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Federalism in Cyberspace*

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I. INTRODUCTION

Use of the global Internet computer network is rising exponentially. As Internet subscription increases, just as where any sizeable number of human beings interact, disagreements may be expected to arise. As the community of Internet users grows increasingly diverse, and the range of online interaction expands, disputes of every kind may be expected to occur. Online contracts will be breached, online torts will be committed, online crimes will be perpetrated. Although many of these disputes will be settled informally, others may require formal mechanisms for dispute resolution. Regulation in all its facets may be expected in response to such disputes.

And indeed regulators seem all too happy to oblige. The federal legislature has begun paying some attention to the network, and state regulators seem equally anxious to leave their mark on the burgeoning field of "cyberlaw." The first fruits of this anxiety are beginning to appear. The Georgia legislature has enacted a new law prohibiting cybernauts from "falsely identifying" themselves online. Similar legislation is pending in California. In Texas and Florida, regulators overseeing the legal profession have interpreted their rules on professional conduct to cover law firm web pages — including, apparently, the pag-

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^{**} Assistant Professor of Law, Seton Hall University. I wish to acknowledge the assistance of Professor I. Trotter Hardy of the College of William and Mary in the initial conception of this article, as well as the helpful advice of my colleagues Edward Hartnett and Howard Erichson in its formulation.

^{1.} See M. Mitchell Waldrop, Culture Shock on the Networks, 265 SCIENCE 879, 880 (1994).

^{2.} GA. STAT. 16-9-9.1

^{3.} California Senate Bill SB-1533 (1996); see also Ilana DeBare, State Trademark Bill Ignites Net Turmoil, THE SACRAMENTO BEE, March 2, 1991, at F1.

es of out-of-state firms — as "attorney advertising" within their states.4

Of course, even without the enactment of new laws or regulations, there are already on the books plenty of laws that states might apply to the Internet, including consumer protection statutes and other public law to police online behavior and commerce. The Minnesota Attorney General's office in particular has been very aggressive in pursuing what it considers to be online violations of Minnesota law, filing a flurry of lawsuits against out-of-state advertisers and service providers. The Illinois Attorney General's office is by all accounts equally eager to get into the cyberspace game. By contrast, the Attorney General of Florida, exercising not only the better part of valor but arguably a considerable measure of wisdom, has opined that because of the novel nature of the Net, forays into online enforcement of current law would be premature.

The prospective negative effects of such regulation on the growth and productivity of the network are at the very least alarming. The Internet extends beyond the boundaries of any of the states, and the effects of state regulation will likewise spill over state borders. Such regulatory leakage implicates constitutional doctrines designed to preserve both the sovereignty of the individual states and the coherence of the United States as a whole. Thus, the prospect of states applying haphazard and uncoordinated multijurisdictional regulation to the Internet's seamless electronic web raises profound questions regarding the relationship between the several states and the future of federalism in Cyberspace.

Such problems of multijurisdictional coordination and competition are not unique to regulation of the Internet; they arise in many interstate regulatory contexts. However, I shall argue here that the unique nature of the Internet necessarily triggers constitutional limitations when states begin regulating online activity that originates outside their physical borders. In particular, I shall argue that the Due Process Clause of the Fourteenth Amendment and the Commerce Clause in its dormant

^{4.} See TEXAS BAR ADVERTISING COMM., Interpretive Comment on Attorney Internet Advertising (1996); Ethics Update, Fla. Bar News, January 1, 1996; see also Texans Against Censorship v. State Bar of Texas, 888 F. Supp 1328, 1369-70 (1995) (discussing applicability of Texas lawyer advertising regulation to the Internet).

^{5.} See Mark Eckenwiler, States Get Entangled in the Web, LEGAL TIMES, Jan. 22, 1996, at S35.

^{6.} Id. at \$37.

^{7.} Id.

aspect significantly curtail the ability of states to regulate online activities. Using the analytical tools of competitive federalism, I shall also show that such jurisdictional limitations are integrally linked to personal liberty,⁸ and that enforcing their strictures will serve to maintain the democratizing influence of the network. In the process, I hope also to articulate an accessible framework for analyzing such jurisdictional problems both in cyberspace and in real space. But in order to embark on such a program, we must begin by considering the nature of the medium at issue.

II. THE NATURE OF THE NET

The Internet has been called a network of networks, local computer systems hooked to regional systems hooked to national or international high-capacity "backbone" systems. Each link, or node, in this web is a computer or computer site, all connected together by a variety of connections: fiber optic cable, twisted-pair copper wire, microwave transmission, or other communications media. Each computer in the network communicates with the others by employing machine-language conventions known as the IP, or Internet Protocols. Indeed, it is these protocols that define the network; those machines that talk to one another using IP are the Internet.

This medium defined by these shared protocols is distinctly unlike any other. First, the Internet is a packet switching network. Unlike communications media that tie up the entire channel in real time during transmission, the Internet breaks information into discrete packets of bits that can be transmitted as capacity allows. Packets are labeled with the address of their final destination and may follow any of a number of different routes from computer to computer until finally reaching their final destination, where they are reassembled by the recipient machine. Thus, packets from a variety of sources may share the same channel as bandwidth allows, promoting more efficient use of available carrying capacity.

^{8.} Cf. Richard Epstein, The Proper Scope of the Commerce Power, 73 VA. L. REV. 1387, 1390 (1987) ("Provisions that go to the question of jurisdiction are no less important to sound governance than those that govern individual rights.").

^{9.} See Vinton G. Cerf, Networks, Sci. Am., Sept. 1991, at 72, 78.

^{10.} See generally A Close-up of Transmission Control Protocol/Internet Protocol (TCP/IP), DATAMATION, Aug. 1, 1988, at 72; ED KROL & PAULA FERGUSON, THE WHOLE INTERNET FOR WINDOWS 95 at 29-31 (1995) (explaining the IP) [hereinafter KROL & FERGUSON].

^{11.} See KROL & FERGUSON, supra note 10, at 26.

Second, the Internet is designed around "smart communications." Because it is a network of computers, mechanical intelligence is available at every node of the network, and the design of the Internet takes full advantage of this characteristic. Computers at each node monitor traffic on the network and route packets along the least congested route to the next node, from which the process is repeated. Each computer in the network assesses whether to hold packets temporarily or send them on, so that maximum use is made of the available carrying capacity at any given time. ¹²

There is no centralized control of the packet routing or, for that matter, of almost any other aspect of the Internet. The rom a technical standpoint, each computer acts autonomously, coordinating traffic with its nearest connected neighbors, and guided only by the "invisible hand" that arises from the sum of millions of such independent actions. From a management standpoint, each node is similarly autonomous, answering only to its own systems administrator. This means that there is no central authority to govern Internet usage, no one to ask for permission to join the network, and no one to complain to when things go wrong.

Finally, the Internet protocol provides for "telepresence" or geographically extended sharing of scattered resources. An Internet user may employ her Internet link to access computers, retrieve information, or control various types of apparatus from around the world. These electronic connections are entirely transparent to the user. The "virtual machine" created by the connection appears to be the one at the user's fingertips — indeed, depending upon local network traffic, a distant facility may prove to be faster and more responsive than one in the next room. Internet users may therefore be completely unaware where the resource being accessed is, in fact, physically located. So insensitive is the network to geography, that it is frequently impossible to determine the physical location of a resource or user. Such information is unimportant to the network's function or to the purposes of its creators, and the network's design thus makes little provision for geographic discernment.

These features make available a vast array of interconnected infor-

^{12.} See Nicholas Negroponte, Products and Services for Computer Networks, Sci. Am., Sept. 1991, at 106.

^{13.} See KROL & FERGUSON, supra note 10, at 17-20, 26.

^{14.} See WILLIAM J. MITCHELL, CITY OF BITS 19 (1996) (discussing telepresence).

^{15.} Id. at 8.

mation including computerized digitized text, graphics, and sound. The totality of this international information construct is commonly referred to as "cyberspace," a cognitive habitat that is conceptually separate from the real space that we physically inhabit. "Cybernauts" who traverse this digital landscape find that virtual relationships with other electronic pilgrims blossom into collaboration, friendship, and even romance. Virtual communities coalesce from all corners of the globe to exchange information and reinforce shared values. And, increasingly, the universal human proclivity toward arbitrage and commerce is becoming an important component of online interaction.

The Internet, in fact, began as a product of Cold War military technology, linking together researchers in the U.S. Department of Defense sponsored research program.¹⁷ This system for communicating and sharing computer resources became increasingly important to the scientific community generally, and much of the funding, as well as management, of the Net's high speed backbone connection became the responsibility of the National Science Foundation, or NSF. In the days of government-sponsored research usage, there was little opportunity for commercial Internet traffic, and, indeed, NSF promulgated an acceptable use policy, or AUP, forbidding such use of the publicly-funded Internet backbone connection.¹⁸

As the benefits of Internet access became better known, the usefulness of computer networking was not lost on business or, for that matter, on consumers. A crop of private Internet access providers developed to offer network access and facilities to such customers outside the research community. In order to route traffic around facilities restricted by the NSF AUP, these providers formed the CIX, or Commercial Internet Exchange, which sponsored high-speed links for commercial traffic. In the meantime, NSF began slowly edging its way out of the Internet management business, first by funding regional networks, then contracting oversight out to private firms, and finally by encouraging the regional networks to find paying customers. By early 1995, NSF's role was the funding of a few Network Access Points, or NAPs, to act as data traffic exchanges.²⁰

Consequently, although the academic and scientific research com-

^{16.} Id. at 115-16; see generally HOWARD RHEINGOLD, THE VIRTUAL COMMUNITY (1995).

^{17.} See KROL & FERGUSON, supra note 10, at 14.

^{18.} See id. at 39-40.

^{19.} See DANIEL DERN, THE INTERNET GUIDE FOR NEW USERS 15 (1994) (discussing the CIX).

^{20.} See Waldrop, supra note 1.

munity remains an important part of the Internet community as a whole, private and commercial traffic is becoming a dominant force in the development and growth of the "electronic frontier." Businesses of all types routinely use the Internet for a variety of commercial transactions, and consumer services have begun to appear. At present, commercial traffic on the network generally culminates in an exchange of physical goods, and it is presently possible to access a variety of mailorder catalogs online, to arrange for purchase of music, books, fast food delivery, even flowers.²¹ The variety and availability of such consumer services is likely to grow, as are attendant facilities for online advertising and marketing.

In particular, the network offers novel opportunities for transactions involving information-based goods and services.²² The network already supports access to a wide variety of information utilities including databases and computational facilities, as well as archives of text, music, graphics, and software. Information and information-based services on the network have traditionally been offered for free, but will increasingly be offered on a commercial basis. Unlike transactions involving physical goods, delivery of digitized information products such as music, photographs, novels, motion pictures, multimedia works, and software can be accomplished entirely within the network itself. Such information products already represent a sizeable portion of the gross national product of developed nations. That portion is likely to increase world-wide, and the Internet will facilitate such increases. And, where there is commerce to be had, regulation is sure to follow.

