporary or permanent, although Goolsbee clearly advocates at most a temporary moratorium on taxation of electronic commerce.⁶

Still others stress that, to the extent electronic commerce involves interstate trade, it would be protected from the duty to collect use tax under the U.S. Supreme Court decision in *Quill* (described and discussed below). This view neglects to mention that the Court indicated clearly that the Congress has the constitutional power to over-ride this decision.

Finally, some take a “feet-to-the fire” approach, arguing that if electronic commerce is tax-free, local merchants will be more likely to pressure their legislatures and governors to keep taxes down.⁷ This is a special case of the theory being espoused by many conservatives that “a good tax is a bad tax and a bad tax is a good tax.” In that view it would be a mistake to reform the sales tax to conform more closely to the conceptual ideal or to make it simpler; the worse the tax, the more pain it inflicts, and the more difficult it is to finance big government. One problem with that view is the fact that the taxation of business inputs under the present arrangements results in a substantial hidden tax burden. It is estimated that as much as 40 percent of sales tax revenues come from sales to business.⁸

Against preferential tax treatment. Opponents of preferential treatment of electronic commerce generally agree that there should be no *new* taxes on the Internet and no taxes that discriminate against electronic commerce, but believe that electronic commerce should be taxed like other commerce. They oppose preferential treatment on several grounds.

First, they argue that, by substituting the judgement of politicians, bureaucrats, and industry spokespersons for that of the market, preferential treatment of electronic commerce would distort economic decision-making and create economic inefficiency, as tax advantages may cause more costly e-commerce alternatives to be chosen over traditional forms of commerce. They acknowledge, without regret, that electronic commerce may supplant traditional commerce in some sectors, for example, because of its convenience. But they do not want to see traditional commerce shackled by the need to collect sales tax, while electronic commerce is not required to collect use tax. To them the Goolsbee analysis provides evidence of the economic distortion that would be created by not taxing electronic commerce while taxing competing activities. By supporting the “Appeal for Fair and Equal Taxation of Electronic Commerce,” which was presented to the ACEC on December 15, 1999 (and reproduced as an appendix to this chapter), 65 academic tax specialists, most of them economists, have indicated opposition to a permanent exemption for electronic commerce.

Second, they argue that preferential treatment would be unfair. It would widen the “digital divide,” favoring those who are more computer literate and who have greater access to computers — and to the telephone lines and credit cards needed for Internet access — almost certainly the more affluent members of society.⁹ Perhaps worse, it would place Main Street merchants at a competitive disadvantage, relative to vendors in electronic commerce.

By comparison, equal treatment of electronic and non-electronic commerce would create a level playing field.

Third, they argue that preferential treatment of electronic commerce is not needed — that the growth of electronic commerce is not likely to be seriously hampered by taxation that creates a level playing field. They note the explosive growth of electronic commerce and the easy access to capital enjoyed by Internet ventures. More generally, they doubt the validity of “infant industry” arguments for preferential tax treatment.

Fourth, they note that there will be an increasingly important negative effect on revenues of state and local governments if electronic commerce is not taxed.

Fifth, they doubt that, once granted on “infant industry” grounds, preferential treatment of electronic commerce could easily be withdrawn.

Impediments to Equal Tax Treatment of Electronic Commerce

Even if it were agreed that electronic commerce and non-electronic commerce should be taxed the same, there are impediments to achieving this objective.

Technological/Administrative Constraints. The flagship cartoon of the Internet pictures two dogs sitting in front of a computer screen. One says to the other, “On the Internet, no one knows you are a dog.” This truth has fundamental implications for the implementation of tax policy, especially by market jurisdictions.

Tax administrators may not know the identity, or even the location, of the parties to a transaction conducted over the Internet. Indeed, vendors may not know the identity or location of their customers. The anonymity of Internet transactions seriously complicates both tax administration and tax compliance, if taxes are based on the destination of sales or the source of income.

Unlike tangible products, digital content does not stop at the border, the customs house, or the post office, and cannot be made to do so, at least with present technology. (Whereas both tangible and digitized products can be ordered on-line, only digitized content can be delivered on-line.) Moreover, since digital content can be reproduced without cost and is not warehoused, it is not possible to check production records or inventories to see how much has been sold.

Vendors of digitized content may be located in foreign countries (including countries not a party to tax treaties) and thus beyond the reach of tax authorities. Finally, payment for purchases in electronic commerce may be made with digital money that cannot be traced or with credit cards issued by financial institutions in countries with strict bank secrecy laws. (Digital money would be a credit balance purchased from a financial institution or other issuer; it would be especially useful to pay for small transactions, such as games or single plays of digitized music. It might be stored on “smart cards” similar to pre-paid phone cards that could be read by a computer or it might be transferred directly to a computer.) Where these four attributes (anonymity, digital a content, foreign vendor,

and untraceable money) are found together, effective tax administration may be almost impossible.

Legal Constraints. Laws specifying the taxation of electronic commerce are not being written on a clean slate; rather, they are being considered in the context of existing laws, agreements, and practices.

The state sales and use tax. Application of state sales and use tax to electronic commerce must be considered in the light of the decision of the U.S. Supreme Court in *Quill*¹⁰ that effectively exempts many remote sales of tangible products. Under the *Quill* decision, remote vendors cannot be required to collect use tax unless they have a physical presence in the state. (A physical presence is said to constitute *nexus*. The state of North Dakota had argued that *Quill*, a major mail-order house, had an economic presence in the state that justified the state's requirement that it collect use tax on sales made to customers in the state. The Court's reasoning is described below.) This case law may be applied to electronic commerce, including that in digital content. Moreover, efforts to achieve a "level playing field" for electronic commerce must consider the preferential tax treatment of other remote sales, with which electronic commerce competes. If it is impossible to alter the current de facto tax exemption of other remote sales, the optimal tax treatment of electronic commerce is not obvious.

*International income tax rules.*¹¹ National laws of various countries contain provisions that, absent modification, will control the taxation of income from electronic commerce. The "rules of the game" for the taxation of income from international economic relations are found primarily in bilateral treaties, especially between developed countries. These, in turn, are commonly based on the Model Treaty of the Organisation for Economic Co-operation and Development (OECD). National laws and treaties were not written with electronic commerce in mind, and thus do not easily accommodate it. Changing domestic legislation and renegotiating treaties are extremely time-consuming activities with uncertain outcomes.

