October 5, 2006

Dear Colloquium Participants,

Attached please find a working draft of my paper, NetWork, which examines the phenomenon of trade in services via the electronic medium. The latter parts of the paper are as yet unfinished, but I hope to flesh out my arguments in that regard during my talk next week.

Looking forward to our engagement.

Anupam Chander
I. INTRODUCTION

Today, an American family can outsource tutoring to an Indian engineer, tax preparation to an Indian accountant, and medical diagnosis to an Indian radiologist, and then sit for a portrait by an artist in coastal China.\(^1\) An American corporation, for its part, can outsource human resources management to the Philippines, design and engineering to China, customer service to Jamaica, and Sarbanes-Oxley compliance and

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information technology to India.² And an American city can outsource data processing to Ghana, while a state government can outsource welfare payments processing to India.³ Where China has become the factory to the world,⁴ India and other developing countries may become its back office.⁵

Services⁶ once provided in local settings increasingly are being provided at great distances. Little seems immune: Today, even prayers for Kansans are outsourced⁷ to priests in Kerala.⁸ This radical shift in the provision of services becomes possible because of advances in telecommunications technologies. This is the rapidly growing phenomenon

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² Saritha Rai, As It Tries to Cut Costs, Wall Street Looks to India, N.Y. TIMES, Oct. 8, 2003 (quoting business student Gayatri Srinivasan, “Imagine working directly for a Wall Street firm while continuing to live in India.”); Eric Bellman, One More Cost Of Sarbanes-Oxley: Outsourcing to India, WALL ST. J., July 14, 2005, at C1; Sarbanes-Oxley § 404(a) (requiring management to assess and report on effectiveness of company’s internal controls over financial reporting).
⁴ David Barboza, Some Assembly Needed: China as Asia Factory, N. Y. TIMES, Feb. 9, 2006 (characterizing China as increasingly “the world’s basic factory floor”).
⁶ International trade agreements, including GATS and NAFTA, eschew a definition of services, and I will follow suit. While one might initially approximate services as “economic activities that cannot be put on a train,” a clear definition proves elusive. Consider, for example, the issue of whether magazines are a good or service, a question implicated by a recent World Trade Organization dispute. Appellate Body Report, Canada—Certain Measures Concerning Periodicals, WT/DS31/AB/R (June 30, 1997) (concluding that a magazine is a good composed of editorial and advertising elements, even though each part, when considered separately, may function as a service). See MICHAEL J. TREBILCOCK & ROBERT HOWSE, THE REGULATION OF INTERNATIONAL TRADE 350 (3rd ed. 2005) (noting lack of “consensus within economic literature” on definition of services).
⁷ I will use “outsourcing” to refer to the transfer of a company’s internal activities to an outside provider. “Outsourcing” includes both the transfer to a separate “captive” enterprise owned by that company as well as a third party “vendor.” “Outsourcing” includes the use of a provider within the firm’s country (a practice sometimes referred to as “insourcing”) and a provider in a foreign country (a practice often referred to as “offshoring”). The World Trade Organization subdivides outsourcing into four distinct categories: captive onshore outsourcing, non-captive onshore outsourcing, captive offshoring, and non-captive offshoring. WORLD TRADE ORGANIZATION, WORLD TRADE REPORT 2005 266-68 (2005). This paper discusses the latter two categories. When needed, I will differentiate between captive and non-captive offshoring.
of net-work—information services delivered remotely through electronic communications systems. Net-work heralds a global bazaar for services, mediated by Amazon, eBay, IBM, Infosys, and their brethren.\(^9\) Once theorized as untradable,\(^10\) services now join goods in the global marketplace, with workers in developing countries able to participate in more lucrative Western markets despite the barriers of restrictive immigration policies. Net-work simultaneously enables Western enterprises to offer services worldwide, often free of tariffs and sometimes eluding local regulation; consider Google’s Orkut,\(^11\) Apple’s iTunes,\(^12\) and, most notoriously, Yahoo’s auctions.\(^13\) Just as the Internet has transformed

\(^9\) Katharine Mieszkowski, “I make $1.45 a week and I love it,” SALON.COM (Jul. 24, 2006), at [http://www.salon.com/tech/feature/2006/07/24/turks/](http://www.salon.com/tech/feature/2006/07/24/turks/) (last visited Jul. 22, 2006) (describing Amazon’s Mechanical Turk system, which permits “a new global workforce” to perform services for pay); Katie Hafner, How eBay Makes Regulations Disappear, N.Y. TIMES, June 4, 2006 (describing efforts by eBay to create exemptions in state regulations for Internet-based trading services); eBay.com (listing services and permitting U.S.-based buyer to search for services offered by sellers worldwide, in North America, in the United States, or within a certain distance); Saritha Rai, India Becoming a Crucial Cog in the Machine for IBM, N.Y. TIMES, June 6, 2006 (reporting that in supplying services across the globe from India, IBM, partly through its subsidiary IBM Global Services, has now become that country’s largest multinational employer). Infosys is India’s largest standalone indigenous services firm, as measured by market capitalization. See infra note 81 and accompanying text. [NEED TO CHECK TCS—TATA CONSULTING SERVICES]


\(^11\) A Brazilian judge recently reproached Google for evincing a “profound disrespect for national sovereignty” when its Brazilian subsidiary failed to comply with a Brazilian order to disclose information about those who used Google’s Orkut service for racist and anti-semitic messages and child pornography. Andrew Downie, Google and the Pedophiles, TIME, Sept. 6, 2006, at [http://www.time.com/time/nation/article/0,8599,1531986,00.html](http://www.time.com/time/nation/article/0,8599,1531986,00.html). Google’s Brazilian subsidiary explained that it did not have the information, apparently because Google reportedly maintains a “policy of keeping data about its users in the US to protect it from disclosure to foreign governments.” Richard Waters, Brazil lawyers lean on Google, FIN. TIMES, Aug. 24, 2006, [http://www.ft.com/cms/s/d2420942-32f9-11db-87ac-0000779e2340.html](http://www.ft.com/cms/s/d2420942-32f9-11db-87ac-0000779e2340.html). Brazilian authorities re-addressed the subpoena to Google’s Silicon Valley headquarters, and Google promptly complied. Downie, supra.


\(^13\) [CITE FRENCH YAHOO DECISIONS/9th Cir. EN BANC decision]
the delivery of intellectual property, it promises to transform the delivery of 
services more broadly. In the process, it may remake the firm and 
international law, as the boundaries of the firm increasingly permeate the 
boundaries of the state. This paper examines the relationship of law to this 
coming transformation.

The subject has attracted a great deal of attention. Newspapers 
breathlessly announce the latest service to face global competition.\textsuperscript{14} The 
World Bank, the World Trade Organization, the Organization for Economic 
Co-operation and Development, the United Nations, and consulting firms 
such as McKinsey publish major studies of crossborder outsourcing of 
services.\textsuperscript{15} But these accounts treat crossborder outsourcing as principally a

\begin{figure}
\centering
\includegraphics[width=\textwidth]{news_outsourcing_india.png}
\caption{News stories on "Outsourcing" and "India"}
\end{figure}

The Lexis-Nexis “News, All (English, Full Text)” and the Westlaw “All News” databases 
were searched on July 29, 2005 using the query “India and outsourcing.” Lexis/Nexis 
reports more documents than Westlaw because Lexis/Nexis adds descriptive keywords for 
articles, and thus an article can be included even if it does not use both “India” and 
“outsourcing” if those words appear in the added keywords. These results are suggestive, 
not exact, because the search both overcounts (by including incidental references to 
outsourcing and India) and undercounts (by excluding stories concerning crossborder 
outsourcing to countries other than India, or by using a different name). American 
television, too, is captivated by the trend: CNN’s Lou Dobbs, for example, regularly 
decries outsourcing in a segment entitled “Exporting America.”