III. COMPETITIVE FEDERALISM

In the United States, regulatory power is divided "vertically" between the states and the federal government and "horizontally" among the several states. It is with the latter division of power that we are primarily concerned here. At first blush, the social value of horizontal federalism may seem elusive or nonexistent: a plurality of possible fora, each with a different legal structure, might seem to foster only chaos and confusion in allocating interstate legal obligations. At a minimum,

^{21.} See MITCHELL, supra note 14, at 86-92.

^{22.} Id. at 141.

the reality of operating under a variety of legal regimes introduces an element of complexity and additional cost into both individual and business planning. If the existence — indeed, the promotion — of such a jurisdictional patchwork is to be at all defensible, then the benefits of such a system must somehow outweigh the costs of multiple compliance and uncertainty imposed by fostering multiple jurisdictions.

However, the benefit of jurisdictional diversity has long been celebrated, at least anecdotally, in the legal literature. Diversity forestalls legal and political stagnation. Within the so-called "laboratories of the states," various legal regimes may be composed and field tested in an attempt to evolve optimal systems. As between the states, deficiencies or virtues in their respective systems are expected to become manifest, leading to a "weeding-out" of undesirable rules and promotion of superior approaches. The implication of the "laboratory" metaphor has been that regulatory schemes that prove successful on a small scale may be adopted on a larger scale, either by other states or by the federal government.

More formal public choice models have built upon this somewhat intuitive recognition of the benefits of federalism.²⁴ Modern public choice theory predicts that representative government will frequently be subject to capture by special interest groups.²⁵ This arises in part from the low marginal value of voting as compared to the higher marginal value of activities such as lobbying. Voters may tend to be "rational ignorant" or "rational indifferent" — because a given vote is so unlikely to affect the outcome of an election that it is frequently not worth individual voters' time and effort to bother learning enough about the issues to cast an informed vote, or even to engage in voting itself. By contrast, special interest groups may see substantial pay-offs from activities that may be characterized as "rent-seeking," that is, expending time and money in order to use governmental mechanisms to secure competitive advantages.²⁶

^{23.} See New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (describing the states as the laboratories of democracy).

^{24.} See, e.g., Richard Epstein, Exit Rights Under Federalism, 55 LAW & CONTEMP. PROBS. 147 (1992).

^{25.} See Mancur Olson, The Logic of Collective Action: Public Goods and the Theory of Groups 141-48 (1965); James M. Buchanan & Gordon Tullock, The Calculus of Consent: Logical Foundations of Constitutional Democracy 284-95 (1962) (discussing the disproportionate political power of special interests and high degree of organization of business interests).

^{26.} See Gordon Tullock, The Welfare Costs of Tariffs, Monopolies and Theft, 5 W. ECON. J. 224, 232 (1967).

As a consequence, jurisdictions may potentially become encrusted with special-interest legislation that not only fails to reflect the interests of the majority of voters, but also burdens a wide variety of business and personal activity.²⁷ However, one of the virtues of a federal system is that individuals and businesses may express their preferences in a different manner: where voting at the ballot box fails, they may opt to "vote with their feet." Local governments that are captured by special interests, or that fail to reflect voter preferences, may find themselves losing constituents to more responsive regimes.

The production of local public goods and services might thus resemble the production of private goods in a competitive market: competitive pressure from other jurisdictions will prevent any given jurisdiction from offering too much or too little in the way of public services. Jurisdictions that offer too much will experience an influx of immigrants from less generous jurisdictions; jurisdictions that offer too little will experience an exodus to more generous jurisdictions. Migration in or out of the jurisdiction will continue until parity with competing jurisdictions is reached. These forces will tend to act as a check on overproduction or underproduction of local public goods. By "voting with their feet," or exiting, citizens force local politicians toward efficiency in allocation of resources to such goods. Indeed, just as in classic cartel theory the threat of entry deters monopoly profits, so in public choice theory the threat of "exit" may deter special interest regulation from accumulating. The services is a competitive market: competitive mar

The seminal analysis in this field is Tiebout's classic model, which describes local provision of public services on a theory of inter-jurisdictional competition that closely resembles market competition for provision of private goods.³¹ Tiebout theorized that if citizens are free to migrate between jurisdictions, competition for desirable citi-

^{27.} See RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 638 (4th ed. 1992).

^{28.} See Epstein, supra note 8, at 1454 ("How do the people compel the holders of governmental monopoly power to act as though they could only obtain a competitive return for their services? Federalism facilitates a solution by allowing easy exit, as well as by allowing voice." (citation omitted)).

^{29.} ALBERT HIRSCHMAN, EXIT, VOICE, AND LOYALTY — RESPONSES TO DECLINE IN FIRMS, ORGANIZATIONS, AND STATES 7 (1970); see also id. at 22-25 (discussing how the exit option works).

^{30.} See Albert Breton, The Existence and Stability of Interjurisdictional Competition, in Competition Among States and Local Governments: Efficiency and Equity in American Federalism 37, 40 (Daphne A. Kenyon & John Kincaid eds., 1991).

^{31.} See Charles Tiebout, A Pure Theory of Local Expenditures, 64 J. Pol. ECONOMY 416 (1956).

zen immigrants will arise. Local communities will offer to potential immigrants the most attractive packages of goods and services at the lowest tax rate possible. Similarly, migrants will relocate to jurisdictions offering the maximum package of public goods at the tax rate that the migrant is willing to pay. Local communities may even tailor their offerings to appeal to particular types of immigrants, and immigrants would be expected to sort themselves out into groups of similar means and tastes by jurisdiction.

Although business firms were not part of Tiebout's original model, his insight was quickly expanded to encompass strategic preferences of local governments regarding such firms. Just as in the consumer/citizen model, businesses too may "vote with their feet," locating their operations in jurisdictions that offer the most attractive set of local public goods. This, in turn, implies that jurisdictions may tailor their offerings to attract businesses, or to attract certain kinds of desirable businesses, or even to repel undesirable businesses.³²

This type of competition, in fact, appears to occur, giving rise to the so-called "Delaware phenomenon."33 It is fairly widely recognized that in the United States, surprisingly large numbers of corporations choose to incorporate or re-incorporate under the laws of the State of Delaware. The proper explanation for this phenomenon is less well settled than is the observation itself. Analyses of the phenomenon tend to fall into two broad schools of thought. The first of these schools, originally set out by law professor William Cary, suggests that competition for incorporation represents a "race to the bottom," that is, a race to liberalize incorporation law for the benefit of officers and directors.34 By enacting laws to appeal to the interests of officers and directors, states may attract incorporation, but at the expense of shareholders' rights. As states vie with one another for incorporation franchises, they successively liberalize their laws, until the rights of shareholders are entirely subordinated. Cary recommended federal intervention to halt what he perceived as a downward spiral of ruinous interstate competition.

The second school, which coalesced in response to Cary's claims,

^{32.} *Id.* at 418.

^{33.} For a recent review of the literature, see Lucian A. Bebchuck, Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law, 105 HARV. L. REV. 1435 (1992).

^{34.} See William L. Cary, Federalism and Corporate Law: Reflections upon Delaware, 83 YALE L.J. 663 (1974).

questioned whether shareholders would in fact be stupid enough, or oblivious enough to their own interests, to leave their investment dollars with firms incorporated under laws detrimental to the shareholders' interests.³⁵ If in fact jurisdictions such as Delaware were subordinating shareholder rights, one might expect to see shareholders "vote with their feet" by abandoning Delaware corporations for firms incorporating under laws more favorable to investors.³⁶ Such a loss of investment dollars to Delaware corporations might in turn provide an incentive for firms not to incorporate there. However, there appeared to be no such migration of investors from Delaware firms, or of firms from Delaware itself, leading commentators of the second school to interpret Delaware's success in attracting franchisees as indicating that such incorporations are attractive to investors, probably due to the superior returns on investment received from such firms.

This latter analysis suggested that Delaware, far from winning a "race to the bottom" for inefficient incorporation laws, had won a "race to the top" for efficient incorporation laws that permitted maximum returns to investors. A subset of the "race to the top" school, typified in the writings of Roberta Romano, particularly emphasized the Delaware phenomenon as a competition between jurisdictions for "law as a product."³⁷ Delaware may have attracted the lion's share of incorporation not necessarily because of the absolute superiority of its governing rules, but because the Delaware legal system has specialized in corporate law, offering additional certainty to firms seeking incorporation. Thus, Delaware offers not merely a highly developed statutory system. but also a court system with a high degree of expertise in resolving corporate conflicts, and a considerable body of case precedent governing such conflicts. Thus, these scholars argue, the total package of Delaware's law succeeds in the incorporation marketplace as a superior product.

The Tiebout model, like most pure economic theories, rests upon a number of simplifying assumptions. The model assumes that voters have full knowledge of the package of local services offered in various

^{35.} See Peter Dodd & Richard Leftwich, The Market for Corporate Charters; Unhealthy Competition Versus Federal Regulation, 53 J. Bus. 259 (1980); Daniel Fischel, The "Race to the Bottom" Revisited: Reflections on Recent Developments in Delaware's Corporation Law, 76 Nw. U. L. REV. 913 (1982).

^{36.} See Epstein, supra note 24, at 152.

^{37.} See Roberta Romano, Law as a Product: Some Pieces of the Incorporation Puzzle, 1 J. L. ECON. & ORG. 225 (1985).

jurisdictions, that there are a large number of jurisdictions from which to choose, that individual mobility is relatively unconstrained, and that communities have an optimal size which will be dictated by the balance between resource constraints and economies of scale. Most important for this discussion, the Tiebout model assumes that jurisdictions are tightly compartmentalized so that no external costs or benefits accrue from the local provision of public services. If jurisdictions are "leaky," then individuals could perhaps enjoy the positive benefits of a neighboring jurisdiction's policy without actually incurring the cost of migrating there.³⁸ More significantly, in a world of "leaky" borders, jurisdictions could lower the costs of regulation to local firms by imposing all or part of those costs on neighboring jurisdictions; this would serve to attract firms, but not necessarily by generating a net gain in efficiency. As one commentator observes:

Each state has an incentive to impose taxes the burden of which will, as much as possible, fall on residents of other states. Such taxation not only deflects the state from the search for taxing methods that maximize efficiency and distributive values for the nation as a whole, it also leads to socially excessive government expenditures, by enabling the state to externalize the costs of its public services.³⁹

The states may attempt to avoid such a race by entering a cooperative agreement that forbids such a "race to externalize." However, as in the case of classic economic cartels, such a governmental cartel is likely to be highly unstable.⁴¹ Theories of cooperation predict that, much as in the famous "Prisoner's Dilemma" game theory model,⁴² a

^{38.} See JOSEPH STIGLITZ, The Theory of Local Public Goods, in LOCAL PROVISION OF PUBLIC SERVICES: THE TIEBOUT MODEL AFTER TWENTY-FIVE YEARS 17, 19 (George R. Zodrow ed. 1983).

^{39.} See POSNER, supra note 27, at 638.

^{40.} See Joel P. Trachtman, International Regulatory Competition, Externalization, and Jurisdiction, 34 HARV. INT'L LJ. 47, 73 (1993).