Political Constraints. Efforts to apply sales tax to electronic commerce or to apply income tax to it in ways that deviate from present practice would encounter political opposition.

Over-riding Quill. In principle, the U.S. Congress, acting under the power granted by the Constitution to regulate interstate commerce, could enact legislation to over-ride the *Quill* decision, substituting a less demanding test for the physical presence test of nexus. In fact, this would not be easy to do, because of the political power of the direct marketing industry, which can mobilize letter-writing campaigns by thousands of customers. The direct marketers have now been joined by those engaged in electronic commerce, which seems to enjoy support based on a special mystique. Of course, political power is not found only on one side, but those favoring equal taxation — largely government officials and a few academics to date, but increasingly Main Street merchants — appear thus far to have less political clout than advocates of exemption.

Federalism aspects. Some proposed solutions to the “mail-order problem,” and thus the question of how to tax electronic commerce, involve acceptance of an expanded duty of remote vendors to collect use tax, in exchange for substantial simplification of sales and use taxes. Among the simplifications that may be required are greater uniformity of state sales tax systems and a single local sales tax rate in a given state.¹² Both these elements of simplification would be difficult to realize under the American system of fiscal federalism, in which the individual states have substantial fiscal sovereignty and local governments have considerable political power. Congressional action in this area, even if taken only to ratify state initiatives, would represent a worrisome encroachment on the fiscal autonomy of the states.

The difficulty of fundamental reform. Some believe that this is a unique opportunity to rationalize a defective state sales tax system inherited from the Industrial Age — that fundamental reform is needed and tinkering will not suffice.¹³ In that view, all sales to business should be exempt, virtually all sales to households, whether of goods, services, or intangible products, should be taxed, and sales by remote vendors should be taxed like sales by local merchants. But enormous inertia resists such a change. Moreover, there is no institutional framework for a fundamental and coordinated reform of state taxes.¹⁴ Worse, there is no political constituency for such a reform, but substantial opposition to it.

International aspects. Some changes in the rules of the game for the taxation of income from international economic relations are likely to involve substantial redistribution of tax revenues among countries. For example, the United States has suggested a shift to greater reliance on taxation by the country of residence of firms engaged in electronic commerce.¹⁵ It cannot be expected that countries that would lose revenue will gladly acquiesce in such changes. Unlike the situation in the areas of contracts and intellectual property, where other nations may follow the lead of the United States, in the tax area decisions are more likely to be made on a multilateral basis, especially in the forum provided by the OECD.¹⁶ Other nations will listen to the U.S. position, but they will not be led by the nose.

Norms, Practices, and Proposals: State Sales Taxation

Before examining state practices in the sales tax area and proposals to modify them, it is useful to consider norms against which to judge them.

Norms for Taxation of Sales between Jurisdictions. Economists describe two internally consistent systems for the taxation of sales that cross the borders of political jurisdictions, be they states or nations.¹⁷

Under the *destination principle*, tax is imposed on imports into the taxing jurisdiction, but not on exports (and any amount collected before the export stage is refunded). A destination-based tax is a tax on consumption occurring in the taxing jurisdiction.

Under the *origin principle*, tax is imposed on exports from the taxing jurisdiction and imports are not taxed (but tax is collected on value added after the import stage). An origin-based tax is a tax on production in the taxing jurisdiction.

The destination principle is almost universally employed for the sales taxation of international trade in tangible products, and the European Union appears to be moving toward destination-based taxation of intangibles and services. Destination-based taxation has several conceptual advantages. First, destination-based taxation is much less likely to distort the location of economic activity than is origin-based taxation. Second, taxation of consumption is probably a better proxy for the benefits of public services than taxation of production. (For example, people send their children to school where they live and consume, not where they work and produce.)

Perhaps more important is the political attraction of the destination principle. It is hard to imagine that those producing for the domestic market would quietly accept origin-based taxation, as it implies that they pay taxes while their foreign competition does not. Under the destination principle market jurisdictions would collect the same tax on domestic and foreign production. Similarly, exporters are not likely to take kindly to a suggestion that exports should be taxed.

It is relatively easy, ignoring legal obstacles for the moment, to collect destination-based taxes on tangible products. Where there are fiscal borders, as between nations that are not members of a common market, tax can be collected at the border. Within a common market, it may be possible for vendors to collect the tax, because they know where they ship goods. Destination-based taxation of digital content transmitted over the Internet is more difficult to implement, because of the difficulty of determining the location of purchasers. By comparison, origin-based taxation would be relatively easy to implement in this case. But if applied to electronic commerce in digital content, origin-based taxation might create a “race to the bottom,” in which jurisdictions vie to attract foot-loose firms by exempting electronic commerce.

Overview of Practice: State Sales and Use Tax.¹⁸ For the most part, state sales and use taxes follow the destination principle. That is, exports from a state are commonly exempt from sales tax in that state and local vendors collect sales tax on products that are imported, as well as those produced within the state. There are three important exceptions to the generalization that states sales and use taxes are destination-based.

First, when a consumer engages in *cross-border shopping*, buying something in another state and bringing it back home for consumption, tax is ordinarily collected where the sale occurs, instead of where the product is consumed. There is no easy remedy for this problem, short of the highly undesirable step of imposing fiscal borders between states.

Second, many *business inputs* are subject to tax, which is not refunded when products are shipped outside the state; this interjects an element of origin-based taxation. Finally, *remote sales* to households in other states are commonly not subject to tax, unless the vendor has a physical presence in the market state.