\textsuperscript{14} Newspaper coverage of crossborder outsourcing has grown dramatically over the last 
handful of years.

\textsuperscript{15} See, e.g., \textit{World Bank, India and the Knowledge Economy: Leveraging 
Strengths and Opportunities} (2005); \textit{World Trade Organization, World Trade 
for Economic Co-operation and Development, GATS: The Case for Open Services 
Toward Services} (2004); \textit{NASSCOM-McKinsey Study} 2002; \textit{NASSCOM-McKinsey 
Study} 2005. \textit{See also} the report of the Canadian government. \textit{Government of Canada, 
Canadian Outsourcing Report} (2005), \textit{at
technological and economic phenomenon. Law is mentioned in passing, if at all. Law reviews, the principal venue for scholarly consideration of legal developments, are almost entirely silent. Law firms, meanwhile, have established entire practice areas in outsourcing. Since 2002, the Practicing Law Institute has trained lawyers in the practice through annual conferences. State legislatures, by contrast, pass measures to curtail the practice, worried about foreign competition for local jobs and the risks of crossborder information flows.

Ricardo’s theory of comparative advantage applies, of course, to all trade, whether trade in goods or trade in information. Services constitute


[EXCEPTIONS]


19 See the annual series of volumes beginning with JOHN F. DELANEY & WILLIAM A. TANENBAUM, THE OUTSOURCING REVOLUTION: PROTECTING CRITICAL BUSINESS FUNCTIONS (2002). The contributions to these volumes seek largely to share expertise in writing the best vendor agreement from the perspective of the American corporations outsourcing certain processes.

20 See infra notes ___ and accompanying text.

21 Brian Hindley & Alasdair Smith, Comparative Advantage and Trade in Services, 7 WORLD ECONOMY 369, 389 (1984) (“Services are different from goods in ways that are significant and that deserve careful attention, but the powerful logic of the theory of comparative advantage transcends these differences.”); GEZA FEKETUTY, INTERNATIONAL TRADE IN SERVICES 115 (1988) (concluding that “trade in most services can lead to the better use of the existing resources of countries engaged in trade”); Jagdish Bhagwati et al., The Muddles over Outsourcing, 18(4) J. EC. PERSP. 93, 112 (2004) (concluding that outsourcing, defined as services traded internationally at arm’s length, has “effects that are not qualitatively different from those of conventional trade in goods [and] … leads to gains from trade and increases in national income, with the caveats that are standard in this literature”). But cf. Paul Samuelson, Where Ricardo and Mill Rebut and Confirm Arguments of Mainstream Economists Supporting Globalization, 18(3) J. EC. PERSP. 135 (2004) (arguing that changing terms of trade over long term might result in real per capita income loss for a country like the United States); with Arvind Panagariya, Why the Recent Samuelson Article in NOT about Offshore Outsourcing, at http://www.columbia.edu/~ap2231/Policy%20Papers/Samuelson%20JEP%20(Summer%202004).Not%20on%20Outsourcing.htm (arguing that Samuelson misapplies changing terms of trade model to outsourcing).
an increasing bulk of human economic activity. In 2004, the value of trade in commercial services was more than two trillion dollars, some one-fifth of all world trade. If as Benkler describes, the wealth of nations lies increasingly in electronically-enabled networks, such networks rely ultimately on net-work. Yet, for much of its history, the legal regime governing international trade neglected services in favor of liberalizing commerce in goods. But as Western economies became increasingly service-oriented, they began to recognize the opportunities for export in telecommunications, media, financial and other services. Their efforts in the Uruguay Round of trade negotiations resulted—over developing country opposition—in the General Agreement on Trade in Services (GATS), forming one pillar of the World Trade Organization established in 1995. GATS subjected services for the first time to the international trade regime’s far-reaching disciplines. This revolution finds its most far-reaching requirements in regional arrangements. The European Union has ambitiously declared a Single European Market, seeking “an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured.” Both the North American Free Trade Agreement (NAFTA) and the Central American Free Trade Agreement (CAFTA) require national treatment and market access for foreign service providers. America’s new bilateral free trade agreements with Australia, Bahrain, 

22 WORLD BANK, WORLD BANK ATLAS 36 (2004) (“The services sector now accounts for two-thirds of global economic output. Services are the fastest growing sector in developing countries, growing by more than 250 percent since 1970. In these countries the share of services in GDP increased from 42 percent in 1970 to more than 51 percent in 2003.”).
23 WORLD TRADE REPORT, supra note Error! Bookmark not defined., at 5.
25 Fekututy identifies leaders from American finance (viz., from American Insurance Group and American Express) and aviation (viz., from PanAm) as key to the 1974 Congressional support for service trade liberalization and subsequent Presidential action. FEKUTUTY, supra note 21, at 299-308. On the developing country response during the Uruguay Round negotiations, see PHEDON NICOLAIDES, LIBERALIZING WORLD TRADE: STRATEGIES FOR SUCCESS 80-98(1989); Jagdish Bhagwati, Services, in THE URUGUAY ROUND: A HANDBOOK FOR THE MULTILATERAL TRADE NEGOTIATIONS 207 (J. Michael Finger & Andrzej Olechowski, eds. 1987).
27 Article 14 of the EC Treaty (but originally inserted as Article 8A by the Single European Act). The formation of the United States itself can be seen in part as an effort to create a free trade area encompassing goods and services.
Chile, Morocco, Oman, [Peru,] and Singapore all include broad obligations to liberalize services. Southeast Asian nations have promised to create a free trade zone including services by 2012.\textsuperscript{30}

The international trade order’s first challenge to laws barring net-work comes from unexpected quarters. The tiny island nation of Antigua and Barbuda charged the United States with violating free trade commitments by barring online gambling.\textsuperscript{31} This dispute marked the World Trade Organization’s first decision on trade via the Internet. The United States protested that a ruling in favor of Antigua would undermine American sovereignty, threaten American youth, and promote fraud.\textsuperscript{32} While the WTO Appellate Body rebuffed the bulk of the Antiguan claim, I will suggest that the decision carries the seeds of a net-work revolution, with world trade rules deployed to break down legal barriers to net-work.

Yet, as this case reveals, the coming of international trade disciplines to services is fiercely contested. Some oppose liberalization because it might erode the wages or threaten the livelihoods of workers now forced to compete on a global stage. Others see a gathering threat to law itself. Will work be outsourced to jurisdictions without adequate legal protections? Will we be forced to dismantle health and welfare regulations in the face of competitive pressures from unregulated jurisdictions? While there have been earlier eras of globalization, characterized by large global flows of people, goods, and people,\textsuperscript{33} the globalization of services today poses a unique challenge to regulation. When individuals migrated to provide services, they could be expected to conform to the laws of their new home. But net-work enables individuals to provide services around the world without leaving their home jurisdiction. In such an environment, can states still regulate services?

The critics’ concerns cannot be dismissed as merely protectionism in disguise. The jurisdiction-hopping implicit in net-work carries serious risks. Consider Kazaa, the leading peer-to-peer file trading system, founded in the Netherlands by a Swede and a Dane, but programmed from Estonia,


\textsuperscript{32} Anupam Chander, \textit{Globalization and Distrust}, \textsc{Yale L. J. __} (2005).