^{41.} See George J. Stigler, A Theory of Oligopoly, 72 J. POL. ECONOMY 44 (1964).

^{42.} The "Prisoner's Dilemma" model serves as an standard example of a noncooperative game in which the rational self-interest of the players leads to a suboptimal outcome for each player. DAVID M. KREPS, GAME THEORY AND ECONOMIC MODELING 37-39 (1990). However, the outcome is dependent on the assumption that the players cannot communicate with one another to collude, and that the game is a single-round event. In at least some instances, however, this dynamic may change if the game continues through multiple rounds. ROBERT AXELROD, THE EVOLUTION OF COOPERATION 10 (1984); see generally John E. Chubb, How Relevant is Competition to Government Policymaking, in COMPETITION AMONG STATES AND LOCAL GOVERNMENTS, supra note 30, at 57-58 (States are not in a prisoner's dilemma with one suboptimal outcome, but are in

sovereign state will remain party to a cooperative agreement only to the extent that the agreement is "self-enforcing," that is, only so long as it has more to gain from cooperation than from defection.⁴³

If, in fact, cooperative strategies prove impossible or unworkable, rational competitors may have yet another option. If "horizontal" cooperation between jurisdictions proves unstable, the creation of a "third party" standing in a vertical relationship to the competitors may be necessary. Tiebout recognized this in his original model by noting that where externalities exist, centralized decisionmaking, rather than interjurisdictional competition, may be required to achieve an efficient outcome. Stated in game theoretic terms, knowing that their own rational short-term competitive preferences will inevitably lead to their own detriment in the long term, states may choose to voluntarily surrender all or part of their decisionmaking power to a third party.

This is in essence the strategy adopted by the individual states of the United States in acquiescing to their constitutional compact that creates a centralized federal government. Similar benefits may be found in the federal compacts of Canada, Australia, and, to some extent, the European Community. As the colonial parties to the Articles of Confederation quickly found, certain activities are poor subjects for a cooperative agreement, because it is too attractive to "defect" from the agreement. The solution was to shift regulation of such activities to a central government under the federal constitution.⁴⁵ However, under the federal Constitution, even when some types of interstate regulation have been centralized, the benefits of interstate competition have also been preserved to the extent deemed practical.⁴⁶ Because competitive benefits will be lost in whichever markets are centralized, centralization must be considered a drastic measure taken only where no such efficiencies are to be had; that is, where externalities prevent the development of competition in the first instance.

However, in order for competitive benefits to be maintained, jurisdictional compartmentalization is essential. Thus, the federal compact not only "vertically" transfers certain powers to the federal government, it also defines the "horizontal" relationships between the states that are

a repeated play version of that game where they can learn about cooperative behavior.).

^{43.} See Lester Telser, A Theory of Self-Enforcing Agreements, 53 J. Bus. 27 (1980).

^{44.} See Breton, supra note 30, at 48-49.

^{45.} See Epstein, supra note 8, at 1454 ("National regulation prevents unhealthy types of competition among jurisdictions . . .").

^{46.} See id.

party to the compact. Significant portions of the Constitution are given over to defining "horizontal" federalism, and, as I shall argue, are particularly given over to preserving the jurisdictional conditions necessary for competition of "law as a product." Chief among these provisions are the Due Process Clause of the Fourteenth Amendment and the Commerce Clause in its dormant aspect. The unprecedented interconnectedness created by the Internet poses new challenges to the jurisdictional aspects of both these provisions; if they are to continue serving their proper function in an online environment, their role as buffers for competitive federalism must be kept firmly in mind.

IV. DUE PROCESS LIMITS

The personal jurisdiction problems posed by virtual commerce and Internet telepresence are in many ways the culmination of a long evolution of legal doctrine occasioned by changing technology.⁴⁷ Traditionally, jurisdiction over the person was premised on the physical presence of the individual in the forum; this continues to be a viable jurisdictional basis.⁴⁸ However, increased physical mobility due to automobiles and other modern transportation placed this jurisdictional basis under severe strain,⁴⁹ as did disputes over "virtual" entities such as corporations that have no physical situs,⁵⁰ and over "virtual" properties such as stocks⁵¹ and debts⁵² that similarly lack physical form.⁵³

As a response to the imminent collapse of jurisdiction based on physical presence, the Supreme Court configured new rules based upon a kind of "virtual" presence. Beginning with the notorious *International Shoe* opinion, the Supreme Court began developing a set of criteria for

^{47.} See Hanson v. Denckla, 357 U.S. 235, 250-51 (1958) ("As technological progress has increased the flow of commerce between the states, the need for jurisdiction over nonresidents has undergone a similar increase."); Burger King v. Rudzewicz, 471 U.S. 462, 476 (1985) ("[I]t is an inescapable fact of modern commercial life that a substantial amount of business is transacted solely by mail and wire communications across state lines, thus obviating the need for physical presence within a state in which business is conducted.")

^{48.} See Burnham v. Superior Court, 495 U.S. 604 (1990).

^{49.} See Hess v. Pawloski, 274 U.S. 352 (1927).

^{50.} See Hutchinson v. Chase & Gilbert, 45 F.2d 139 (2d Cir. 1930).

^{51.} See, e.g., Shaffer v. Heitner, 433 U.S. 186 (1977).

^{52.} See Harris v. Balk, 198 U.S. 215 (1905).

^{53.} See Roger H. Transgrud, The Federal Common Law of Personal Jurisdiction, 57 GEO. WASH. L. REV. 849, 892 (1989) ("The Court's territorial rules . . . could not readily account for incorporeal juridical entities").

requiring non-residents of a state to defend lawsuits in that state.⁵⁴ According to *International Shoe* and its progeny, the Due Process Clause of the Fourteenth Amendment constrains state courts from exercising personal jurisdiction over defendants who lack sufficient contacts with the forum state.⁵⁵ Unless the defendant has a sufficient quantum of contact with the forum state, that state's exercise of jurisdiction over the defendant would offend "traditional notions of fair play and substantial justice".⁵⁶

A. Minimum Contacts Analysis

In analyzing the defendant's contacts, two broad classes of jurisdictional situations have been recognized. The first, known as "general jurisdiction," involves an attempt to assert jurisdiction over a defendant when the defendant's contacts are unrelated to the dispute.⁵⁷ An assertion of general jurisdiction over the individual is permissible if the defendant's contacts with the forum are systematic and continuous enough that the defendant might anticipate defending any type of claim there.⁵⁸ A second jurisdictional situation arises where the defendant's contacts arise out of the facts of the dispute. A court may exercise jurisdiction over the defendant if the defendant has "minimum contacts" with the forum such that he might anticipate defending that particular type of claim there.⁵⁹ The contacts relied upon may be isolated or occasional, so long as they are purposefully directed toward the forum.⁶⁰

The specific jurisdiction situation is rather more problematic than that of general jurisdiction, as the nature and extent of the contacts, as well as their relationship to the claims asserted, must be carefully examined. The general requirement that must be satisfied for Due Process purposes is a sort of "foreseeability" that the defendant is on notice of fora where she may be called upon to defend a suit.⁶¹ This "foreseeability" requirement allows the defendant to structure her activities so as to prepare for potential liability, or avoid states where she does not

^{54. 326} U.S. 310 (1945).

^{55. 326} U.S. at 316.

^{56.} Id.

^{57.} See Helicopteros Nacionales de Columbia, S.A. v. Hall, 466 U.S. 408, 414 n.9 (1948).

^{58.} International Shoe, 326 U.S. at 318.

^{59.} Id. at 320.

^{60.} See id. at 319-320; Burger King v. Rudzewicz, 471 U.S. 462, 473 (1985).

^{61.} See World-Wide Volkswagon Corp. v. Woodson, 444 U.S. 286, 292 (1980).

wish to assume liability.62

The Supreme Court has also offered a list of five jurisdictional "fairness factors" that may require a separate assessment, especially when the defendant's contacts with the forum are attenuated. The factors to be weighed before subjecting the defendant to jurisdiction include the inconvenience to the defendant of defending in that forum, the forum state's interest in adjudicating the dispute, the plaintiff's interest in obtaining convenient and effective relief, the interstate judicial system's interest in efficient resolution of interstate conflicts, and the shared interest of the states in furthering substantive social policies. 64

1. Virtual Contacts

These oft-repeated jurisdictional criteria, though familiar, have not necessarily produced recognizably coherent results when applied to real-space activity. A comprehensive theory of personal jurisdiction has largely eluded commentators. Indeed, although we may discern the broad outlines of the legacy of *International Shoe*, predicting the outcome of the "minimum contacts" test under a given set of transactions is something of a black art. However, no matter how perplexing the application of the test has been in real space, its application to Internet activity may prove to be even more arcane. Anomalous results may be expected because the network's structural indifference to geographic position is incongruous with the fundamental assumptions underlying the *International Shoe* test.

Consider how the Supreme Court's jurisprudence in this area contradicts the essential nature of the Net. Where jurisdiction from Internet contacts is at issue, physical presence of the defendant within the forum state will likely be the exception rather than the rule — internauts do physically reside somewhere in real space, and if the defendant internaut physically resides within the forum, the law seems well settled that its courts can exercise jurisdiction over her. However, given the far-flung nature of the Net, far more defendants will reside outside any

^{62.} Id.

^{63.} Burger King, 471 U.S. at 477.

^{64.} Id. Additionally, where jurisdiction over foreign nationals is at issue, the Supreme Court has indicated that potential interference with the procedural and substantive policies of other nations, as well as the impact on the foreign relations policies of the United States may constitute additional fairness factors for consideration. See Asahi Metal v. Superior Court, 480 U.S. 102, 115 (1987). A full consideration of these additional factors goes beyond the scope of this paper, but in practice will often be required due to the scope of the Internet.

given plaintiff's preferred jurisdiction than will reside within it. A significant number of online disputes will therefore require an *International Shoe* analysis.

Thus, personal jurisdiction over an Internet user will most frequently be premised on the user's contacts with the forum. Given the nature of online transactions, those contacts will, in many cases, be solely Internet-based contacts. As described above, the "minimum contacts" test requires the tribunal to inquire whether the defendant cybernaut has purposefully availed herself of the benefits of the forum state, such that she might reasonably foresee being haled into court there. In particular, pecuniary gain from the forum is assumed to signal that the defendant has "benefitted" in a concrete way from the laws and public services of the forum.

However, one must wonder how reliable an indicator pecuniary gain will be as to minimum contacts via the Internet. At the present time, the majority of Internet users probably derive no pecuniary benefit from their online activity (if anything, their use of the Net is probably a net *drain* on their finances). Personal communications and discussion groups may be breeding grounds for a wide range of constitutional, contractual, and tort claims, but in the course of conduct that leads to the claim, little money changes hands. This situation is of course already changing; there is money to be made in cyberspace, and entrepreneurs are scrambling to claim their share. Clearly, as online commerce grows, many businesses will benefit financially from transactions conducted via the network.