The last point implies that demands for “technologically neutral” taxation of electronic commerce are doomed to failure. Neutrality cannot be achieved relative to both Main Street

merchants, who generally collect tax on sales of tangible products, and other remote vendors, who commonly do not collect use tax on sales to households.¹⁹

De Facto Exemption of Remote Sales to Households. The preferential tax treatment of remote sales deserves elaboration, because of its importance in the debate on the taxation of electronic commerce. Here, in a nutshell, is the Constitutional state of affairs, as determined by decisions of the U.S. Supreme Court.²⁰

States cannot apply their *sales tax* to sales made by remote vendors, because title passes (or can be made to pass) outside the state. State can levy *use tax* on the use of a product in the state, but the use tax must be levied on the user, not the vendor. Use tax cannot realistically be collected unless a) the product must be registered to be used in the state, b) the purchaser is a business that is subject to audit in the state, or c) the vendor can be required to collect the tax. It is generally not cost-effective to attempt to collect use tax directly from non-business purchasers. But under *Quill* only vendors with a physical presence in a state can be required to collect use tax. Thus tax evasion is common on interstate sales to households.

The decision in *Quill* produces a result that is indefensible from an economic point of view: local merchants that charge sales tax must compete with remote vendors that need not collect use tax, and state and local governments lose tax revenue from remote sales.²¹ The Supreme Court required the physical presence test because it thought that state (and local) taxes were so dissimilar that requiring vendors lacking a physical presence in the market state to collect use tax would impose an unconstitutional burden on interstate commerce. While the *Quill* decision applies explicitly to sales of tangible products, it is unclear whether it would also apply to sales of digital content.

By exercising its power to regulate interstate commerce, the Congress could over-ride the Court's decision in *Quill*. It is unclear whether the states can get around *Quill* at this late date by simplifying their systems of sales and use taxes; given the Court's emphasis on *stare decisis* ("let the decision stand") and the need for "settled expectations," Congressional ratification of state action might be required.

Given the importance of complexity in explaining the *Quill* decision, it is worth noting the following sources of complexity of state and local sales and use taxes:

— Almost 7,600 local jurisdictions in the United States levy sales and use taxes; not all local jurisdictions in a given state levy tax at the same rate. Thus, if required to collect local use tax, remote vendors would need to know both the locality of destination of a sale and the tax rate applied there.

— Boundaries of taxing jurisdictions do not neatly correspond to those of postal ZIP codes.

— States (and localities in a few states) are free to define the sales and use tax base as they wish; they need not tax the same products, employ the same definitions of products, or provide the same exemptions for products sold to businesses or non-profit organizations.

— Administrative procedures (registration, filing, payment of tax, appeals, etc.) vary from state-to- state.

— There is no central multistate administrative organization to which remote vendors can report; vendors must report separately to each state in which they have a duty to collect use tax (and to individual local governments in some states).

— States that attempt to force remote vendors to collect use tax have not enacted realistic *de minimis* rules that would exempt remote vendors making only small amounts of sales in the state from the duty to collect.

— Vendors discounts (the privilege of retaining a small part of revenues collected, which states allow as partial compensation for the costs of collecting sales tax) fall woefully short of costs of compliance for small firms — and would be especially inadequate for remote vendors, who would encounter especially high costs of compliance.

Except for *Quill*, the resulting complexity would be onerous for both firms engaged in traditional remote selling (e.g., mail-order) and firms engaged in electronic commerce. The burden of compliance would be much worse for small firms engaged in electronic commerce, since — leaving aside the potential barrier created by the difficulty of compliance with use taxes — quite small firms can engage in electronic commerce much more effectively than in conventional direct marketing. While large firms might be able to deal with the complexity and the high compliance costs associated with the hodgepodge of state and local use taxes, small firms might find interstate sales uneconomical, if the duty to collect use tax were expanded, without substantial simplification.

The Peculiar Case of Telecommunications and Internet Access. For historical reasons telecommunications are taxed far more heavily than most other goods and services.²² Local excises have been justified as compensation for the use of the public right-of-way and for the monopoly position once enjoyed by the phone company. By comparison, as a service, Internet access ordinarily has not been subject to sales taxes during its short existence (but providers of Internet access may pay tax on their purchases of equipment and telecommunications, which ordinarily do not qualify for resale exemptions). This situation is anomalous, because providers of telecommunications and Internet access increasingly compete with each other. Moreover, following the dramatic technical innovations that make competition and the deregulation of telecommunications possible, it is difficult to find a sound reason for a policy of taxing that service more heavily than other goods and services.

The Scope of Discussion. Participants in the debate on the application of sales and use taxes to electronic commerce do not agree on the proper scope of the debate.²³ Some would limit the discussion to electronic commerce in digital content and Internet access, taking the present tax treatment of sales by local merchants and of remote sales of tangible products as given. Others argue that it is unrealistic to limit the debate in this way, since a) digital content downloaded from the Internet substitutes for tangible products in many applications, b) electronic commerce in tangible products and other remote sales are often

in direct competition, and c) Internet access and telecommunications are becoming increasingly intertwined and indistinguishable. Many would expand the discussion to include taxation of all remote vendors and/or telecommunications, but not the taxation of traditional commerce. Still others believe that this is a once-in-a-lifetime opportunity to rationalize the state sales and use tax, by exempting all sales to business, expanding the tax base to include most services and intangible products sold to households, which are now largely exempt, and eliminating special taxes on telecommunications.

It seems that not all questions of scope need to be answered the same way. For example, it is hard to see how the tax base of a given state can sensibly be defined differently for remote and local commerce. But it might be feasible, absent constitutional restrictions, to impose different tax rates on a given product being sold locally and in remote commerce. (It seems unlikely that, failing Congressional sanction, the Supreme Court would allow a state-wide use tax to be applied to remote sales to a locality that had no sales tax on the same product.)

Proposals for Sales and Use Taxation of Electronic Commerce. Most proposals for the application of sales and use taxes to electronic commerce take as given the objective of imposing destination-based taxation. But a few, noting the extreme difficulty of achieving this objective, favor origin-based taxation.

Proposals for Destination-Based Taxation. Destination-based taxation requires that remote vendors collect use tax. But for this to be a reasonable demand, as well as a realistic possibility politically, state sales and use taxes must be greatly simplified. Among the simplifications advocated by various participants in the NTA Project (described below) are the following:²⁴ a) one tax rate per state; b) attribution of sales only to the state level; c) uniform rules for determining the situs of sales (the “ship to” address for tangible products and the billing address for digital content); d) a uniform “menu” of what might be taxed, from which each state could choose its tax base; e) adequate notice of changes in tax base and tax rates; f) uniform administrative procedures; g) a simplified system of filing; and h) a *de minimis* rule. Some of these involve political or technical problems that deserve discussion.