\textsuperscript{33} See, e.g., Niall Ferguson, \textit{Sinking Globalization}, \textsc{Foreign Aff.}, Dec. 2005 (“From around 1870 until World War I, the world economy thrived in ways that look familiar today. The mobility of commodities, capital, and labor reached record levels; the sea-lanes and telegraphs across the Atlantic had never been busier, as capital and migrants traveled west and raw materials and manufactures traveled east.”).
and now run from Australia and incorporated in the South Pacific nation of Vanuatu.\textsuperscript{34} Or the online gambling site PartyGambling, which, from its headquarters in Gibraltar, manages computer servers in a Mohawk Indian reserve in Canada, a London marketing office, and a workforce based mainly in Hyderabad, India.\textsuperscript{35} While the deepening global division of labor may motivate much of these structures, offshore service providers raise the specter of regulation evasion.\textsuperscript{36} Of course, where regulation is oppressive and contrary to human rights, such evasion should be encouraged, not condemned.\textsuperscript{37} But for liberal democratic states, the ability to exploit the net to perform an end run around local law is deeply troubling. Left unattended, footloose net-work might imperil domestic laws, replacing local law with the regulation, if any, of the net-work provider’s home state.

I will argue that the importing of services should not require us to import law as well. Nor are the legal risks of transnational services insuperable. I will describe three strategies to help counter the potential adverse effects on law from net-work; they are, with illustrations for each:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Illustration</th>
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<tbody>
<tr>
<td>1. Harmonization &amp; Convergence</td>
<td>UN Convention on the Use of Electronic Communications in International Contracts</td>
</tr>
<tr>
<td>2. Mutual or Unilateral Recognition</td>
<td>EU data transfer certifications</td>
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<tr>
<td>3. Glocalization</td>
<td>EU data transfer model contract</td>
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The first strategy, harmonization and convergence, requires widespread agreement on substantive legal norms in a particular area. The second strategy, mutual or unilateral recognition, permits countries to defer to foreign country regulation in certain domains based on a prior assessment of


\textsuperscript{35} Nils Pratley, \textit{The porn princess, the Indian computer whizz and the poker bet that made $10bn}, \textit{The Guardian}, June 3, 2005.

\textsuperscript{36} Relocation cross-border to avoid regulation is a well-worn tactic. The history of Hollywood can be traced in part to regulatory evasion, as moviemakers such as Fox and Paramount sought to elude New Jersey-based Thomas Edison’s patent monopolies by decamping to the other end of the continent. Larry Lessig, \textit{Free Culture} Ch. 4 (2004) (“The film industry of Hollywood was built by fleeing pirates…. California was remote enough from Edison’s reach that film-makers there could pirate his inventions without fear of the law.”).

\textsuperscript{37} See infra notes \underline{---} and accompanying text.
its acceptability. The strategy of glocalization permits foreigners entry into local markets, but on local terms.

While harmonization, convergence, and recognition are concepts familiar to private international lawyers, the less familiar glocalization may well prove the most popular strategy to manage net-work. This strategy, designated by a portmanteau rooted in the seeming opposites “global” and “local,” requires further introduction. Wikipedia offers two definitions:

| Glocalization | The creation or distribution of products or services intended for a global transregional market, but customized to suit local laws or culture. Using electronic communications technologies, such as the Internet, to provide local services on a global or transregional basis. |

Sociologists offer glocalization as an antidote to the homogenization of indigenous culture by the process of globalization. I will use it here with reference to law. Legal glocalization here means “the creation or distribution of products or services intended for a global market, but customized to conform to local laws and regulations.”

While this concept may seem anodyne, the streets of Strasbourg and Berlin swelled this February to defend this principle. As originally proposed, the Services Directive would have mandated a “country of origin” rule within the European Union, requiring states to permit other Europeans to supply a service under the rules of their home country, at least in the absence of compelling public health or security rationales to the contrary. The head of the European Trade Union Confederation claimed that this directive would “fire the starting gun on a race to the bottom.” He worried that a country of origin rule would create “flags of

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convenience,” as European corporations would reincorporate in states with lax regulation, such as Liechtenstein.\(^\text{43}\) Such complaints had resonance: Opposition to the “country of origin” principle helped derail the EU Constitution in 2005,\(^\text{44}\) and later led to that principle’s apparent demise.

Whatever the merits of the “country of origin” principle in European integration, such an approach seems imprudent for today’s global trade system. Yet, reasserting national sovereignty in the face of network need not stymie globalization. Indeed, it will strengthen globalization against a retrenching backlash.\(^\text{45}\) If crossborder flows of information undermine our privacy, security, or the standards of locally-delivered services, they will not long be tolerated. Even the promise of more efficient production and its concomitant cost savings might not rebuff protectionist impulses bolstered by, a robust transnational legal infrastructure for network can improve the efficiency and welfare effects of network.

Glocalization’s assertion of municipal law in the face of global information flows runs contrary to the world envisioned by cyberspace enthusiasts, who would deny the applicability of local law to a universal cyberspace.\(^\text{46}\) Glocalization simultaneously confounds the desires of globe-trotting corporations, which seek to extend their markets without the troublesome impediments of local law.\(^\text{47}\) The cosmopolitan,\(^\text{48}\) borderless world promised by both business strategists and cyber-utopians seems yet remote—at least when such a world would defeat local law. The flat world

\(^{43}\) *Id.*; Karen De Coster, *Will Liechtenstein’s Autonomy Prevail?*, Ludwig Von Mises Institute, at http://www.mises.org/story/1214 (Apr. 23, 2003) (describing Liechtenstein as “a business asylum” because “it is very unrestricted to set up and perform business operations, due to its privacy of registration and its lack of compulsory permits and registrations”).

\(^{44}\) *Opposition to ‘Frankenstein’ law leads to backlash against EU treaty*, *IRISH TIMES*, Mar. 23, 2005, at 10.


\(^{48}\) *See Anupam Chander, Diaspora Bonds*, __ N.Y.U. L. REV. __, __ (2001) (defining “cosmopolitanism” as preferring global community over local, parochial ones); *but see* Paul Schiff Berman, (defining “cosmopolitanism” as embracing plural legal orders).
of global business\textsuperscript{49} and the self-regulated world of cyberspace remain distant ideals. And, I will argue properly so.

My argument develops over two parts. Part I demonstrates how net-work alters the organization of production, requiring conforming adaptations of law. Technology has shifted the calculus determining the boundaries of the firm: as transaction costs of the delivery of services crossborder have declined, the market for such services has expanded. But the reorganization of production has never been confined entirely to the realm of technologically-driven economic logic, even more so in the case of trade across national borders. Just as railways and electric machines, which made possible a deeper division of labor in the production of goods, required changes in the legal infrastructure, the emergence of net-work will demand revisions to the legal order.\textsuperscript{50} Specifically, the economics of net-work puts increasing pressure on law to (1) dismantle protectionist regulation; (2) reduce the risks of crossborder transactions; and (3) encourage open standards.

The existing infrastructure of trade, developed over the centuries for a paradigm of the sale of goods, proves inadequate to support and regulate net-work. Part II sketches the contours of reform projects to be undertaken at national, international, and transnational levels to improve the legal infrastructure of net-work. Services trade disciplines may put increasing pressure on states to \textit{dematerialize} the services infrastructure—that is, to make physical presence unnecessary for authentication, notification, certification, inspection, and even dispute resolution. Given the cyber medium of net-work, I suggest the incorporation of cyber institutions, including transnational cyber-tribunals for dispute resolution and, where appropriate, web-based systems of certification and licensing. To avoid any race to the bottom in global services competition, I suggest a hierarchy of possible approaches, in descending order of preference: regulatory harmonization and convergence, mutual and unilateral recognition, and glocalization. I illustrate harmonization and recognition with, respectively, (1) the new UN Convention on the Use of Electronic Communications in International Contracts and (2) the European Union certifications for data transfer to countries outside the EU.