Yet the business activity these online users conduct will not, for the most part, be directed toward a particular physical jurisdiction. Businesses will frequently be ignorant of a customer's physical location, and customers equally ignorant of the business'. If the transaction results in shipment of physical goods, then this veil of ignorance may be rent; the goods must end up somewhere. But the unique aspect of Internet commerce is that the Net allows not only negotiation and payment online, but also delivery of goods if the goods are digitized information products: software, pictures, movies, music, novels, data, and the like. Information-based services such as systems monitoring, education, data processing, or consulting can also be offered wholly online. Payment by credit card may reveal to a business the customer's identity, but not

^{65.} See International Shoe, 326 U.S. at 319.

^{66.} See id. at 320.

her location, and payment using anonymous "digital cash" is even less traceable.⁶⁷

2. Purposeful Availment

The network's geographic insensitivity is similarly problematic with regard to Due Process' purposeful availment requirement.⁶⁸ As outlined above, cybernauts neither know nor care about the physical location of the Internet resources they access. In some very broad sense one might argue that an Internet user who accesses remote resources is "purposefully availing" himself of the benefits of the forum in which the resource is located; the laws and public services of that jurisdiction likely help to maintain the physical infrastructure of that resource, protect it from theft and vandalism, and facilitate its continued operation. But the remote user is entirely indifferent, and frequently ignorant, as to which jurisdiction is providing these benefits — the resource could just as well be in one jurisdiction as another.⁶⁹ Thus it is difficult to assert with a straight face that the remote user has purposefully or knowingly availed himself of that particular jurisdiction's benefits.⁷⁰

It is similarly difficult to seriously assert that an Internet business should "reasonably anticipate" being haled into court in a geographical location concerning which it was ignorant, or at least indifferent, with regard to contact. Consider for a moment whether an Internet host could somehow screen or block access so as to avoid contact with a certain jurisdiction. Access to Internet resources is provided via a system of request and reply; when an online user attempts to access information or services on the network, her local computer requests such access from the remote server computer where the desired resource is

^{67.} See A. Michael Froomkin, Flood Control on the Information Ocean: Living with Anonymity, Digital Cash, and Distributed Database, 15 J.L. & Com. 395 (1996).

^{68.} See Bensusan Restaurant Corp. v. King, 1996 U.S. Dist. Lexis 13035 (S.D.N.Y. Sept. 9, 1996) (declining jurisdiction on the grounds that Missouri web site owner "has done nothing to purposefully avail himself of the benefits of New York.").

^{69.} See MITCHELL supra note 14, at 117.

^{70.} See Eckenwiler, supra note 5, at S35. Unfortunately, the absurdity of such on assertion seems to have been lost on the court in Inset Systems, Inc. v. Instruction Set, Inc., 1996 U.S. Dist Lexis 7160 (D.Conn. April 17, 1996). In an opinion devoid of any meaningful due process analysis, the District Court in Inset Systems held that the mere presence of defendant's web site on the Internet constituted "purposeful availment of the privilege of doing business in Connecticut." Id. As of this writing, there are an estimated 450,000 web sites on the Internet. If one were to accept the logic of the Inset Systems opinion, then it would appear that all 450,000 web site owners have purposefully availed themselves of the privilege of doing business in Connecticut - even if they have never heard of Connecticut.

housed.⁷¹ The remote machine may grant or deny the request, based on its programmed criteria; only if the request is granted does the server tender the information to the user's machine.

At least in theory, this step in access to Internet resources could be used to screen requests, denying those requests originating in jurisdictions with which the host machine's operator did not wish to have contact. But in practice, such screening is eminently unworkable. Internet protocols were not designed to facilitate geographic documentation; in general, they ignore it. Internet machines do have "addresses," but these locate the machine on the network, and not in real space. Of course, some Internet addresses do include geographic designators, or designators that might be geographically traceable — for example, an Internet address containing the domain ".byu" might be recognized as associated with computers at Brigham Young University, which in turn could be found in a directory of colleges and universities as being located in Provo, Utah. An Internet host who wished to avoid being haled into court in Utah might instruct her machines to refuse access requests originating at the ".byu" domain.

Unfortunately for such a screening system, the majority of Internet addresses contain no such geographic clues. More to the point, all Internet addresses are eminently portable because they are not physical addresses in real space, but are rather logical addresses on the network. Today the operator of the "foo.bar" domain may reside on a machine operating in New York, but tomorrow he may transfer his operation — and his Internet address — to a host machine in Hawaii. The transfer need not even involve physical movement; the operator may remain in New York, if indeed he does not already dwell in another jurisdiction altogether. This transfer, whether physical or logical, will be completely invisible to Internet users; when they seek access to resources at that address, the request will be routed to that location on the network, without reference to its physical location. There is, in other words, simply no coherent homology between cyberspace and real

^{71.} KROL & FERGUSON, supra note 10, at 33; MITCHELL, supra note 14, at 9.

^{72.} See KROL & FERGUSON, supra note 10, at 37 ("The pieces of a domain-style name... may not tell you anything about who maintains the computer corresponding to that address, or even (despite country codes) where that machine is located."). Additionally, the same machine may have many different domain names, and machines displaying the same domain are not necessarily on the same physical network. Id.

^{73.} MITCHELL, supra note 14, at 8-9.

^{74.} See KROL & FERGUSON, supra note 10, at 37-38.

space.

To add an additional layer to the geographic confusion, even if in some instances an Internet address tells one something about the location of a given machine, it tells nothing about the location of the user of that machine.⁷⁵ For example, I generally use my sponsoring institution's computer system to access the Internet. Seton Hall University is physically located in New Jersey. It is possible someone familiar with Seton Hall University would classify my Internet address among "New Jersey based" domains, and one can imagine that a business seeking to avoid contact with New Jersey could program its Internet site to refuse connections with my domain and other apparently "New Jersey based" domains. However, I also maintain a guest account at a university located in California. I can effortlessly use the Internet utility called "telnet" to access the California system from my New Jersey account and use the California account exactly as if I were physically there — from my perspective, the connection is completely transparent.76 Similarly, any system that I access via the California account will "see" me as being "located" at an Internet domain in California but the data is in fact being passed through to New Jersey. If New Jersey were on a site's list of prohibited jurisdictions, my access via California would elude current protocols for screening and blocking.77

This situation is not unusual on the Internet and is by no means limited to academics — I am acquainted with one attorney who recently moved from New York to Chicago; he prefers to continue using his New York-based Internet service provider, which he accesses via an 800 dial-up number. Internet sites attempting to screen Illinois users would see him as a New York user and permit him access, even though any data or service he accesses is passed through to his physical location in Illinois. Similar kinds of dial-up access, as well as common Internet features allowing remote access and anonymous login, strip the network of any meaningful clues by which one might screen users by geographic region.⁷⁸

These examples should make clear that a user need not actively cloak her activities on the Internet for her physical location to be obscured; geographic indeterminacy is simply part of the network's nor-

^{75.} See KROL & FERGUSON, supra note 10, at 37; MITCHELL, supra note 14, at 9.

^{76.} See KROL & FERGUSON, supra note 10, at 209.

^{77.} See Eckenwiler, supra note 5, at S35.

^{78.} See KROL & FERGUSON, supra note 10, at 286.

mal operation.⁷⁹ Additionally, it must be emphasized that the examples I have given anticipate only the most routine uses of the Internet's capabilities; they do not involve exotic — but readily available — technology, such as public key cryptography⁸⁰ or anonymous remailers,⁸¹ that could be used to *actively* conceal a user's location.⁸² Neither do the examples contemplate illegal activity, such as unauthorized hacking into another's computer account, in order to mask a user's physical location.

Given the request-and-response sequence of Internet host access, some might wonder whether the system might support a request for physical coordinates before access were granted. Such a scheme to avoid contacts with certain jurisdictions is also quite unworkable. First, the query could not be effectively conducted online since, as we have seen, there is no way within the Internet to verify the response. Public key cryptography may someday allow the development of the cyberspace equivalent of "photo ID," but this would verify only the user's identity, not her location. Could the response be somehow verified off-line, by telephone or otherwise? The utility of such a supposition is highly questionable — even were a human being to vet every request manually, there is simply no feasible way to coordinate the offline response with the online usage.83 Additionally, unless the process were automated, all of the advantages of using the Internet would be lost, much like forcing telephone carriers to abandon modern software switching and return to "pull and plug" switching by switchboard operators.

And finally, just to further cloud the issue, consider the common

^{79.} MITCHELL, supra note 14, at 9.

^{80.} Public key cryptography uses the mathematical properties of large prime numbers to create a code such that anyone holding the code's "public key" may decode a message, but only the person holding the code's "private key" can encode it. See generally Martin Hellman, The Mathematics of Public-Key Cryptography, SCI. AM. Aug. 1979 at 146; see also A. Michael Froomkin, The Metaphor is the Key: Cryptography, the Clipper Chip, and the Constitution, 143 U. PA. L. REV. 709 (1995).

^{81.} Anonymous remailers are Internet devices that make electronic mail messages untraceable. See generally A. Michael Froomkin, Anonymity and its Enmities, 1995 J. Online L. art. 4 (http://www.law.cornell.edu/jol/froomkin.html).

^{82.} See MITCHELL, supra note 14, at 9-10.

^{83.} A point which unfortunately appears to have been lost on the District Court in Playboy v. Chuckleberry Publishing, 1996 U.S. Dist. Lexis 9865, (S.D.N.Y. June 19, 1996) where the court ordered an Italian web site owner to screen out users from the United States. See id. at 11.

Internet practice of "caching" copies of frequently accessed resources.⁸⁴ In order to better manage packet traffic, some Internet servers will store partial or complete duplicates of the materials from frequently accessed sites; keeping copies on hand alleviates the need to repeatedly request copies from the original server. An Internet user attempting to access the materials will never know the difference between the cached materials and the original. The materials displayed on the user's machine will appear to come from the original source, whether they are actually transmitted from there or from a nearby cache. Note again that in using the term "nearby," I refer to logical proximity, not physical proximity—the resources may be accessed from a cache that is physically farther from the user than the original source if the cache is more accessible because of lower traffic or usage.

Thus, the user may be accessing materials at a particular site, or he may be accessing copies of those materials located on a different machine half a world away. Or, he may be receiving materials transmitted from the cache, updated by occasional transmissions from the original server. This means that not only is it impossible to be certain of an Internet user's physical location, it is equally impossible to be certain of an Internet resource's physical location. Indeed, given that the network lends itself to distributed computing applications, an Internet resource may well have no discrete physical location — portions of the resource may be resident on many different machines around the world, to be transparently and seamlessly assembled as needed.

3. Constructive Notice

This discussion should clearly demonstrate that Internet users are unlikely to have an actual awareness of the jurisdictions that their online activities might touch. Of course, one might argue, the "reasonably anticipate" standard does not contemplate actual knowledge or anticipation of contacts, but constructive knowledge: even if the actor did not in fact anticipate the contact, he should have. But this is equally problematic; construed this broadly, the criterion of reasonable anticipation becomes a sham, especially on the Internet. Because Internet activity can originate essentially anywhere, the broad form of the anticipation requirement would dictate that users might "reasonably

^{84.} See generally KROL & FERGUSON, supra note 10, at 142.