One rate per state/attribution to state level. The requirement of one rate per state, combined with attribution of sales only to the state level, which business says is vital, would seriously undermine the fiscal autonomy of local governments. Local government officials would not be satisfied to rely on state governments to channel revenues from the uniform local portion of a sales and use tax to local governments. Moreover, this solution would immediately raise practical problems for local governments that have pledged revenues from sales and use taxes to finance debt service for capital projects (e.g., stadiums). The hypothetical solution of divorcing the use tax rate from the sales tax rate might be an acceptable compromise, if not a pretty one. But, besides being questionable politically, it risks constitutional challenge, unless endorsed by Congress.

Menu of potentially taxable/exempt sales. Because members of the NTA Project were unwilling to propose unification of the state sales tax base, they suggested the menu approach. A uniform menu of potentially taxable products would represent a substantial simplification, but it would not be simple or easy to implement, especially in the case of catalog sales. (Those who wish to pay by check, predominantly the poor and the elderly, pose the greatest problem, as they need to be able to calculate the tax due when they place an order. In the case of payments made by credit card, the vendor can calculate the tax or adjust calculations made by the buyer.) Preliminary investigation suggests that there might be upwards of 10,000 items in such a menu.²⁵ Besides “off/on” switches to indicate whether a given product is taxable or exempt when sold to households, it might be appropriate to have similar menus and switches to indicate the tax treatment of sales to business and tax-exempt organizations; the NTA Project did not consider this question.²⁶

Simplified filing. The NTA Project examined two forms of simplified filing, plus a “hybrid” that draws on the others to modify present practice. None seems to be a panacea.

Under the *base-state approach*, adapted from the International Fuel Agreement, a vendor lacking a physical presence in a state would file a use tax return (and pay tax due) for that state with its “base state” (presumably where it has its primary place of business), instead of with individual states where it makes remote sales. A central clearinghouse would calculate net interstate liabilities.

The base-state system has several obvious faults. First, tax administrators in each base state would need to be familiar with the tax laws of all states in which their taxpayers make remote sales — a daunting task, even with use of a uniform menu to define tax bases.²⁷ (By comparison, the definition of the base of motor fuel taxes is relatively simple.) Moreover, tax administrators in base states would have little incentive to collect revenues that would go to other states.

A *real-time* system would rely on financial institutions to collect use tax at the time a sale is made, based on the nature of the product, the applicable tax rate in the state of destination, and the nature of the buyer (household, business, or tax-exempt organization). The requirement that the computers of these institutions contain the tax bases and rates of each state and each local jurisdiction, and even the tax treatment of business purchasers and tax-exempt organizations, does not seem overwhelming. But under present practice vendors submit substantially less information to financial institutions than would be required to implement the real time system — essentially the account numbers of the merchant and the buyer and the total amount of the sale, including applicable tax. To modify these systems to accommodate the real time system would require a major investment, for which financial institutions would reasonably expect to receive compensation. (Because of savings in costs of compliance and administration, this might be a bargain in the long run.) Moreover, concerns about privacy — and privacy legislation already on the books in some states — could impede use of this system and even the identification of the state of billing address required by the hybrid system.

The *hybrid* system would depart less from present practice. Certain functions (e.g., registration) might be consolidated, as in the base-state system, but filing would continue to be done on a state-by-state basis. States might rely on financial institutions to provide or verify the state in the purchaser's billing address, but not to collect tax.

On behalf of the National Governors' Association (NGA), Governor Leavitt has proposed that the ACEC consider a voluntary system in which "*trusted third parties*" would calculate, collect, and remit use tax.²⁸ In the same spirit as the real-time system considered by the NTA, the NGA proposal could build on existing systems.²⁹

Proposals for Origin-Based Taxation. Noting the complexity of destination-based taxation and the need for federal legislation to implement it, some have argued that taxation of electronic commerce in digitized content — or perhaps of all remote commerce — should be based on the origin principle.³⁰ While clearly feasible, this approach encounters the objections voiced earlier (inconsistency with the basic destination-based system, a race to the bottom, and distortion of locational decisions).

The Revenue at Stake. Some advocates of extending the sales and use tax to electronic commerce have called the state sales tax "road-kill on the information superhighway."³¹ But the assertion that "the sky is not falling" seems more accurate, at least for now.³² The lost revenue scenario is so rosy for the following reasoning. First, an estimated 80 percent of sales in electronic commerce are from one business to another; many of these transactions are explicitly exempt, and use tax is currently being collected on many of the rest. Second, a substantial share of electronic commerce sales to households involves services (e.g., travel and financial services), intangibles, or goods (e.g., groceries and prescription drugs) that are not subject to sales and use tax. Finally, some electronic commerce involves sales to households diverted from other remote vendors that lack a duty to collect use tax. In other words, revenue loss would be small primarily because the present system falls far short of the ideal. In brief, the failure to tax electronic commerce would be "no big deal" because: a substantial amount of revenue comes from sales to business, which would be taxed, even though they should not be; most services would not be taxed, as they should be, even if provided locally; and, most remote sales to households are already effectively exempt, contrary to common sense, as well as the widely accepted model of destination-based taxation. The last two points suggests that the real revenue problem lies not in electronic commerce, per se, but in the failure to tax services and the effective tax exemption of most remote commerce.

Some advocates of preferential taxation of electronic commerce deny that electronic commerce poses any threat to Main Street business, noting the large fraction of businesses that now have a presence on the Internet. But there may be some very large and nasty flies in this seemingly optimistic ointment. First, suppose that households in New York order furniture (or other tangible products) from stores in New Jersey and vice versa, for delivery or drop shipment by common carrier; on "big ticket" items, the saving from evading the use tax could be significant. It is possible, if not likely, that there would be no

net effect on total business in either of the two states. But both states would be deprived of revenue they would receive if the sales were made by local merchants. The de facto tax exemption provided by *Quill* could finance a great deal of unproductive cross-hauling of merchandise across state lines.