Two lines of legal decision help demarcate glocalization. First, the WTO Appellate Body’s first ruling on net-work establishes the outer bounds that trade law imposes on local regulation of net-work. While perceived as a failed effort to use GATS against a domestic protectionist system, the WTO’s decision in \textit{Measures Affecting the Cross-Border Supply of Gambling and Betting Services (Antigua v. United States)} in fact signals the coming of the liberalizing disciplines of international trade law to the

\textsuperscript{49} THOMAS FRIEDMAN, FLAT WORLD [cite].
\textsuperscript{50} James Ely, Railroads…
regulation of services. Second, the European Court of Justice has largely rejected what the French describe as the “double deontology” of glocalization, holding that imposing local rules on foreign service providers impermissibly interferes with free trade. The WTO, I argue, should eschew this interpretative approach. Glocalization rejects protectionism, yet maintains local safeguards over culture and security. Where international agreement on substantive legal norms is lacking, glocalization helps resolve the dilemma of net-work, navigating between the Scylla of protectionism and the Charybdis of laissez faire.

I. THE FIRM: FROM CLOSED TO OPEN TO OUT SOURCE

A. A New Global Division of Labor

“In the lone houses and very small villages which are scattered about in so desert a country as the Highlands of Scotland, every farmer must be butcher, baker, and brewer for his family.”51 Adam Smith began his 1776 study of the wealth of nations by examining the division of labor. The division of labor, he observed, depended in large part on the size of the market, which in turn depended largely on geography and technology. In remote locations, the absence of extensive markets limited the division of labor. But those with better access to means of transportation could reach larger markets, and thereby improve efficiency: “by means of water carriage a more extensive market is opened … and industry of every kind naturally begins to subdivide and improve itself.”52 Specialization would improve productivity by reducing time wasted in transferring among multiple tasks, increasing the dexterity of the individual worker at a specific task, and spur the invention of machines that perform specified functions.53 Smith critiqued the reigning mercantile political economy of his day, which sought to encourage exports but discourage imports. While Smith spoke in terms of absolute advantage and not comparative advantage, he argued that liberal rules for both export and import would deepen the division of labor and enrich the nation.

Advances in mechanization, transportation and communications technology deepened the national and international division of labor. Technology eroded the decisive role of geography in the organization of production. While crossborder trade in goods is as old as borders themselves, the coupling of improved transportation and communications systems with mass production techniques and modern management systems swelled the international trade in goods. This brought with it economic

52 Id. at 32.
53 Id. at 17-21.
benefits as well as enormous pain and dislocation. Merchandise producers reduced their costs by shifting manufacturing to advantageous locations, often in maquiladoras or other export processing zones in the developing world. This shift led to the loss of blue-collar jobs in the industrialized nations—witness the “Rust Belt” in the United States. Some of the overseas manufacturing took place in sweatshop conditions, offering desperate developing nation populations employment under exploitative circumstances. For the consumer in the industrialized nations of the world, it led to the dazzling array of affordable merchandise available at the local superstore.

As Alfred Chandler describes, technological innovation shifted not just the location of production, but also its organization. By enlarging both output and markets, technology required the creation of the managerial hierarchies (“managers who managed managers”) characteristic of the modern business enterprise. The multi-division corporation (dubbed “the M-Form” corporation) would, over time, extend itself internationally to become today’s multinational corporation. Over time, the M-form corporation and its descendents would become a principal mechanism for crossborder trade in services. Hollywood, for example, began to recognize the global audience available for its intellectual products. Large American corporations such as Disney accordingly established local subsidiaries to market their products. Today, Microsoft has subsidiaries in ninety-nine countries, from Algeria to Zimbabwe. Financial institutions such as Citigroup recognized the need for financial services in the developing world, leading to a local presence today in more than 100 countries and territories worldwide. Having achieved extensive penetration of their services in their home markets, Western telecommunications companies similarly found opportunities for growth in the developing world. When Western multinational corporations ventured into the developing world, they typically established subsidiaries

55 Shifts in production took place within countries as well as between countries, with the American South gaining industrial jobs.
56 This presented what Margaret Jane Radin calls the “double-bind” of commodification....
57 Alfred D. Chandler, Jr., The Visible Hand: The Managerial Revolution in American Business 12 (1977) (“The visible hand of management replaced the invisible hand of market forces where and when new technology and expanded markets permitted a historically unprecedented high volume and speed of materials through the processes of production and distribution. Modern business enterprise was thus the institutional response to the rapid pace of technological innovation and increasing consumer demand in the United States during the second half of the nineteenth century.”).
58 Chandler, supra note __, at 368-69, 480.
60 http://www.citigroup.com/citigroup/global/index.htm (“On the ground in more than 100 countries and territories”) (last visited August 8, 2005).
or joint ventures or purchased controlling stakes in indigenous corporations. The global wave of privatizations of government services beginning in the 1980s increased the local presence of multinational corporations in a variety of fields from banking, to telecommunications, to water services.

But this crossborder trade in services did not generally require the daily transmission of large volumes of data across borders. For intellectual property firms such as Microsoft and Disney, engaging in a global trade in services required development of the product in one country—typically the United States—followed by global distribution of that product. Local subsidiaries would, at most, translate and repack the material for local or regional consumption. Thus, while service providers in the developing world faced competition from Western corporations with local distribution channels, service providers in advanced, industrialized nations did not face a reciprocal competition from service providers in the developing world. Thus, even during this period of rapid global extension by multinationals, much of the service sector in the West remained immune to international competition.

Unlike merchandise, which typically can tolerate the lag between product design and product production imposed by international shipping, many services typically require a real-time exchange of information between the service and its consumer. Accordingly, for the bulk of human history, services had to be performed on-site or near-site. Two aspects of the digital revolution disrupted this requirement: digital networks and the digitization of information. First, the introduction of the Internet and high capacity transcontinental electronic data networks made possible remote collaboration on a real-time basis, with parties separated by continents able to share data. The deployment of high-capacity, high-speed communications technology enables the information sharing necessary to the provision of services across the globe. Second, the increasing digitization of information spurred its wide dissemination. The widespread

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61 Financial transactions often did require instantaneous interchange of information, and financial houses developed electronic networks for such purposes.

62 One reporter notes the Internet’s contribution to trade in architectural services:

“In offshore services, the Internet is integral in two aspects: communication or collaboration and data transfer. The Internet offers a number of available modes of communication. The most common and widely-used among these is electronic mail or email. Email messages can be received seconds after these are sent, regardless of where it came from and how far that place is from the recipient. At the same time, instant messaging and chat features add a new dimension to collaboration and online discussion.”


63 Of course, electronic communication networks facilitate the global production of goods as well. Even an ancient trade such as Persian carpet weaving now “is guided, in part by e-mail missives on the tastes of rich customers in the West.” Ian Fisher, *A Quest for Carpets Reveals the Persian Past and the Soul*, N.Y. TIMES, at A19, Sept. 3, 2005.
adoption of computers as a tool for work meant that information was often created originally in digital form. The World Wide Web took advantage of digital networks and digitized information to provide a common information-sharing platform. Information that had been held locally now found wide distribution. Take for example the United States Securities and Exchange Commission’s EDGAR database, with its immense storehouse of information about publicly-traded companies, and the Patent and Trademark Office’s databases. The global nature of the World Wide Web meant that these databases were available for free not only to Americans, but also to people across the world.  