^{85.} See Lea Brilmayer, How Contracts Count: Due Process Limitations On State Court Jurisdiction, 4 SUP. CT. REV. 72, 92 (1980).

anticipate" defending a lawsuit essentially anywhere.86

This position in fact appears to be the position of the Minnesota Attorney General's office, that she who ventures into cyberspace takes her chances as to where she may find herself defending a lawsuit.⁸⁷ This jurisdictional theory closely resembles the "stream of commerce" theory articulated by a Supreme Court plurality in the *Asahi Metal* decision.⁸⁸ Under this analysis, placing goods into the "stream of commerce" would render the manufacturer amenable to suit wherever the goods came to rest, as participants in a modern economy should be aware that they could come to rest almost anywhere.⁸⁹ This position may also derive some support from the Supreme Court's decisions in *Keeton v. Hustler Magazine, Inc.*⁹⁰ and *Calder v. Jones.*⁹¹ In each of these cases, the sale of magazines within a forum state was found to render, respectively, the publisher and editor of the magazine amenable to suit there.⁹²

But the "stream of commerce" rationale failed to draw a majority in Asahi Metal, and its application in many cases will lie at odds with the language of the Supreme Court's other Due Process holdings. The opinion in World-Wide Volkswagen flatly rejects a construction of personal jurisdiction that would subject manufacturers of physical products to suit wherever their products should happen to end up.⁹³ In that decision, the Court declined to make automobiles travelling "agent[s] for service of process" on the distributor, rendering him amenable to suit wherever they roamed.⁹⁴ Similarly, on the Internet, if amenability to suit travels with a user's packets, then it might be said that the user, in effect, appoints his data "as agents for service of process."

However, the analogy between moving packets and moving auto-

^{86.} See World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 295-96 (1980) (rejecting actual foreseeability because of the scope of potential liability).

^{87.} See Eckenwiler, supra note 5, at \$35.

^{88.} Asahi Metal Indus. Co. v. Superior Ct., 480 U.S. 102 (1987). In Asahi Metal Justice Brennan articulated a very permissive standard for "purposeful availment" that would hold manufacturers liable in a forum of they were aware that their product was regularly marketed there. *Id.* at 117. Neither this standard nor Justice O'Connor's more restrictive standard for purposeful availment commanded a clear majority.

^{89.} Id. at 116-17 (Brennan, J., dissenting in part).

^{90. 465} U.S. 770 (1984).

^{91. 465} U.S. 783 (1984).

^{92.} Keeton, 465 U.S. at 773-74; Calder, 465 U.S. at 789.

^{93.} See World-Wide Volkswagen, 444 U.S. at 296.

^{94.} Id.

mobiles is somewhat obscured by the holding in Calder v. Jones. There the defendants raised similar arguments, using the World-Wide Volks-wagen phraseology with regard to the magazines: that they should not be transformed into their agents for service of process. The court rejected that argument, and perhaps one might reason that packets of bits more closely resemble magazines than they do automobiles. But extending the holding of Calder or of Keeton to the Internet may, as my colleague Michael Risinger would say, simply be taking a good joke too far. The publisher or editor in those cases was unlikely to have had actual knowledge that their magazines were sold in, respectively, California and New Hampshire, but the distribution or subscription information was undoubtedly available if needed or requested. The defendants in those cases could, at least in theory, have structured their conduct so as to avoid those jurisdictions.

On the Internet, however, the fiction of such imputed knowledge is pushed to the point of intellectual bankruptcy. The fundamental principle of the Supreme Court's Due Process jurisprudence has been that the actor must be able to structure his primary conduct so as to avoid liability in a given jurisdiction. The structure of the network is such that there is no meaningful opportunity to avoid contact with a given jurisdiction — except perhaps to stay off the Internet altogether. This "all or nothing" result is not consonant with the Supreme Court's in personam jurisprudence and almost certainly results from a poor analysis of both the characteristics of the Internet and of the competitive federal functions of due process. Thus, a more careful examination of both is clearly in order.

B. Competitive Contacts

Much of the difficulty in articulating a sensible standard of Internet due process stems from the misleading terminology employed in personal jurisdiction analysis. Consider the Supreme Court's core criterion of "foreseeability" or "reasonable anticipation." This standard is in a very real way circular. A defendant should anticipate being haled into fora with which he has minimum contacts. But what constitutes mini-

^{95.} Calder, 465 U.S. at 789.

^{96.} Id.

^{97.} See Calder, 465 U.S. at 783; Keeton, 465 U.S. at 789-90. In Calder v. Jones particularly, the court appeared to regard the publication as a sort of poisoned arrow "expressly aimed" at the forum. Id.

mum contacts? On the Internet, in particular, one could very easily anticipate having contacts with every jurisdiction in the nation. The Supreme Court has indicated that only certain kinds or levels of contacts will render a defendant amenable to suit. What contacts are those? Why, the kind of contacts that one might reasonably anticipate would render one amenable to suit. But this brings us precisely back to where we started — in other words, defendants should reasonably anticipate being haled into any court into which they should reasonably anticipate being haled. This kind of tautology is, to say the least, not helpful in structuring one's primary conduct.

1. Foreseeability

There is a way out of the tautology, however. Previous personal jurisdiction analyses have already recognized that this problem may be illuminated by reference to relevant substantive law. A similar tautology appears to occur, for example, when the term reasonably foreseeable is employed in tort law: the law of negligent torts requires that an actor be held liable for the reasonably foreseeable consequences of his acts. This rule does not contemplate a standard of actual foreseeability. On the one hand, tortfeasors may clearly be held liable for consequences that they should have foreseen but in fact did not. On the other hand, given sufficient time and contemplation, any consequence is, in theory, foreseeable. An actor thus should expect to be held liable for those consequences that the law considers reasonably foreseeable — but this standard is supposedly based upon what the ordinary prudent person would foresee, an apparent tautology.

In tort law, courts and commentators have avoided chasing their tails by recognizing that "reasonable foreseeability" in fact comprises a social value judgment. The parameters of this policy are embodied in the famous "Learned Hand inequality," which would impose liability where the cost of taking additional preventive measures would be less than the expected cost of additional accidents. ¹⁰⁰ Under this calculus, actors would be required to take precautions up to the point where the

^{98.} See Brilmayer, supra note 39, at 92 n.70 ("[The reasonable anticipation standard] begs the question because the only difference between that and foreseeability generally is the legal conclusion of whether the defendant is subject to jurisdiction.").

^{99.} See id. at 91-92.

^{100.} See United States v. Caroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947) (stating the inequality as "B < PL," where B denotes the cost of taking precautions, P denotes the probability of harm, and L denotes the cost of the harm); see also POSNER, supra note 27, at 163-66 (expanding the Learned Hand analysis).

marginal cost of an additional unit of prevention equalled the marginal cost of the next unit of accidental harm; taking more precautions would be socially wasteful. ¹⁰¹ In the causation context, this means that cost-effective precautions would be taken only against the most likely consequences of an act; precautions against remote or unlikely accidents would cost more than they are worth. ¹⁰²

This suggests that, in order to avoid chasing our tails in the law of personal jurisdiction, we must similarly recognize that "reasonable anticipation" comprises a social judgment regarding costs and benefits, allowing us to articulate a procedural analogue for the Learned Hand negligence calculus. Stated simply, societal interests are best served when we require defendants to defend suits in a particular forum only in those instances where the benefits accruing to the defendant from his activity there exceed the costs of forcing him to defend in that forum. 103 Understood in this fashion, the "reasonable anticipation" test no longer requires circular guessing about how prescient defendants must be; rather, the standard recognizes that a societal value judgment is being made and should be made on the basis of at least roughly quantifiable costs and benefits. As some previous commentators have noted, in many cases the amount of the cost of defending in a distant forum appears irrelevant; minimum contacts may be lacking even where the cost to the defendant appears relatively modest. 104 This is because the absolute magnitude of the cost is not the issue; it is the comparative magnitude of the cost of defending in that jurisdiction against the benefit conferred by the jurisdiction.

However, the court's calculus is not finished with the determination of "minimum contacts." In performing the contacts calculus, the court risks the costs of both Type I and Type II error; that is, finding jurisdiction where it should have found none, or failing to find jurisdiction where it should have been found. Either mistake is eminently possible, as the question of jurisdiction will be decided at the initial stages of the proceeding, before discovery or any other significant development of the facts of the case, and, thus, likely on incomplete information

^{101.} POSNER, supra note 27, at 164.

^{102.} Id. at 185 ("[One] meaning of unforeseeability in the law of torts is that high costs of information prevented a party from taking precautions against the particular accident that occurred; put differently, B in the Hand Formula was prohibitive once information about risk is recognized to be a cost of avoiding risk.").

^{103.} See id. at 644-45.

^{104.} See Brilmayer, supra note 85, at 85,

about relevant costs and benefits. Error of the first kind is likely to be unnecessarily costly to the defendant, whereas error of the second kind will likely be unnecessarily costly to the plaintiff — one party or the other will be forced by the decision to defend in a distant forum. ¹⁰⁵ Consequently, as it is making its decision under uncertainty, the court is required to balance the five "fairness factors" to determine the probability of harm given one type of error against the probability of harm given the other type of error. ¹⁰⁶

2. Sovereignty and Contacts

This general framework takes us a considerable way toward articulating a coherent standard for personal jurisdiction. One important puzzle remains, however, which is the problem of sovereignty. The Supreme Court has repeatedly stated that state sovereignty forms an integral part of the personal jurisdiction calculus. In particular, the Court has stated that its personal jurisdiction jurisprudence incorporates the limits imposed upon state sovereignty by the sovereignty interests of sister states. ¹⁰⁷ On its own terms, this is somewhat puzzling, as the Due Process Clause is generally understood to guarantee a personal freedom for individuals — in other words, it defines a relationship between an individual and the state, not between sovereign states. ¹⁰⁸ Neither is it

^{105.} Cf. John Leubsdorf, The Standard for Preliminary Injunctions, 91 HARV. L. REV. 525, 540-42 (1978) (discussing the standard for preliminary relief in terms of comparative costs of error). Judge Posner has transformed Professor Leubsdorf's insight into a symbolic notation: $P(H_P) > (1-P)H_A$, where P is the probability that the plaintiff will prevail at trial, (1-P) is concomitantly the probability that defendants will prevail, H_P is the irreparable harm that plaintiffs will suffer if preliminary relief is erroneously denied, and H_A is the irreparable harm that defendants will suffer if preliminary relief is erroneously granted. See American Hosp. Supply Corp. v. Hospital Prod. Ltd., 780 F.2d 589, 593 (1986); see also POSNER, supra note 27, at 553-54. Although I would hesitate to attempt to reduce the due process fairness factors to symbolic notation, the principle is much the same.

^{106.} Thus, these factors are by no means "extraneous and misleading" adjuncts to the contacts analysis, as some previous commentators have supposed. See Transgud, supra note 53 at 896. It is critical to note that the court is balancing the possible harm under one set of assumptions against the possible harm under a different set of assumptions; i.e., the social harm if jurisdiction is erroneously asserted, against the social harm if jurisdiction is erroneously declined. Cf. Douglas Laycock, MODERN AMERICAN REMEDIES, (2d Ed. 1995) (discussing the assumptions for balancing preliminary injunction factors).