Second, the courts of some states have ruled that a firm engaged in remote selling does not necessarily have nexus for use tax purposes just because an affiliated company has a physical presence in the state. Already many of the nation's largest retailers are establishing separate subsidiaries to handle Internet sales. This could lead to the migration of substantial amounts of commerce from Main Street merchants, which collect sales tax, to out-of-state affiliates engaged in electronic commerce, which would not collect use tax. In that case, revenue loss from the exemption of electronic commerce might be far greater than commonly assumed.³³

The NTA Project. Beginning in the fall of 1997, the National Tax Association (NTA) convened its Communications and Electronic Commerce Tax Project (the NTA Project) "to develop a broadly available public report which identifies and explores the issues involved in applying state and local taxes and fees to electronic commerce and which makes recommendations to state and local officials regarding the application of such taxes..."³⁴ Focusing first on the sales and use tax, the Project's Steering Committee, composed of 16 representatives each from business and government, as well as seven "others" (including the author), quickly specified the broad outlines of a possible compromise — an expanded duty to collect use tax, in exchange for substantial simplification. The Steering Committee identified and discussed many elements of simplification, including those described earlier, in and in September 1999 it approved a final report that analyzes issues and describes areas of tentative agreement and of disagreement.³⁵ But it was unable to agree on a legislative proposal, because it had previously agreed that, "Nothing is agreed to until everything is agreed to." (It might be noted that a three-fourths majority of the Steering Committee is required to approve any measure.) This report should serve a useful educational purpose and provide valuable input to the Advisory Commission on Electronic Commerce.³⁶

The Advisory Commission on Electronic Commerce. In October 1998 the U.S. Congress enacted the Internet Tax Freedom Act (ITFA). Besides imposing a three-year moratorium on new taxes on the Internet, the ITFA created the Advisory Commission on Electronic Commerce (ACEC or "the Commission"), which is comprised of eight representatives each from business and from state and local governments and three from the federal government. A two-thirds majority is required for decisions of the Commission. An important part of the charge of the ACEC is an examination of whether to impose sales and use taxes on electronic commerce.

Prospects that the ACEC will be able to produce a consensus report on sales and use taxation do not appear bright. First, the NTA Project demonstrates just how difficult agreement will be. Second, almost none of the Commission's members are tax experts; rapid mastery of a complex subject is thus required. Third, while some members of the

Commission believe that electronic commerce should be taxed, a substantial fraction of the membership would prefer continuation — and perhaps codification — of the status quo, which leaves remote commerce tax-free, unless the vendor has nexus in the taxing state.³⁷

The Commission did not hold its first meeting until June 1999, almost half-way through its 18 month statutory life. Despite the critical shortage of time, much of the meeting, held in Williamsburg, was consumed in bureaucratic wrangling and political posturing, rather than being devoted to serious discussion of substantive issues. Reflecting the predilections of the Chairman of the Commission, Governor James Gilmore of Virginia, many of the presentations were little more than lobbying for exemption of electronic commerce based on ideological presuppositions, rather than unbiased discussions of whether and how electronic commerce should be taxed. Only at its second meeting, in New York in September 1999, which was cut short by the impending arrival of a hurricane and the need for Governor Gilmore to return to Virginia, did the Commission agree to ask for proposals that would entail “radical simplification” of the sales and use tax — long recognized to be the *sine qua non* of any solution involving an expanded duty to collect use tax. Again there was little serious discussion of alternatives. At its third meeting, in San Francisco in December 1999, the Commission finally heard proposals for radical simplification, along with more arguments for exempting electronic commerce. Only one more meeting is scheduled, in March 2000, a month before the Commission is scheduled to expire.

Given the complexity of the issues the Commission faces and the dearth of empirical evidence on which to base policy decisions, at least one group has suggested that the life of the Commission should be extended to the end of 2000.³⁸ The Commission did not discuss this issue in San Francisco.

Some Caveats: Dubious Arguments. Before leaving the discussion of the state sales and use tax it is appropriate to warn the reader of arguments that the author believes to be fallacious. Most involve failure to apply elementary economics correctly.

“Remote vendors do not consume services.” Some argue that remote vendors should not be required to collect use taxes because they do not consume public services provided by the market state. This view reflects a misunderstanding of the benefit principle of taxation. The sales and use tax is levied primarily to finance services provided to households, not to finance services provided to business firms doing business in the taxing state. Thus it should apply equally to all taxable goods and services consumed in the state, not only to those sold by local merchants. (The invalidity of the argument cited above can be seen by replacing reference to the sales and use tax with reference to an excise on tobacco products used to finance health care for smokers. No one would seriously suggest that cigarettes sent by mail order from another state should not be taxed, just because they are sold by a vendor that receives few services in the taxing state.³⁹)

“Shipping and handling compensate for the lack of use tax.” Some argue that the need to pay charges for shipping and handling, which are higher for shipments to individual customers than for bulk shipments to local merchants, compensates for the lack of use tax

on remote sales. This argument is obviously invalid in the case of digitized content; there are no shipping and handling charges to offset the lack of use tax. But it is equally invalid in the case of tangible products. The easy case involves a comparison of two remote vendors, one with nexus and one without. Shipping and handling costs may be comparable, but one collects tax and the other does not. Finally, consider the more difficult case, comparison of a remote vendor and a Main Street merchant. If costs are higher for remote commerce, that is *prima facie* evidence that the tax exemption induces economic inefficiency; costs are being incurred that would not exist if tax policy were neutral.

The previous two argument (involving lack of services to remote vendors and shipping costs) may not be convincing to non-economists. But consider the following. Suppose someone suggested that sales (or use) tax should be collected when Americans buy foreign-made cars from American merchants, but not when they order them directly from a foreign manufacturer — or that sales tax should be collected on cars made in the United States, but not on cars made abroad. Few would think these suggestions make sense. Yet they are exactly analogous to arguments that purchases from out-of-state vendors should not be taxed; that is, foreign merchants and car manufacturers do not consume services provided by the American states and they incur substantial shipping costs getting their products to American markets. Yet we do not consider either fact in deciding whether to collect sales or use tax on foreign-made cars.

Taxing electronic commerce would hinder the growth of small e-commerce firms. No sensible proposal to impose an expanded duty to collect use tax would negatively affect small e-commerce vendors. First, there would be a *de minimis* exemption that would eliminate the duty to collect for small vendors. Second, the author's proposal to eliminate tax on sales to business implies that taxes on such vendors would be lower, not higher.