Today, a radiologist in Bangalore sits at a 3-D workstation reading images of a patient at Massachusetts General Hospital, and reviews the patient’s records before offering a diagnosis. And crossborder outsourcing includes “typists, researchers, librarians, claims processors, proofreaders, accountants and graphic designers.” Crossborder trade in services also includes engineering, architectural, paralegal services, animation, and movie special effects. Clients include “U.S. brokerage firms, investment banks, law firms and even copy shops.” The jobs are both “big—100-page investment reports requiring weeks of work—and small.”

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64 [Interview with _______, Mumbai, India, Jan. ___, 2005.]
66 Pathology is also being outsourced, but often from hospitals outside the United States to doctors within the United States:

“The University of Pittsburgh Medical Center essentially manages a transplant hospital in Italy, performing some pathology from Pittsburgh. The Armed Forces Institute of Pathology in Washington, part of the Walter Reed Army Medical Center, provides second opinions on about 60,000 cases a year, for Americans and foreigners. Most of the time, slides and tissue samples are sent in by mail, but about 300 to 500 a year are analyzed by using telepathology.”

67 [CITE]
68 Reyes, supra note 62 (“because current engineering technology - be it CAD files or engineering computations - stores data electronically, off-shore engineering services are now an easy option for foreign companies”).
69 Pete Engardio et al., The New Global Job Shift, BUSINESS WEEK (Feb. 3, 2003) (“Fluor Corp. … of Aliso Viejo, Calif., employs 1,200 engineers and draftsmen in the Philippines, Poland, and India to turn layouts of giant industrial facilities into detailed specs and blueprints.”).
70 [CITE]
71 Amol Sharma, India winning higher-status jobs from US, CHRISTIAN SCIENCE MONITOR, June 18, 2003 (describing outsourcing of special effects production to Bangalore for movies such as “The Nutty Professor II” to “Independence Day”).
72 [CITE]
program for [the] wedding of Ann and John, a Texas couple proclaiming their joy in being ‘together for life.’”

Even small firms might hire workers across the world. Today, telecommuting can occur across hemispheres. In the somewhat hyperbolic words of a reporter, “Task by task, function by function, the American office is being hollowed out and reconstituted” in India.

The Millennial turn had an almost literal significance for crossborder outsourcing of services. Computer programs written decades earlier had expected to be long obsolete before the clock rolled over to the year 2000. The task of reviewing millions of lines of computer code for this vulnerability was both arduous and gargantuan. Indian software companies recognized an opportunity to attract new clients, especially from the United States. The relationships and experience developing from the Millennial programming led to further programming shifts. “Once the Indians had saved the world, they set out to conquer it.”

In perhaps the most important economic shift, entire business processes are being outsourced. The various departments that make up large-scale businesses, including procurement, finance and accounting, human resources, and data processing may amenable to outsourcing.

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73 Id.
74 Hal R. Varian, Technology Levels the Business Playing Field, N. Y. TIMES, Aug. 25, 2005 (describing two Silicon Valley entrepreneurs: one, Rashmi Sinha, who owns a software company with six employees, two in the United States and four in New Delhi; “The other, Cosimo Spera, started a company to develop applications and services for mobile phones; his company has five employees in the United States, eight in Spain and two in Italy.”).
75 See, e.g., Kevin Voigt, For ‘Extreme Telecommuters, ’ Remote Work Means Really Remote -- Enterprising Employees Swap Cubicles for Exotic Locales, WALL ST. J., at B1, Jan. 31, 2001 (“[A]lthough [Paolo Conconi]’s work is in Europe and China, his office is a table by the pool of his villa in Bali, Indonesia. As he goes through his mail, he sips his favorite Italian coffee. An attendant lights his cigarette.”); Brice, supra note 65 (“teleradiology allowed Dr. John Schlakman to fulfill his dream of living in Jerusalem”).
76 Streitfeld, supra note __. As I discuss later, the truth is far more complicated; western countries export far more services than they import. See infra notes __ - __ and accompanying text.
77 The Place to Be, ECONOMIST, Nov. 11, 2004.
78 One commentator satirically observes the potential benefits of outsourcing the Chief Executive Officer position, not just back office positions:

The decision to outsource the CEO position to an equally competent former opium farmer living in Pakistan, a Mr. Mosul, was made as an alternative to moving plant operations to Mexico by a 76% vote of company shareholders over the last month.

“It was one of the easiest decisions I’ve ever made,” commented Matilda Jenkins, a proud owner of 2,000 shares of CBI, “Opium farmer for 80K a year or Mr. 1 million a year plus shares, options, bonuses, golden parachute plan and sexual harassment suits? .”

CEO Position Outsourced: Over 700 Jobs Saved, NEWSMUTINY.COM, (Jan. 25, 2005) at http://www.newsmutiny.com/pages/CEOPositionOutsourced.htm; see also Jeff Angus, The
Most high value outsourcing contracts involve either business process outsourcing (BPO) or information technology outsourcing (IT outsourcing). While IT outsourcing-led global outsourcing, BPO has been growing, and, according to the British consultancy, should overtake IT outsourcing in terms of contract value by 2006. Most of the companies offering outsourcing services are Western corporations that draw on staffing around the world. The leading vendors in winning new BPO contracts over the latest 12-month period were Capgemini, which is based in Paris; IBM, which is based in New York; and Affiliated Computer Services, Inc., which is based in Dallas. But India now offers information technology companies that are becoming global players, a few even with market valuations in the billions of dollars. Take, for example, Infosys Technologies Ltd., Wipro Ltd., and Satyam Computer Services Ltd., which, in mid-2006, had a market capitalization of $21.71 billion, $17.49 billion, and $5.32 billion, respectively. The OECD estimates that one-fifth of all service jobs in the developed economies will be affected by crossborder trade in services. This does not mean that such a large fraction of jobs will soon be outsourced, but rather that the terms of these positions will change as a result of international competition. The Bank of International Settlements credits outsourcing with reducing inflationary pressures by curtailing the bargaining power of workers in industrial countries. The deepening division of labor represented by crossborder outsourcing of services increases efficiency, just as the international division of labor in manufacturing increased efficiency. The OECD describes an inefficient service sector as “a prohibitive tax on the national...
Increased efficiency, economists predict, should improve growth for most parts of the world.

Despite public perception to the contrary, the United States and the United Kingdom actually export far more services than they import. The United States and the U.K. had a net surplus in business services trade of $19 billion and $29 billion, respectively, in 2003. India, by contrast, had a net surplus of $4 billion during the same period. India’s possible position as back office to the world remains yet a fairly distant possibility.

B. Vendor or Captive?: Reinterpreting “Make or Buy”

Ronald Coase placed technology at the heart of his 1937 explanation of the existence and boundaries of the firm, recognizing that technology would influence both the transactions costs of marketplace contracting and the organization costs of internal hierarchy. Coase thus anticipated the organizational shifts arising from the radical reduction in the costs of communication resulting from global electronic networks such as the Internet. In 2000, the New York Times linked the organizational shift to a prediction of Coase’s theory: “Sixty years [after Coase’s paper], transaction costs have plunged, thanks to the Internet… As a result, companies can get complete information about potential suppliers and business partners within a few clicks, and can therefore set up supplier agreements or form alliances with other companies for a fraction of what it would have cost even a decade ago.”