^{107.} See, e.g., Hanson v. Denckla, 357 U.S. 235, 251 (1958) ("These [due process] restrictions are more than a guarantee of immunity from inconvenient or distant litigation. They are a consequence of the territorial limitations on the power of the respective States."); World-Wide Volkswagen, 444 U.S. at 293 ("The sovereignty of each state, in turn, implied a limitation on the sovereignty of all of its sister States—a limitation express or implicit in both the original scheme of the Constitution and the Fourteenth Amendment.").

^{108.} Indeed, the Supreme Court has suggested dicta that personal jurisdiction protects an indi-

immediately clear where the matters of horizontal federalism fit into a cost/benefit calculus for personal jurisdiction such as that described above.

In resolving this puzzle, the precepts of competitive federalism prove exceptionally helpful. I have described above how competition between jurisdictions may function to promote personal liberty, and how the ability to "vote with one's feet" is integral to such competition. Of course, as in the case of Delaware incorporation, such "exit" may or may not be physical exit; consumers of law products may simply select from among jurisdictions the "law product" best suited to their individual needs or business transaction. But in order to preserve this ability to choose, we require a theory of personal jurisdiction that respects the individual's choice. If I write a contract anticipating that it will be enforced in California courts, but am instead haled into court in Texas, my attempt to avail myself of Texas' "law products" may well be frustrated. Similarly, if I move to Arizona to take advantage of that state's community property law, but my estate is instead divided under the law of Illinois, my revealed preference for Arizona law is frustrated. 109

Stated differently, due process requires a jurisdictional rule that encourages interstate entrepreneurs to take advantage of the benefits offered by a particular state, but does so only up to the point where the costs of doing so exceed the aggregate social benefits of doing so; when that point is reached, we want to leave the entrepreneur free to shift his activities to any more cost-efficient venue. We accomplish this by allowing entrepreneurs to "vote with their feet" among the fifty

vidual liberty interest, rather than state sovereignty. See Insurance Corporation of Ireland v. Companie des Bauxites de Guines, 456 U.S. 694, 702 n.10 (1982). The difficulty of squaring this statement with the Court's emphasis on federalism has puzzled a generation of commentators. See, e.g., Wendy Collins Perdue, Sin, Scandal and Substantive Due Process: Personal Jurisdiction and Pennoyer Reconsidered, 62 WASH. L. REV. 479, 514-17 (1987).

^{109.} Neither can such preferences be properly implemented under choice of law rules alone. Recall that in the Delaware phenomenon, the attractiveness of Delaware incorporation arises not simply from the substantive law of the state, but from the expertise of Delaware courts in corporate law. See Romano, supra note 37. Even if the Illinois court decides to apply Arizona community property rules to the division of my estate, my true preference may have been to have an Arizona court with expertise in community property perform the division.

^{110.} On this theory, there is no disparity between the Court's statements on liberty and on sovereignty; under a competitive federal model, protection of state sovereignty serves to protect personal liberty interests. See Epstein supra note 8, at 1390. Thus, we know "why boundaries matter" to an individual rights inquiry. See Perdue supra note 108, at 515 (puzzling over the territorial element in personal jurisdiction).

states, selecting the law "products" of the jurisdiction that best suit the particular transaction or set of transactions in which the entrepreneur wishes to engage.¹¹¹

Problems may arise, however, because the application of a jurisdiction's rules occurs only after something has gone wrong with a transaction. On the basis of their own cost-benefit analysis, entrepreneurs may select one set of law "products" ex ante, but prefer a different set after a mishap in fact occurs. Such strategic behavior may be particularly prevalent where contracts are silent as to choice of forum, or in situations of negligence where the parties had no opportunity to negotiate forum at all. And, if the defendant will frequently have reason to engage in ex post forum selection, so too will the forum itself—as described above, states are under competitive pressure to lower the cost of domestic regulation, and if they can do so by forcing those costs onto extraterritorial actors, it is to their advantage to engage in such a "race to externalize."

In such situations, the arbiter of a dispute will be called upon to infer from the defendant's course of conduct which set of law "products" the defendant would have selected had he explicitly done so. The determination must be done both with an eye to prevent windfalls to defendants attempting to freely ride on the benefits of a jurisdiction's regulatory offerings, and also to prevent states from imposing their regulatory costs on out-of-state actors who did not and would not have chosen to assume those costs. In some instances, this determination will be relatively straightforward, as where a forum selection clause has been included in a contract. Strong inferences as to jurisdictional preference may also be drawn from the residence or business domicile that a defendant has chosen. It is the majority of cases, however, the arbiter will be required to draw inferences based upon the defendant's course of conduct; only when the course of conduct reaches the level of minimum contacts is a revealed preference for the forum inferred.

And here the calculus of costs and benefits described above comes

^{111.} Cf. Transgud, supra note 53, at 853 (arguing that jurisdiction is grounded in a form of "tacit" political consent).

^{112.} See Brilmayer, supra note 85, at 95 ("The State's incentive is always to expand jurisdiction to the detriment of out-of-state enterprises and the out-of-state consumers to whom the costs are passed.").

^{113.} See, e.g., M/S Bremen v. Zapata Off-Shore Co., 407 U.S. 1 (1972).

^{114.} See Transgud, supra note 53, at 895.

^{115.} See Brilmayer, supra note 85, at 96.

fully into play. If defendants must take the bitter with the sweet — if amenability to suit in a jurisdiction is the price interstate actors pay for the benefits of that forum's law "products" — then we may infer that a rational defendant would cheerfully choose to defend a suit in a jurisdiction so long as the marginal benefits associated with doing so at least equal the marginal costs. 116 Additionally, this approach suggests that the costs to be balanced are not merely the costs of travelling to a distant forum; they also include the external costs of allowing the jurisdiction to export its substantive law. Thus, all the important considerations of such a "competitive federalism" analysis are found embedded within the fairness factors that have been articulated by the Supreme Court.

This perspective on jurisdiction clearly shows that online contacts or transactions by themselves will frequently, if not routinely, fail to support an assertion of jurisdiction over the person engaging in the activity. The argument that a cybernaut exposes herself to lawsuits in any and every jurisdiction that her packets may reach is an argument unsupported by either doctrine or policy. From a purely doctrinal standpoint, this standard affords Internet users no meaningful opportunity to "structure their primary conduct" so as to accept or avoid the risk of litigation in a given forum — cybernauts cannot "vote with their feet" if their feet are in essence planted everywhere. As a matter of policy, the standard would similarly afford states enormous opportunities for overreaching by imposing their domestic regulatory costs on out-of-state Internet users.

V. DORMANT COMMERCE LIMITS

The extensive discussion of due process and competitive federalism set forth above should facilitate similar discussion of a second and equally significant constitutional barrier against state jurisdictional overreaching. Separate constitutional grounds for limiting state Internet regulation may be found in dormant Commerce Clause analysis.¹¹⁷ The standard formulation of this analysis is well known. In its negative or "dormant" aspect, the Commerce Clause limits the ability of states to im-

^{116.} See Brilmayer, supra note 85, at 96.

^{117.} See Eckenwiler, supra note 5, at S37.

pede the flow of interstate commerce.¹¹⁸ Most especially, the dormant Commerce Clause enjoins the states from the problem that prompted its adoption and which was endemic under the Articles of Confederation: economic protectionism.¹¹⁹ A state may not discriminate solely on the basis of geographic origin against articles of commerce from outside the state.¹²⁰ Neither may a state sacrifice the unity of the national market in order to reap purely local benefits.¹²¹ Tariffs and taxes against out of state commerce are almost per se prohibited,¹²² but more subtle non-tariff barriers may be prohibited as well.¹²³

If the statute treats domestic and out-of-state commerce unequally in order to achieve some legitimate local purpose, incidental effects on interstate commerce will be tolerated unless those effects exceed the putative local benefits.¹²⁴ This test requires courts to balance local benefits against systemic detriments, looking particularly to the effect on the interstate economic compact should many states adopt measures similar to the one in question.¹²⁵ Additionally, the court balancing the costs and benefits should look to whether the same benefit could be achieved by some other means with a lesser degree of burden on interstate commerce.¹²⁶

A. Commerce Holdouts

Many of the state laws now being enacted or enforced with regard to online activity lie within the "traditional police powers" of the states, and so may be given special deference in this balancing test. For example, states have inherent power to safeguard the health and safety of their citizens, and to protect them from fraud and deceptive trade prac-

^{118.} See LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW § 6-3 (2d ed. 1988).

^{119.} Id. § 6-3, at 404. Accord Quill v. North Dakota, 112 S. Ct. 1904, 1913 (1992) ("Under the Articles of Confederation, state taxes and duties hindered and suppressed interstate commerce; the Framers intended the Commerce Clause as a cure for these structural ills.").

^{120.} City of Phila. v. New Jersey, 437 U.S. 617, 626-27 (1978).

^{121.} See Pike v. Bruce Church, Inc., 397 U.S. 137, 144-45 (1970).

^{122.} West Lynn Creamery, Inc. v. Healy, 114 S. Ct. 2205, 2211 (1994).

^{123.} See Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 527 (1935) ("What is ultimate is the principle that one state in its dealings with another may not place itself in a position of economic isolation.").

^{124.} Bruce Church, Inc., 397 U.S. at 142.

^{125.} Bibb v. Navajo Freight Lines, Inc., 359 U.S. 520, 529-30 (1959).

^{126.} Hunt v. Washington State Apple Advertising Comm'n, 432 U.S. 333, 353 (1977); Dean Milk Co. v. City of Madison, 340 U.S. 349, 354 (1951).

tices. 127 The state interest component for such regulation will weigh heavily in the balance. 128 At the same time, the courts must be wary where a health and safety rationale is the purported basis of an enactment that tends to burden interstate commerce. The degree of deference accorded states in this area naturally makes consumer protection rationales particularly attractive to state legislatures. Where possible, they will likely articulate such a rationale in order to avoid dormant Commerce Clause nullification of a given statute. 129 The courts are not blind to such subterfuge, and so-called health and safety measures cannot be simply "convenient apologetics" for constructive trade barriers between the states.

These rules constitute in part an adjunct to the federal system for situations in which the right of exit alone may not preserve the benefits of interjurisdictional competition. For example, the dormant commerce requirements modulate the multistate coordination problem inherent in building interstate facilities such as a railroad, or in operating interstate business ventures such as those of a major insurer. If each state can impose restrictions on the portions of the venture within its territory, then each state can act as a "hold-out," seeking to extract from the interstate enterprise the profits from the entire venture. Alternatively, the aggregate cost of inconsistent state demands may well exceed the total value of the interstate enterprise. However, the dormant Commerce Clause forestalls such dissipating regulation by its nearly per se rule prohibiting even facially non-discriminatory regulation that is overly burdensome to interstate commerce.

The similarity of the Internet to previous interstate "instruments of commerce" such as railroads or trucks is striking. Given that the Internet is not simply a means of communication, but a conduit for

^{127.} Milk Control Bd. v. Eisenberg, 306 U.S. 346, 351 (1939) (upholding a Pennsylvania price control statute as applied to purchasers of milk).