"The European Union is shifting to origin-based taxation." Some suggest that it would be appropriate to apply origin-based taxation to electronic commerce because the European Union (EU) is shifting from destination-based taxation to origin-based taxation under the value-added tax (VAT). Nothing could be further from the truth.⁴⁰ The EU has recently determined that digital content downloaded from the Internet should be taxed as a supply of services. For historical reasons services have been subject to origin-based taxation in the EU. (They have not been exempt, as in the typical American states sales tax.) But the EU has recently decided to move to destination-based taxation of services, in large part to prevent the loss of revenue implied by origin-based taxation. Thus, like goods and other services, digital content will be subject to destination-based taxation.

"It is not necessary to tax electronic commerce, because the states have surpluses." This assertion reflects an implicit assumption that taxation of electronic commerce would be the source of additional revenue — that taxing electronic commerce would increase taxes. (This assumption is encouraged by the lament of state and local officials that revenues will drop if electronic commerce is not taxed.) I believe that this is not the way to frame the issue — that it makes much more sense to discuss the taxation of electronic commerce in a

revenue-neutral context. In that context, the existence of a surplus is irrelevant; rates could be lower if e-commerce is taxed than if it is not.

"The development of electronic commerce is driving the recent economic expansion." Some attribute the recent expansion of the American economy to the development of electronic commerce.⁴¹ However, no evidence is offered to support the proposition, other than the fact that the two phenomena are occurring simultaneously. This is a fallacy that would not pass muster in any undergraduate economics course in the country, let alone a graduate course in econometrics. One might just as well — and with as much basis in hard evidence — attribute the expansion to the decline in the murder rate in New York City, the decline in the teenage pregnancy rate, or the decline in the fortunes of the Notre Dame football team, all of which are also contemporaneous with it. Electronic commerce may indeed be one factor that is fueling the expansion. But parsing out its contribution requires careful econometric analysis that attempts to control systematically for other influences that are occurring simultaneously, a difficult enterprise that would challenge the best econometricians; it is not something that can be achieved by casual observation.

Bibliography

- Abrams, Howard E., and Richard L. Doernberg. "How Electronic Commerce Works." *State Tax Notes* 13 (July 14, 1997): 123-36.
- Avi-Yonah, Reuven S. "International Taxation of Electronic Commerce." *Tax Law Review* 52 (Spring 1997): 507-55.
- Commission of the European Communities, *Report of the Committee of Independent Experts on Company Taxation*. Luxembourg: Commission of the European Communities, 1992.
- Cordell, Arthur J. "Multijurisdictional Taxation of Electronic Commerce." Presented at the symposium on Multi-Jurisdictional Taxation of Electronic Commerce, Harvard Law School, Cambridge, Mass., April 5, 1997.
- Cline, Robert J., and Thomas S. Neubig. "The Sky Is Not Falling: Why State and Local Revenues Were Not Significantly Impacted by the Internet in 1998. Ernst & Young Economics Consulting and Quantitative Analysis. June 18, 1999.
- Doernberg, Richard, and Luc Hinnekens. *Electronic Commerce and International Commerce*. The Hague: Kluwer Law International, 1999.
- Due, John F., and John L. Mikesell. *Sales Taxation: State and Local Structure and Administration*. 2nd ed. Washington: Urban Institute Press, 1994.
- "Establishing a Framework to Evaluate E-Commerce Tax Policy Options." A report on an "E-Commerce Taxation Workshop" held at the University of California at Berkeley on October 1, 1999. Released December 14, 1999.
- Hardesty, David E. *Electronic Commerce: Taxation and Planning*. Boston: Warren, Gorham, and Lamont, 1999.
- Horner, Frances M., and Jeffrey Owens. "Tax and the Web: New Technology, Old Problems." *Bulletin for International Fiscal Documentation* 50 (1996): 516-23.
- James S. Gilmore, III. "No Internet Tax: A Proposal Submitted to the 'Policies & Options' Paper Of the Advisory Commission on Electronic Commerce." available at www.ecommercecommission.org.
- Glichlich, Peter; Howard J. Levine; Sanford H. Goldberg; and Ellen S. Brody. "Electronic Services: Suggesting a Man-Machine Distinction." *Journal of Taxation* 87 No. 2 (August 1997): 69-75.
- Goolsbee, Austan. "In a World without Borders: The Impact of Taxes on Internet Commerce." *Quarterly Journal of Economics* (forthcoming).
- Goolsbee, Austan, and Jonathan Zittrain. "Evaluating the Costs and Benefits of Taxing Internet Commerce" *National Tax Journal*, 52 (September 1999): 413-428.

- Goolsbee, Austan, and Peter Klenow. "Evidence on Learning and Network Externalities in the Diffusion of Home Computers." National Bureau of Economic Research, Working Paper No. 7329, 1999.
- Hellerstein, Walter, "Telecommunications and Electronic Commerce: Overview and Appraisal." *State Tax Notes* 12 (February 17, 1997): 519-26.
- Hellerstein, Walter. "Supreme Court Says No State Use Tax Imposed on Mail-Order Sellers ... For Now." *Journal of Taxation* 77 (August 1992): 120-24.
- Hellerstein, Walter. "State Taxation of Electronic Commerce." *Tax Law Review* 52 (Spring 1997): 425-505.
- Leavitt, Michael O. "Streamlined Sales Tax System for the 21st Century," a proposal to the Advisory Commission on Electronic Commerce. available at www.ecommercecommission.org.
- McIntyre, Michael J. "Taxing Electronic Commerce Fairly and Efficiently," *Tax Law Review* 52 (1997): 625-654.
- McLure, Charles E., Jr. "Taxation of Electronic Commerce: Economic Objectives, Technological Constraints, and Tax Law." *Tax Law Review* 52 (Spring 1997): 269-423.
- McLure, Charles E., Jr. "Electronic Commerce, State Sales Taxation, and Intergovernmental Fiscal Relations." *National Tax Journal* 50 (December 1997): 731-49.
- McLure, Charles E., Jr. "Electronic Commerce and the Tax Assignment Problem: Preserving State Sovereignty in a Digital World." *State Tax Notes* 14 (April 13, 1998): 1169-81.
- McLure, Charles E., Jr. "Achieving a Level Playing Field for Electronic Commerce." *State Tax Notes* 14 (June 1, 1998): 1767-83.
- McLure, Charles E., Jr. "Electronic Commerce and the State Retail Sales Tax: A Challenge to American Federalism." *International Tax and Public Finance* 6 (May 1999): 193-224.
- McLure, Charles E., Jr. "How — and Why — the States Should Tax Electronic Commerce: Explanation of My ACEC Proposal for Radical Simplification." *State Tax Notes*, forthcoming.
- McLure, Charles E., Jr. "Rethinking State and Local Reliance on the Retail Sales Tax: Should We Fix the State Sales Tax or Discard It?" prepared for presentation at a symposium on Electronic Commerce Taxation organized by the Brigham Young University Law Review, January, 14, 2000, forthcoming in the *Brigham Young University Law Review*.
- National Tax Association Communications and Electronic Commerce Tax Project. "Description of the Organization and Operation of the Communications and Electronic Commerce Tax Project." Available at www.ntanet.org.
- National Tax Association Communications and Electronic Commerce Tax Project. *Final Report*. September 1999, available at www.ntanet.org.