Electronic data networks reduced not only the costs of marketplace transactions but also the costs of managerial hierarchies. The first effect—the reduction of transaction costs—tends to reduce the size of the firm by increasing the use of the marketplace for purchasing inputs into the production process. However, the second effect—the reduction of hierarchy costs—tends to increase the size of the firm, as the costs of internalizing production inputs fall. In his original paper, Coase himself was uncertain whether improvements in communications technology (he spoke specifically of the telephone) would put greater downward pressure on market transaction costs or internal organization costs. Today, the

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84 OECD, supra note Error! Bookmark not defined., at 14.
85 WORLD TRADE ORGANIZATION, WORLD TRADE REPORT, supra note __, at 278.
86 Id.
89 See Coase, supra note 87, at ___ (“It should be noted that most inventions will change both the costs of organizing and the costs of using the price mechanism. In such cases, whether the invention tends to make firms larger or smaller will depend on the relative effect on these two sets of costs. For instance, if the telephone reduces the costs of using the price mechanism more than it reduces the costs of organizing, then will have the effect of reducing the size of the firm.”).
standing view seems to be that the greater effect has been on market transaction costs. 90

Yet, the choice of employing a service provider abroad does not necessitate a turn to the market. Many Western corporations outsource by establishing local subsidiaries—“captives” in the lingo of international business—rather than by employing independent vendors. In the language of organizational economics, they chose “make” over “buy.” General Electric (GE) helped pioneer this type of outsourcing in India, in large part by accident. In 1997, as GE was establishing an Indian office to process credit applications from Indians for a credit-card joint venture with an Indian bank, 91 “the ‘light went on.’” 92 “We started to think, we can do this for the rest of the world,” says Pramod Bhasin, a former GE Capital executive who helped create GE Capital International Services (Gecis) and serves as its chief executive. 93 “By the late 1990s, GE began turning its attention from simply buying software from India to using the country as a base for data entry, processing credit-card applications and other clerical tasks.” 94 By 2000 the outsourcing deepened yet further, as GE established in Bangalore a Jack F. Welch Technology Centre, employing “thousands of researchers working on everything from new refrigerators to jet engines.” 95

New institutional economists have refined Coase’s insights into the determinants of the organization of the firm. Today, economists explain the decision to make rather than buy as turning in part on the existence of asset specificity. Certain types of marketplace contracts might be subject to post-contractual opportunistic behavior, leading companies to bring those functions within the corporate hierarchy. When either party invests in assets specialized to that particular contract, the counterparty can exploit that investment by renegotiating the terms of the contract, recognizing that the party making a specialized investment cannot readily divert its resources to alternative productive uses. 96 In crossborder outsourcing, either the vendor or the procurer of services may face the risk of exploitation: the vendor might be required to engage in extensive information gathering about its client or create processes and systems narrowly tailored to the

92 Id. (quoting Nigel Andrews, a former top GE Capital executive who oversaw India).
93 Id.
94 Id. (reporting “savings on backroom operations alone” of “about $300 million a year”).
95 Id.
client’s needs; the client, meanwhile, might come to rely on proprietary systems owned and supported by a particular vendor. The vendor’s investment in knowledge may leave the client vulnerable, at least in the short run, if such knowledge will be difficult for another vendor to replicate readily in the future.

Firms faced with asset specific inputs might avoid the possibility of exploitative behavior by entering into long-term contracts that provide remedies for exploitative behavior. However, such contracts might be quite expensive, both to write and to enforce. This problem is compounded by how idiosyncratic inputs are often priced. Because neither the buyer nor the seller will find it easy to predict exactly how many resources the input will ultimately require, the contractual price may be subject to adjustment under the terms of the contract. The price escalation clause makes it difficult to distinguish legitimate pricing adjustments due to unexpected cost increases from behavior exploiting the counterparty’s asset specific investments. At times, one party will accept the risk of exploitation by the other side, a risk that it will presumably price. Reputational sanctions and the withdrawal of expected future business often prove a popular means to discipline exploitative behavior.

The principal alternative to contracting as a response to the difficulties posed by asset specificity is vertical integration. Rather than rely on contracts with third party vendors, corporations might choose to bring the function in house. They can do so even with inputs to be delivered by crossborder, typically through establishing a local subsidiary in the foreign country. This was the process followed by General Electric, for instance, as it expanded its financial business in India.

But vertical integration is not necessarily an ideal solution because it imposes hierarchy costs. Managing subsidiaries crossborder is an especially expensive proposition. Perhaps equally important is the fact that keeping a function in house reduces the opportunities for economies of scale. If a particular service exhibits economies of scale it is easier to scale up in a standalone enterprise that can offer that service to multiple purchasers. A diversity of demanders also increases the efficiency with which that service is used, as slackened demand by certain customers can be compensated by increased demand elsewhere. A principal advantage of vendors to captives is the opportunity for a vendor to serve multiple clients and thereby achieve economies of scale. This represents a division of labor across firms, not within them. The approach is the opposite of the conglomerate firm, which makes everything from tires to bathroom tissue (similar only to the extent that each product is circular). Contemporary organization theorists see investments, rather than managerial hierarchy, as the superior mechanism in most cases for diversifying risk and taking

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97 Klein et al., supra note __, at __.
opportunities in disparate markets.

Indeed, GE, though a pioneer in outsourcing to India, recently spun-off its Indian services subsidiary, Gecis.98 In November 2004, GE sold 60% of Gecis (now “Genpact”) to U.S.-based private equity firms. Reports indicate that the sale “has allowed Gecis to begin working for companies other than GE, including Japan's Nissan Motor Co., which recently signed on as a customer.”99 The latest India-based outsourcing company to list on the New York Stock Exchange, WNS (Holdings) Limited, followed a similar path—beginning life in 1996 as the in-house services provider for British Airways, until the American private equity investor Warburg Pincus purchased a majority stake in 2002.100 Today, the company, which is incorporated in Jersey, Channel Islands, continues to provide services to British Airways, but now also serves Air Canada and Virgin Atlantic Airways, as well as numerous financial institutions.101

_The Economist_ reports that captives may tend to be more expensive than independent vendors, with costs up to 50% higher.102 Because they typically serve only one entity, captives are less likely to benefit from the economies of scale available to third party vendors, which provide a similar service to multiple parties. By providing services to multiple companies, third party vendors also develop specialized expertise and best practices not readily available to a supplier for a single entity.103

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99 Streitfeld, supra note __; Sankar Mehta, _GE’s outsourcing departure sets a new trend – outsource headaches do not own it!_, INDIA DAILY, Oct. 07, 2004, available at http://www.indiadiaily.com/editorial/10-07c-04.asp (“‘GE can extract much more juice from the operation by opening it up to competitors who would feel too uncomfortable if it was still “captive”,’ says one foreign executive.”).


102 _Relocating the Back Office_, ECONOMIST, Dec. 11, 2003 (“The business of shifting back-office functions offshore began in earnest in the early 1990s when companies such as American Express, British Airways, General Electric and Swissair set up their own “captive” outsourcing operations in India. However, many of these captives are now finding that their costs are up to 50% higher than those of independent third parties.”).

103 Sathya Mithra Ashok, _Build or Buy_, OUTSOURCING WORLD (Dec. 6, 2005), available at http://www.oswmag.com/features/viewArticle/ARTICL_EID=522 (noting that captive centers must “derive one’s own learning, unlike in a third-party scenario where they would have picked up best practices from other clients and processes.”).
The decision to outsource a function through a foreign subsidiary rather than a third party vendor often turns on yet other factors than asset specificity. Companies are especially wary of turning “strategic” or “core” functions to third party entities. The concern is especially evident when such functions involve proprietary and secret information, given the fear that the foreign vendor might appropriate such information and use it to enhance a competitor.