^{128.} Mintz v. Baldwin, 289 U.S. 346, 350 (1933) (explaining that good faith efforts to protect the health of state residents do not contravene the Commerce Clause).

^{129.} See H.P. Hood & Sons, Inc. v. Du Mond, 336 U.S. 525, 533 (1949) ("This distinction between the power of the state to shelter its people from menaces to their health or safety and from fraud, . . . and its lack of power to retard, burden or constrict the flow of such commerce for their economic advantage, is one deeply rooted in both our history and our law.").

^{130.} Southern Pac. Co. v. Arizona, 325 U.S. 761, 780 (1945).

^{131.} Cf. EPSTEIN, supra note 24, at 160 (discussing multistate coordination problems).

^{132.} Cf.

^{133.} Cf. EPSTEIN, supra note 24, at 160; See also Lloyd Cohen, Holdouts and Free Riders, 20 J. LEGAL STUD. 351 (1991) (discussing the problem of hold-outs generally).

transporting digitized information goods such as software, data, music, graphics, and videos, there may be a variety of instances where state regulation of network traffic constitutes an impermissible burden on commerce similar to burdensome regulation of tractor-trailers, ¹³⁴ or of the length of railway trains. ¹³⁵ For example, several states have considered enacting provisions designed to prohibit access to online pornography; some such provisions would make the Internet service provider (ISP) liable if such images were transmitted on her system. ¹³⁶ However, as discussed at some length above, it is unrealistic to believe that the ISP can screen or block such images. ISPs facing this type of unavoidable liability may simply choose to shut down, a result that suggests that screening or blocking measures are ripe for challenge as an impermissible burden on interstate commerce. Thus, there is a likelihood that state regulation of the Internet will raise the same kind of "hold-out" or coordination problems previously addressed by the dormant Commerce Clause cases.

However, in the case of the Internet, such state regulatory peccadillos will strike far closer to core liberties than those problems we have previously experienced. People familiar with the Internet know that one of the network's great benefits is that the average citizen can participate for a relatively small investment. In the past, communicating with or catering to a national constituency required heavy capital outlays; the Internet makes nationwide communication and commerce accessible to citizens for as little as a few hundred dollars.¹³⁷ But the prospect of multijurisdictional liability may very well raise the price of participation beyond the average citizen's reach. Much of the network's democratizing influence may be lost if the threat of unseen, lurking multijurisdictional liability deters all but the most heavily capitalized entrepreneurs from pursuing all but the most highly profitable ventures. The average user simply cannot afford the cost of defending multiple suits in multiple jurisdictions, or of complying with the regulatory requirements of every jurisdiction she might electronically touch. Thus, the need for dormant commerce nullification of state overreaching is greater on the Internet than any previous scenario.

^{134.} Kassel v. Consolidated Freightways Corp., 450 U.S. 662 (1981).

^{135. 325} U.S. 761.

^{136.} See, e.g. GA. STAT. 16-12-100.1 (criminal penalties for electronically furnishing material that is "harmful to minors").

^{137.} See KROL & FERGUSON, supra note 10, at 23 (1995).

B. Exporting Law

The impact of dormant commerce analysis on problems of state Internet "hold-outs" is intriguing and deserves further exploration. However, consistent with my competitive federalism analysis of due process limitations on the states, I wish to focus here on a different set of dormant Commerce Clause cases which indicate that the dormant Commerce Clause operates to prohibit states from exporting their law "products" into the local markets of sister states. In particular, I wish to focus on the line of cases beginning with Edgar v. MITE Corp., 138 which explicitly analyzes the dormant Commerce Clause, not in terms of the "vertical" relationship between the states and the federal government, but as a significant regulation on the "horizontal" relationship between sister states. The language of these cases implicitly recognizes a competitive federalism role for the dormant Commerce Clause, and hence for modulating horizontal federal relationships with regard to the Internet.

1. Extraterritoriality

The seminal case of *Edgar v. MITE Corp.* dealt with an Illinois securities law requiring a tender offeror in a takeover to register with the Illinois Secretary of State who would oversee the fairness of the takeover and provide full disclosure to the offerees. In the particular case decided, the shareholders of the takeover target were scattered throughout the country; 27% of the shareholders lived in Illinois. Additionally, on its face the statute could have allowed the Illinois Secretary to block takeovers in which not a single Illinois shareholder was affected. In a plurality opinion, Justice White suggested that a statute allowing one state to interdict a tender offer to not only its own residents, but to shareholders in other states, offended the dormant Commerce Clause. In Illinois Illinois Secretary to block takeovers in which not a single Illinois shareholder was affected. In a plurality opinion, Justice White suggested that a statute allowing one state to interdict a tender offer to not only its own residents, but to shareholders in other states, offended the dormant Commerce Clause.

The extraterritoriality portion of the *Edgar* opinion commanded only a plurality of the court.¹⁴¹ However, *Edgar* was cited with approval and

^{138. 457} U.S. 624 (1982).

^{139.} Id. at 627.

^{140.} Id. at 642-43.

^{141.} Id. at 646. The Illinois statute was held by a majority to be unconstitutional under a dormant Commerce Clause balancing analysis, rather than under an extraterritoriality analysis.

relied upon in a subsequent majority holding, *Healy v. Beer Institute*. ¹⁴² In *Healy*, the Court struck down a Connecticut statute that required beer merchants to certify that they offered their products for the same price in states neighboring Connecticut as they did in Connecticut itself. The Court held that the effect of the statute was to impermissibly regulate beer pricing outside the borders of the state. Citing *Edgar v. MITE Corp.*, the majority reaffirmed the principle that state regulation of activity wholly outside the borders of a state offends the Commerce Clause, whether or not the activity has some effect within the state. ¹⁴³

The Court then went on to explain:

A statute that directly controls commerce occurring wholly outside the boundaries of a State exceeds the inherent limits of the enacting State's authority and is invalid regardless of whether the statute's extraterritorial reach was intended by the legislature. The critical inquiry is whether the practical effect of the regulation is to control conduct beyond the borders of the State [T]he practical effect of the statute must be evaluated not only by considering the consequences of the statute itself, but also by considering how the challenged statute may interact with the legitimate regulatory regimes of other States and what effect would arise if not one, but many or every, State adopted similar legislation.¹⁴⁴

The Court concluded by emphasizing that "the Commerce Clause dictates that no State may force an out-of-state merchant to seek regulatory approval in one State before undertaking a transaction in another."

Most recently, the Supreme Court has invoked the *Edgar/Healy* line of cases in its analysis of federal due process limitations on punitive damage awards. In *BMW of North America v. Gore*, ¹⁴⁶ the Supreme Court addressed a punitive damage award assessed against an automobile manufacturer that failed to disclose repainting of new cars damaged in transit from factory. ¹⁴⁷ This nationwide practice by the manufacturer

^{142. 491} U.S. 324 (1989).

^{143.} Id. at 336-37.

^{144.} Id. at 336.

^{145.} Id. at 337.

^{146. 116} S. Ct. 1589 (1996).

^{147.} The BMW opinion is critical in reaffirming the Edgar rationale as a durable fixture of Supreme Court jurisprudence. The analysis of extraterritoriality in the Edgar opinion itself was

violated the consumer fraud provisions of the State of Alabama. However, the defendant showed that its practice complied with the requirements of at least twenty-five states. In analyzing BMW's challenge to the constitutionality of the punitive damage award, the Supreme Court placed considerable significance on the impact that punitive damages awards in one state might have on the substantive policies of sister states. The majority cited both *Healy* and *Edgar*¹⁴⁸ for the proposition that "[o]ne State's power to impose burdens on the interstate market... is not only subordinate to the federal power over interstate commerce, ... but is also constrained by the need to respect the interests of other States." The opinion particularly stressed that a state cannot impose economic sanctions on violators of its laws in order to induce those entities to alter their lawful conduct in other states.

The function of the Edgar/Healy rationale seems clear as a matter of competitive federalism: states may not attempt to externalize the costs of their domestic regulatory schemes on other states or "export" their domestic regulations into another jurisdiction. The most blatant attempt to do this appears in Healy, where Connecticut's certification program was admittedly designed to deter Connecticut residents from driving to neighboring states to purchase beer at prices lower than those available in Connecticut — in other words, Connecticut hoped to deter its residents from "exiting" or "voting with their feet" against the state's regulatory scheme. Only by inducing beer distributors to artificially inflate their prices in neighboring states could Connecticut hope to deter such exit. But by forcing a price increase in neighboring states, Connecticut would effectively export the costs of its domestic regulation to its neighbors, potentially frustrating their own domestic regulatory schemes. Edgar and BMW arose from similar attempts to export the

endorsed by only a plurality of the Court: White, Rehnquist, Stevens, and O'Connor. In Healy, the opinion relying upon Edgar commanded a majority, but a majority made up of Blackmun, Brennan, White, Marshall, and Kennedy — Rehnquist, Stevens, and O'Connor dissented on 21st Amendment grounds! This switch of justices, together with subsequent retirements from the Court, might leave the viability of these holdings in doubt. However, the support of the BMW majority, comprising Stevens, O'Connor, Kennedy, Souter, and Breyer, confirms the continued validity of the Edgar rationale.

^{148. 116} S. Ct. at 1597.

^{149.} Id. at 1597 (citation omitted).

^{150.} Id. The Court declined to specifically opine as to whether states could attempt to force violators to alter their extraterritorial unlawful conduct.

^{151.} Cf. POSNER, supra note 27, at 638-39 (discussing the role of the commerce power in deterring states from taxing nonresident consumers or excluding nonresident producers).

costs of domestic regulation of, respectively, securities and products disclosures.

Much as in the case of due process, the dormant Commerce Clause doctrine articulated in these cases functions as a buffer against such externalization. Yet, although the Court in the *Edgar* line of cases analogizes its dormant Commerce Clause analysis to due process analysis, it is clear that the two doctrines perform different, though complementary, functions. In each of the dormant Commerce Clause cases described above, the individual or entity that the state sought to regulate was properly subject to personal jurisdiction in that forum, but the activity the state sought to reach was territorially exempt from that state's regulation. The net result is that even if an entity's activities within the forum may be reached by domestic regulation, its activities within a sister jurisdiction remain insulated from regulatory "leakage."

This difference in doctrines is thrown into sharp relief when examined in light of the Court's ruling in *Quill v. North Dakota*. There, the Supreme Court held that a mail order company was properly subject to North Dakota's jurisdiction for purposes of taxation; shipment of goods into the state provided sufficient contacts. However, in the second half of the same opinion, the Court held that taxation of a business with no physical presence in the state violated the dormant Commerce Clause. This holding, which fully accords with the *Edgar* line of cases, illustrates how that due process analysis is necessary, but not sufficient, criteria for regulatory jurisdiction in a federal system — states cannot be allowed to impose their domestic policies extraterritorially, even if minimum contacts are present in the particular instance. 155

^{152. 504} U.S. 298 (1992).

^{153.} Id. at 308.

^{154.} Id. at 315-17.