- Newman, Nathan. "Prop 13 Meets the Internet: How State and Local Government Finances are Becoming Road Kill on the Information Superhighway." Economic Democracy Information Network Report, University of California, Berkeley, Center for Community Economic Research, 1995.
- Organisation for Economic Co-operation and Development. *The Economic and Social Impact of Electronic Commerce: Preliminary Findings and Research Agenda*. Paris: OECD, 1999.
- Ryan, Terry, and Eric Miethke. "The Seller-State Option: Solving the Electronic Commerce Dilemma." *State Tax Notes* (October 5, 1998): 881-92.
- Soete, Luc. (1997). "Taxing consumption in the electronic age: the European bit tax proposal." Presented at the symposium on Multi-Jurisdictional Taxation of Electronic Commerce, Harvard Law School, Cambridge, Mass., April 5.
- "Streamlined Sales Tax System for the 21st Century." Submission to the Advisory Commission on Electronic Commerce. Available at www.ecommercecommission.org.
- TAXWARE International, Inc. "Adapting Tax Technology to the Internet – the eCommerce Transaction Tax Server." Submission to the Advisory Commission on Electronic Commerce. Available at www.ecommercecommission.org.
- United Nations. *Central Product Classification (CPC) Version 1.0*, Statistical Papers, Series M, No. 77, Ver. 1.0. New York: United Nations, 1998. Available at www.un.org/Depts/unsd/class/cpcmain.
- U. S. Department of Commerce. (1998). *The Emerging Digital Economy*. available at www.ecommerce.gov/viewhtml.htm.
- U.S. Department of Commerce, National Telecommunications and Information Administration. *Falling through the Net: Defining the Digital Divide*. 1999.
- U.S. Department of the Treasury, Office of Tax Policy. "Selected Policy Implications of Global Electronic Commerce." 1996.
- Wagner, Andrew, and Wade Anderson. "Origin-Based Taxation Of Electronic Commerce." *State Tax Notes* 17 (July 19, 1999):187-92.

Endnotes

1. Howard E. Abrams and Richard L. Doernberg, "How Electronic Commerce Works," *State Tax Notes* 13 (May 1997): 123-36. I find this definition more useful, if slightly less accurate, than the one in Organisation for Economic Co-operation and Development, *The Economic and Social Impact of Electronic Commerce: Preliminary Findings and Research Agenda* (Paris: OECD, 1999), p. 28: "business occurring over networks which use non-proprietary protocols that are established through an open standard setting process such as the Internet."
2. For further discussion, see Charles E. McLure, Jr., "Electronic Commerce and the State Retail Sales Tax: A Challenge to American Federalism," *International Tax and Public Finance* 6 (May 1999): 193-224.
3. For the proposal of a bit tax, see Arthur J. Cordell, "Multijurisdictional Taxation of Electronic Commerce," Presented at the symposium on Multi-Jurisdictional Taxation of Electronic Commerce, Harvard Law School, Cambridge, Mass., April 5, 1997, and Luc Soete, "Taxing Consumption in the Electronic Age: the European Bit Tax Proposal," Presented at the symposium on Multi-Jurisdictional Taxation of Electronic Commerce, Harvard Law School, Cambridge, Mass., April 5, 1997. Although the bit tax might have seemed to have died quickly and quietly, the United Nations Development Programme has proposed a bit tax to help provide telephone and Internet service in poor nations. Congressman Chris Cox maintains a list of "Internet tax horror stories" on his "Internet Tax Freedom Act" website, www.house.gov/cox/nettax/.
4. See James S. Gilmore, III, "No Internet Tax: A Proposal Submitted to the 'Policies & Options' Paper Of the Advisory Commission on Electronic Commerce," available at www.ecommercecommission.org.
5. Austan Goolsbee, "In a World without Borders: The Impact of Taxes on Internet Commerce,," forthcoming, *Quarterly Journal of Economics*; Austan Goolsbee and Jonathan Zittrain, "Evaluating the Costs and Benefits of Taxing Internet Commerce," *National Tax Journal*, 52(3), September 1999: 413-428; and Austan Goolsbee and Peter Klenow, "Evidence on Learning and Network Externalities in the Diffusion of Home Computers," National Bureau of Economic Research, Working Paper No. 7329, September 1999.

6. Goolsbee and Zittrain, "Evaluating the Costs and Benefits of Taxing Internet Commerce," p. 424, state, "The major network externalities are likely to exhaust or at least diminish once the Internet achieves major scale. Too often, infant industry protection turns into established industry protection. Further, we expect that eventually there will be an important negative network externality ... increasing Internet congestion.... The congestion problem is likely to get worse as the Internet grows and it argues against subsidizing the growth rate through tax policies." Goolsbee signed the "Appeal for Fair and Equal Taxation of Electronic Commerce" presented to the Advisory Commission on Electronic Commerce on December 15, 1999 and reproduced in the appendix to this chapter.