But a recent *Harvard Business Review* report observes that even “critical functions like engineering, R&D, manufacturing, and marketing can—and often should—be moved outside.”\(^\text{104}\) The definition of “strategic” and “core” is susceptible to change over time. The history of the integrated circuit chip industry reflects this dynamic, as described by two attorneys:

> [I]n the 1980s, large U.S. integrated circuit chip (“chip”) design companies began moving manufacturing of their chips to offshore fabrication facilities (or “fabs”) that also leveraged economies of scale to produce large volumes of chips for many chip companies. This eliminated the need for chip companies to raise capital or spend the time necessary to establish their own manufacturing capabilities. The benefit for these companies included reducing their costs to produce their chips, while freeing up capital and time to develop newer and better chips. Today, almost every new U.S. chip company is “fabless”; they design their semiconductor products and turn to offshore fabrication facilities to produce them.\(^\text{105}\)

In manufacturing, outsourcing production of even a company’s most valued products is commonplace. Sony, for example, outsources the production of some of its state of the art PlayStation Portable systems to a third-party Taiwanese vendor.\(^\text{106}\) Over time, the pressure to minimize costs may increase demand for third party vendors with respect to services, but only as long as issues of asset specificity, intellectual property, privacy, security, and contract enforcement are adequately resolved. We may well come to see a reverse of the trend noted by Alfred Chandler—as outsourcing to third party entities deepens, we may witness a move from the visible hand of management to the invisible hand of the market.

\(^{104}\) Mark Gottfredson *et al.*, *Strategic Sourcing: From Periphery to the Core*, H ARV. BUS. REV. (Feb. 1, 2005) [Pincite].


C. Hierarchy, Market, and Network

Economists have suggested a third mode of organizing production, alongside hierarchies and markets—the network.\(^\text{107}\) This claim finds some evidence in the fact that neither the revolution of information technology, nor a particular millennial task, nor even the economics of labor arbitrage explain adequately the course of the existing flow of trade in services. Crucial to the choice of India as a primary outsourcing destination was the ubiquity of Indian Americans in the information technology heart of the United States, Silicon Valley, and generally on the Indian diaspora’s presence within corporate America. An OECD study concludes that “diaspora populations [are] proving important in [facilitating trade in] areas spanning traditional medicines to audiovisuals.”\(^\text{108}\) Hal Varian declares, “It is almost impossible for an entrepreneur to put a foreign development team together without some strong connections on the ground.”\(^\text{109}\) Also relevant are historical forces such as colonialism. Colonialism creates both language linkages between North and South and diaspora channels that facilitate trade in information services.\(^\text{110}\)

Consider the efforts of a small San Francisco architectural firm to outsource design work to Asia. The principal reports that it first attempted to outsource to “interiors firms located in Southeast Asia that were run by American ex-pats,” but that this proved unsuccessful. When a “young Indian architect joined our firm after finishing his Masters degree in the States,” the firm began outsourcing—successfully—to the Indian company owned by that young architect’s parents.\(^\text{111}\) Ethnicity and personal contacts prove relevant to this American firm’s outsourcing choices.

Networks do not replace hierarchy or markets, but rather support both, reducing informational deficiencies in this new remote trade regime.\(^\text{112}\) Networks are likely to prove especially important when charting new terrain. Lack of familiarity with a country and its cities, workers, educational institutions, and enterprises will necessitate a turn to alternative

\(^{110}\) NIELSON & TAGLIONI, supra note __, at 9 (noting that “former colony/colonizer relationships” might prove important as facilitating both “capital and credibility for exporters from the latter”).
\(^{111}\) Richard N. Pollack, CONTRACT MAG., June 1, 2005.
\(^{112}\) Some describe networks as an alternative to organization through hierarchy or markets. See, e.g., Jennifer Frances et al., Introduction, in GRAHAME THOMPSON, MARKETS, HIERARCHIES & NETWORKS: THE COORDINATION OF SOCIAL LIFE 1,1 (1991).
mechanisms to create information flow. Buyers will be able to find sellers, and sellers will recognize potential foreign markets.

D. From Open Source to Out Source

Outsourcing shares much in common with peer production, yet another mode of organizing production. Both require that a larger task be divisible across numerous persons that are geographically dispersed, a division made immeasurably easier by the emergence of the Internet. Both thus embody the increasing “deconstruction” of the firm, with the functions of the firm disaggregated via piecemeal work performed remotely. Like outsourcing to third party vendors, peer production does not depend upon internal firm hierarchy to determine how the function is produced.

Peer production can even be seen as a species of net-work: the person coordinating the production outsources specified processes to others around the world. Consider Linux, the exemplar of the peer production and open source movement. The kernel to this operating system was developed by Linus Torvalds from his home in Finland. Since 1991, when he released his source code to an Internet newsgroup, Torvalds has coordinated a global production process, now from the West Coast of the United States. The Linux kernel today contains more than three million

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113 For example, without well-respected international reputational intermediaries, someone with no experience with a foreign country will find it difficult to judge the value of the academic credentials or job experience of someone who lives in that country.

114 Cf. STEVEN WEBER, THE SUCCESS OF OPEN SOURCE 71 (2004) (“Open source is a distributed production process, but clearly the distribution is lumpy and somewhat top heavy.”).

115 Yochai Benkler, Coase’s Penguin, or, Linux and The Nature of the Firm, 112 YALE L. J. 369, 375 (2002) (“Commons-based peer production, the emerging third model of production I describe here, relies on decentralized information gathering and exchange to reduce the uncertainty of participants.”).

116 Id. at 412 (describing peer production as an alternative to both markets and hierarchies).

117 Even though the peer production process has long proceeded on a cross-border basis, there has been little attention paid to law. The typical open source licenses choose neither governing law nor forum. The popular version of the GNU Public License disclaims warrantees and asserts claims over the distribution of derivative works without reference to any particular jurisdiction’s laws. http://www.gnu.org/copyleft/gpl.html. Thus far, this failure to consider choice of law problems does not appear to have proved detrimental, perhaps because of the disciplinary force of informal reputation sanctions in the programming community.

118 Torvalds, of course, built on libraries and tools developed by the Richard Stallman-initiated GNU project.

119 WEBER, supra note 114, at 71 (noting the “profoundly international nature” of the Linux open source community). Contributions to open source projects such as Linux and Gnome are not evenly distributed around the world, being largely the work of people who speak English, and, increasingly, of Europeans. See David Lancashire, Code, Culture and
lines of code, which, according to one study, would have required eight thousand person-years of development time.

In computer software, languages evolved to promote modular programming, which facilitates collaboration. Programming now often involves extending a “library” of functions, each performing a well-defined operation upon the receipt of specified parameters. The rationalization of business processes, too, has increasingly standardized some corporate functions.

In peer production, the ability to collaborate depends on a related fundamental characteristic: the decision to publish all the necessary standards (including the underlying code) for modifying or extending the given project. Opening up the source and the interfaces enables a largely spontaneous division of labor across unaffiliated parties. The web itself has been called “the apotheosis of open standards.” The web’s principal designer, Tim Berners-Lee, sought to ensure that the programming underlying a webpage would be publicly available (thus, the feature of web browsers that allows one to look at the page’s “source”). The decision of some companies to open their application programming interfaces (even without necessarily revealing the underlying code) to the world enables others to access the application’s functionality and extend the application in unforeseen ways. Today, a website can mash up the mapping service offered by Google, with the photography service offered by Flickr, while borrowing Amazon’s sales services.