^{155.} See Quill, 112 S. Ct. at 1913. In Quill, the Court explained the distinction:

Due process centrally concerns the fundamental fairness of governmental activity. Thus, at the most general level, the due process nexus analysis requires that we ask whether an individual's connections with a State are substantial enough to legitimate the State's exercise of power over him. We have, therefore, often identified "notice" or "fair warning" as the analytic touchstone of due process nexus analysis. In contrast, the Commerce Clause, and its nexus requirement are informed not so much by concerns about fairness for the individual defendant as by structural concerns about the effects of state regulation on the national economy Thus, the "substantial nexus" requirement is not, like due process' "minimum contacts" requirement, a proxy for notice, but rather a means for limiting state burdens on interstate commerce. Accordingly . . . a corporation may have "minimum contacts" with a tax-

The principle applied in the *Quill* and *Edgar* line of cases has important ramifications for online commerce. Take, for example, the activities of the Securities Bureau in my own state of New Jersey. These state regulators have taken a highly proactive stance toward supervision of investment solicitations offered online, and with good reason: a variety of fraudulent investment schemes have appeared both on the Internet and on proprietary systems such as Prodigy and America On-Line. However, at least some of these regulators have adopted the rather extreme position that any electronic communication which may be received in New Jersey and which meets the statutory definition of a "security" is subject to New Jersey securities law, including requirements of registration and disclosure. A former chief of the Bureau has opined that online offerings by registered brokers in other jurisdictions, even when legitimate and accompanied by full disclosure, violate New Jersey law if the broker is not registered in New Jersey.

Now this position looks suspiciously similar to that of Illinois in Edgar v. MITE Corp.: a state demanding that out-of-state businesses comply with its domestic securities law, even if the business has fully complied with the securities law of its own state. Indeed, under the New Jersey rationale, the online activity is subject to New Jersey regulation whether or not it has any effect in the state; to trigger regulation, the offer need only be electronically accessible from New Jersey. 159 There need not be anyone actually investing. In effect, under this policy, New Jersey is attempting to dictate to the entire nation — if not the world — what the standards for investment offerings shall be. Although a clearer example of a state attempting to export its domestic law can hardly be imagined, any area in which the state attempts to regulate dissemination or receipt of online information, including its sale, will raise similar problems.

As a practical matter, this position is untenable. As described above with regard to due process, Internet businesses and content providers

ing State as required by the Due Process Clause, and yet lack the "substantial nexus" with that State as required by the Commerce Clause.

Id. at 1913-14.

^{156.} See Patrick McGeehan, Cyber-Swindles Taking Root, USA TODAY, Jan. 31, 1996 at 1A. 157. Id.; see also Jared Silverman, Cyberspace Offerings Raise Complex Compliance Issues, N.J. L.J., December 25, 1995 at 10 (analysis of online securities regulation by former New Jersey regulator).

^{158.} See Ted Sherman, Scam Artists Logging Onto Computer Network; Old Frauds Keep Pace With Technology, TIMES-PICAYUNE, June 22, 1995 at A3 (quoting Jared Silverman).

159. Id.

simply cannot tell with any degree of assurance the geographic location from which access to data has been requested, and there is no practical way to screen out contacts from particular jurisdictions. The end result is that online businesses have no way of knowing whether their communications, advertisements, transactions, and even shipments of digital goods comply with the regulatory regime of wherever the goods or information may end up. If a rule other than that of *Quill* were to be applied to online businesses, and they were subject to the regulation of the recipient jurisdiction, online commerce would face an almost insurmountable burden in attempting to predict what requirements might be imposed upon it.

Given that there are a finite number of U.S. jurisdictions that might have contact with an online site, and so a finite number of regulations, a business could gather information on the complete universe of potential regulations — this would be burdensome, but not impossible. The question would then be what strategy a business should adopt, knowing the possible rules, but being uncertain which might apply. Two strategies might be expected to emerge, depending on the pattern of regulation. In instances where the regulation of the fifty states was consistent but merely differed in magnitude, the "lowest common denominator" would have to prevail — if for example, various states required increasing levels of disclosure about a product or transaction, an online business could opt to offer the highest level of disclosure required. By complying, as the case might be, with either the most demanding or restrictive regulatory regime, a business might satisfy the lesser requirements of all the other jurisdictions as well.

A different result would be expected where state regulation was inconsistent — if, for example, some jurisdictions required disclosure of certain facts about a product or service, but other jurisdictions forbade such disclosure. In such instances, being unable to predict which jurisdiction's regulation might apply, and being unable to comply with all the potential requirements, online businesses might choose to comply with the rule of the majority of jurisdictions and hope that no transactions occurred where compliance was lacking. But unless the possibility of such transactions were very small, or the penalties for non-compliance were substantially outweighed by the profit to be had from taking the risk, it seems more likely that rational businesses would simply cease to transact business online.¹⁶¹

^{160.} See supra notes 68-79 and accompanying text.

^{161.} Cf. Epstein, supra note 24, at 160 ("Knowing that [inconsistent state demands] may

2. The Interstate Laboratory

Under the traditional Commerce Clause analysis, either of these results is likely to place a serious burden on interstate commerce; depending on the local benefits to be gained by the regulations, the burden may or may not be undue. At least in the situation where online businesses are conflicted out of the market, the detriment to commerce would appear so severe that it is difficult to imagine what local benefits would be sufficient to compensate. This may not always be true in the "lowest common denominator" situation. In the example given of product disclosure, excessive disclosure dictated by the most demanding jurisdiction may be costly, but one can imagine that consumers might benefit enough to outweigh the costs.

However, from the perspective of competitive federalism, the situation is far more grave than the traditional balancing test might suggest. If the "lowest common denominator" prevails among online services, then the "laboratory of the states" is disabled. No state wishing to experiment with a lesser level of regulation will be able to do so. Similarly, it goes almost without saying that the "laboratory" is disabled in the situation where online services are driven out of business by conflicting requirements. Either result arises out of the inability in an online environment to geographically circumscribe contacts. In essence, if businesses are subjected to a state's regulation merely on the basis of online contacts, then the businesses cannot "exit" or "vote with their feet" to escape the burdensome regulation of a particular jurisdiction — the regulation follows them wherever they go.

This constitutes an enormous problem for horizontal federalism. It is one thing if a particular state wishes to regulate all the businesses within its borders out of existence — the result is simply a terrible failure (or, depending on the state's goal, perhaps a spectacular success) of that state's regulatory experiment within its own laboratory. But it is another matter entirely if it regulates out of existence businesses that its sister states are attempting to foster within their borders. A particular state cannot be permitted to dictate to the entire country the regulatory standards for any activity. If national uniformity is to be imposed on a regulatory matter — and I have shown above that for some types of "law products" it must be — then it is the prerogative of the federal

await them, some entrepreneurs will avoid making the kinds of investments that will expose them to this sort of risk \dots ?).

government to do so, and not the prerogative of a particular state.

It may be, of course, that in some instances the Internet will facilitate externalization of domestic regulatory costs — perhaps a state could decide to attract businesses by permitting very lax Internet advertising standards bordering on deception. One would expect that the costs of any deception that would result from the lax regulation would accrue primarily outside the permissive jurisdiction, effectively forcing out-of-state residents to pay for the permissive state's system. Might such a situation justify extraterritorial application of another state's stringent regulations to reach the shady advertisers? Under the dormant Commerce Clause analysis, clearly not. To the extent that some Internet activity may facilitate externalization of regulatory costs, then the competitive federal model will function poorly in those areas. But this means that federal regulation, not extraterritorial state regulation, is required—precisely the reason that, under the federal Constitution, regulation of commerce was placed in the hands of a central authority.

VI. CONCLUSION

In conclusion, I think it important to offer a few remarks on where we stand and where we ought to be going, particularly with regard to avenues for ongoing legal research. In the preceding few pages, I have endeavored to show that the Due Process Clause and the dormant Commerce Clause function as a significant check to individual states' regulation of Internet activity, and I have argued that such limits are appropriate as a matter of substantive policy. Using the tools of competitive federalism, I have sketched what I believe to be a coherent framework for applying the doctrines of horizontal federalism to online activity. This discussion is intended to show, at minimum, that the unique characteristics of the Internet require far more careful consideration of the basis for state regulation than the matter has been given to this point, particularly by those who are over-eager to export their local ordinances to cyberspace.

However, this is at best a preliminary study. There is a rich body of scholarship and a vast body of case law on these topics that remain to be considered in the cyberspace context. In my discussion above, I have left untouched rich veins of doctrine, such as the "means of transportation" dormant Commerce Clause cases, which have yet to be mined. Neither have I considered other federal constitutional limitations,

such as the Privileges and Immunities Clause¹⁶² or the Full Faith and Credit Clause,¹⁶³ that may also have a profound impact on the ability of states to regulate online activity. The matter of state criminal jurisdiction for Internet activity deserves exploration, as do a variety of procedural matters, such as the jurisdictional limitations on Article III Courts, questions of venue, and service of process. I expect that these doctrines, when fully explored, will pose an additional set of concerns and caveats for states to consider before attempting Internet regulation.

But most importantly for future analysis, the international questions raised by state regulation of Internet activity beg immediate, serious, and sustained scholarly attention. The Internet is an international medium, and users can no more ascertain whether they are accessing resources in a foreign jurisdiction than they can ascertain whether they are accessing resources in a domestic jurisdiction. Parochial attempts by individual states to impose their regulation on the network have profound implications for the nation as a whole. These implications have been building for some time and have become increasingly complex as the world becomes more interconnected. However, the discussion here should confirm that the advent of the Internet raises the problem to a new order of magnitude.

I should mention that the Supreme Court's constitutional jurisprudence has not been entirely oblivious to the international problem, but it will be no simple matter to formulate the Court's driblets of doctrine into a cyberspace nostrum. For example, the plurality opinion in *Asahi Metals* suggests that in the context of international personal jurisdiction, the degree of interference with federal foreign policies and with the substantive legal policies of affected foreign sovereigns should be considered as additional "fairness factors" in the due process analysis. ¹⁶⁴ Similarly, where state substantive regulation may place the foreign dormant Commerce Clause at issue, the Court has stated that the burden imposed on federal policies, and the ability of the nation to speak with "one voice," become critical analytical factors. ¹⁶⁵ I have not attempted to address these matters in this paper, in part because these additional considerations shift the analysis from one of horizontal fed-

^{162.} U.S. CONST. art. IV, § 2.

^{163.} Id. § 1.

^{164.} Asahi Metal Indus. v. Superior Ct., 480 U.S. 102, 114-15 (1987).

^{165.} See Japan Line, Ltd. v. County of Los Angeles, 441 U.S. 434, 450-51 (1979); but see also Barclays Bank PLC v. Franchise Tax Bd. of Cal., 114 S. Ct. 2268 (1994) (rejecting the "one voice" argument against state method of multinational taxation reporting).

eralism to one of vertical federalism. However, given the international nature of the Internet, these considerations will likely arise in online regulation more often than not. Consequently, these considerations, in addition to those I have sketched here, will necessarily play an integral role in defining the new relationships of federalism in cyberspace.