7. Both Milton Friedman and Grover Norquist, a member of the ACEC, have made this argument in personal conversation with the author.

8. See Raymond J. Ring, Jr., "Consumers' Share and Producers' Share in the General Sales Tax," *National Tax Journal* 52 (March 1999), 79-90.

9. On the digital divide, see U.S. Department of Commerce, National Telecommunications and Information Administration, *Falling through the Net: Defining the Digital Divide* (1999).

10. *Quill Corp. v. North Dakota*, 504 U.S. 298 (1992). For a masterful analysis of *Quill*, see Walter Hellerstein, "Supreme Court Says No State Use Tax Imposed on Mail-Order Sellers ... For Now," *Journal of Taxation*, 77 (August 1992): 120-24.

11. This and the subsequent discussion of international aspects of the income taxation of electronic commerce draw on Charles E. McLure, Jr., "Taxation of Electronic Commerce: Economic Objectives, Technological Constraints, and Tax Law," *Tax Law Review* 52 (Spring 1997): 269-423, and references cited there.

12. See National Tax Association Communications and Electronic Commerce Tax Project, *Final Report*, September 1999, available at www.ntanet.org.

13. For the author's view, see Charles E. McLure, Jr., "Electronic Commerce and the Tax Assignment Problem: Preserving State Sovereignty in a Digital

World," *State Tax Notes* 14 (April 13, 1998): 1169-81, and Charles E. McLure, Jr., "Achieving a Level Playing Field for Electronic Commerce" *State Tax Notes* 14 (June 1, 1998): 1767-83, as well as the second part of this chapter.

14. The National Conference of Commissioners on Uniform State Laws might draft a model unified law, but they would do so only in response to a request from the states.

15. U.S. Department of the Treasury, Office of Tax Policy, "Selected Policy Implications of Global Electronic Commerce," November 1996.

16. For activities of the OECD, see www.oecd.org/daf/fa/e_com/e_com.htm.

17. For further discussion, see McLure, "Taxation of Electronic Commerce," and McLure, "Electronic Commerce and the Tax Assignment Problem."

18. The standard reference is John F. Due and John L. Mikesell, *Sales Taxation: State and Local Structure and Administration*, 2nd ed. (Washington: Urban Institute Press, 1994).

19. This point is developed in greater detail in McLure, "Taxation of Electronic Commerce."

20. See Walter Hellerstein, "State Taxation of Electronic Commerce," *Tax Law Review* 52 (Spring 1997): 425-505.

21. See also McLure, "Taxation of Electronic Commerce."

22. Walter Hellerstein, "Telecommunications and Electronic Commerce: Overview and Appraisal," *State Tax Notes* 12, No. 7 (February 17, 1997): 519-26.

23. McLure, "Achieving a Level Playing Field."

24. National Tax Association Communications and Electronic Commerce Tax Project, *Final Report*.

25. See United Nations, *Central Product Classification (CPC)*, Version 1.0, Statistical Papers, Series M, No. 77, Ver. 1.0, 1998, available at

www.un.org/Depts/unsd/class/cpcad.

26. The author proposes to exempt essentially all sales to business. His proposal does not cover sales to non-profit organizations.

27. The author's proposal to the ACEC would overcome this problem by requiring that all states adopt the same tax base.

28. See "Streamlined Sales Tax System for the 21st Century," available at www.ecommercecommission.org.

29. See, for example, TAXWARE International, Inc., "Adapting Tax Technology to the Internet – the eCommerce Transaction Tax Server," Submission to the Advisory Commission on Electronic Commerce, available at www.ecommercecommission.org.

30. See Andrew Wagner and Wade Anderson, "Origin-Based Taxation Of Electronic Commerce," *State Tax Notes* 17, no. 3 (July 19, 1999):187-92; Terry Ryan and Eric Miethke, "The Seller-State Option: Solving the Electronic Commerce Dilemma," *State Tax Notes*, (October 5, 1998): 881-92; and references provided there.

31. Nathan Newman, "Prop 13 Meets the Internet: How State and Local Government Finances are Becoming Road Kill on the Information Superhighway," Economic Democracy Information Network Report, University of California, Berkeley: Center for Community Economic Research, August 1995.

32. Robert J. Cline and Thomas S. Neubig, "The Sky Is Not Falling: Why State and Local Revenues Were Not Significantly Impacted by the Internet in 1998," Ernst & Young Economics Consulting and Quantitative Analysis, June 18, 1999; see also Goolsbee and Zittrain, "Evaluating the Costs and Benefits of Taxing Internet Commerce."

33. For a detailed discussion of the lack of "nexus by affiliation," see Michael J. McIntyre, "Taxing Electronic Commerce Fairly and Efficiently," *Tax Law Review* 52 (1997): 625-654.

34. "Description of the Organization and Operation of the Communications and Electronic Commerce Tax Project," available at www.ntanet.org.

35. National Tax Association Communications and Electronic Commerce Tax Project, *Final Report*.

36. For a more detailed discussion of the deliberations of the NTA Project, see McLure, "Electronic Commerce and the State Retail Sales Tax," p. 208-15.

37. In McLure, "Electronic Commerce and the State Retail Sales Tax," p. 208, the author suggests that "asking this Commission whether Internet access and electronic commerce should be subject to the same taxes imposed on local business is analogous entrusting a commission of foxes to guard the henhouse."

38. "Establishing a Framework to Evaluate E-Commerce Tax Policy Options," a report on an "E-Commerce Taxation Workshop" held at the University of California at Berkeley on October 1, 1999, released December 14, 1999.

39. An admittedly unrealistic example illustrates the argument. Suppose that it were possible to sell motor fuel in a state without having a physical presence there. Suppose further that a tax on motor fuels consumed by motorists in the state is used to finance the construction and maintenance of roads and highways in the state. Should fuel sold in the state by a remote vendor be taxed? Of course it should; the tax is intended to charge for the in-state motorist's use of highways.

40. The statement of Michel Aujean, Director of Tax Policy at the European Commission, before the ACEC on December 14, 1999 should dispel any remaining doubts on this score.

41. See, for example, the comments by Governor Gilmore at the San Francisco meeting of the ACEC.