One of the principal attractions of the open source process is that it helps reduce opportunistic behavior exploiting asset specificity. Proprietary standards for any given system limit the potential market for suppliers who might manage or extend that system. At least in the absence of reverse engineering (which is both costly and potentially imperfect), only the original supplier of the proprietary system or its licensees will have the information required to modify that system. Where a system is open source, on the other hand, many suppliers can potentially modify that system.

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121 http://en.wikipedia.org/wiki/Linux (offering estimate of labor required for one particular distribution of Linux and the GNU libraries) [NEED BETTER CITE].
123 Kevin Kelleher, All Access Economy, WIRED 14.07 at 140 (July 2006).
124 Cite to Tim Berners-Lee, Weaving the Web.
125 See supra notes 96-97 and accompanying text.
The next Part turns to the legal implications of the economic forces described above. The economic logic of net-work—specifically, the increase in productivity arising from a deepening division of labor—supports the lowering of protectionist barriers against trade in services.\footnote{126} But more is required. International trade flourishes in a legal infrastructure of enforceable contracts. The increased legal risks of the market mechanism operating crossborder might be reduced through better transnational dispute resolution frameworks.

II. THE LAW:
FROM GOODS ACROSS THE KYBER PASS TO SERVICES ACROSS CYBERSPACE

Through the Khyber Pass or around the Cape of Good Hope, merchants have long made arduous journeys laden with the world’s treasures. Trade law developed with such merchants in mind. Law accommodated trade conducted over the high seas, the Silk Road, and the Grand Trunk Road, not through undersea fiber or via satellite links.

While the virtues of trade, whether oversea or undersea, would necessarily be discovered by private actors, trade depends on the legal environment in two crucial ways: first, the law must dis\textit{mantle} protectionist legal barriers erected through history (this is the standard focus of teaching and writing in international trade law); second, the law can facilitate cross-border trade by \textit{erecting a legal infrastructure to reduce uncertainty} in international transactions (this is the standard focus of teaching and writing on international business transactions).\footnote{127} Let us label both features of the legal environment, taken together, the “Trade Plus” regime.

A Trade Plus regime crafted for goods is unlikely to serve well the demands of the burgeoning trade in services delivered through the ether. While trade in goods and trade in services share the same underlying economic rationale,\footnote{128} the two differ in key respects that may be relevant to

\footnote{126}Of course, an increase in productivity does not, by itself, justify free trade. Societies may choose to protect domestic industry even at the price of productivity. Indeed, I have argued that a democratic society must retain the prerogative to choose protectionism over trade. Anupam Chander, \textit{Globalization and Distrust}, supra note __, at __.

\footnote{127}In his classic study, Douglass North suggests that “[t]he major role of institutions in a society is to reduce uncertainty….” \textit{DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE, AND ECONOMIC PERFORMANCE} 6 (1990).

\footnote{128}That is not to say that the economics of trade in goods and trade in services are identical, but that liberalization in each is likely to be beneficial for the trading partners. Drusilla Brown and her coauthors identify the following potential differences between trade in goods and trade in services: “the movement of factors internationally to permit onsite production of services, the perishability of services, the distinctive nature and size of transport costs in services, the role of traditional comparative advantage in determining patterns of services trade, and the embodiment and disembodiment of services into and out
First, the tangibility of goods facilitates measuring performance of a production contract. Second, services may be more likely than goods to implicate local cultural norms. Third, outsourced services may be more “footloose” than outsourced manufacturing because of lower capital-intensity and sunk costs. Fourth, outsourced services often involve the transfer of sensitive personal data. Fifth, the production of services may require the creation and transfer of intellectual property perhaps more intensely than does the production of goods. Sixth, firms in both the manufacturing and services sectors can outsource service functions, while only those in the manufacturing sector can outsource manufacturing. Seventh, services employ white-collar professionals who have historically not faced widespread international competition. Eighth, the measure of the quality of a service often involves not just the appraisal of the outcome, but also the appraisal of the process by which the service was produced. Ninth, unlike electronic services, goods can generally be controlled at border checkpoints. Tenth, we have longer experience in identifying and restraining tariff and non-tariff barriers to trade in goods than to trade in services.

These characteristics raise pressing legal questions. For example: How can we protect consumer privacy amid a worldwide dataflow among information processors? Can intellectual property be secured as it traverses the globe? If the outsourced process fails, who will be liable? Will the liberalization of trade in services require the dismantling of local certification and licensing requirements in favor of distant or global norms? Will the consumers of net-work have to rely entirely on whatever legal protections they might find across the globe in the home jurisdiction of network providers? More directly put, will Americans be left to the mercy of Indian law?

129 For an alternative list focused on technical and social differences between services and other economic activities (including the fact that women make up a higher percentage of the European workforce in services than in manufacturing), see MIROSLAV N. JOVANOVI, THE ECONOMICS OF EUROPEAN INTEGRATION: LIMITS AND PROSPECTS 410-11 (2005).
130 See _____, Harv. Bus. Rev. (describing typology of services by availability of metric for such service).
This concern is more than demagoguery, as I will describe below. I first discuss below legal reform projects to accommodate net-work—how we can *free trade*. I then turn the steps we can take to ameliorate the threat to domestic regulation posed by net-work—how we can *protect law*.

### A. Freeing Trade

Unlike trade in goods, the regulation of net-work occurs not at customs houses on dry docks at border ports, but rather in administrative offices scattered inland. It consists, for example, in certification and licensing rules, rules about government procurement, geographical and quantitative restrictions, and rules for membership in private associations.\(^{132}\) International trade law has long recognized that internal regulations, not just border rules, might serve as barriers to trade in goods, but the even more extensive diffusion of regulatory authority over services heightens the challenge for discerning protectionist from other regulatory objects in services.\(^{133}\) Dispersing regulatory authority through city and county halls, the chambers of self-regulatory associations, and state and federal administrative and legislative units renders the task of liberalizing trade in services particularly difficult.

The infancy of such efforts poses yet another challenge. Where liberalization of trade in goods has a long, rich history, the global effort to dismantle barriers to trade in services is barely a decade old. The General Agreement on Trade in Services introduced services to the binding agenda of globe trade liberalization in 1995. GATS, however, is far less demanding than its older cousin, GATT, which was born from the ashes of a world war. Where GATT requires national treatment for suppliers of goods unless an exception has been carved out, GATS requires only the inverse: it permits discrimination against foreign service providers, except in those sectors specifically designated by a state party for liberalization.\(^{134}\)

Increasingly, regional trade arrangements offer stronger liberalization mandates. Europe’s ambition to create a Single European

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\(^{132}\) *Cf. Organisation For Economic Co-Operation And Development, Barriers to Trade in Services in South Eastern European (SEE) Countries—How Much Do They Matter?* (Oct. 29, 2003) (observing that “barriers to such trade occurs within borders, and include quantitative restrictions, price-based instruments, licensing or certification requirements, discriminatory access to distribution and communication systems.”).

\(^{133}\) GATT, Art. III (“contracting parties recognize that internal … regulations … should not be applied to imported or domestic products so as to afford protection to domestic production”).

\(^{134}\) GATS, Art. XVI (market access obligations for scheduled services only); GATS, Art. XVII(1) (national treatment obligation for scheduled services only). Such an approach still proves to be somewhat trade liberalizing because countries negotiate for specific commitments for nondiscrimination and market access from their fellow WTO members.
Market remains the leading effort to dismantle barriers to trade in services between countries (I discuss aspects of the EU’s free trade regime for services in Section B below). Free trade in services is also one of the pillars of NAFTA, \(^{135}\) CAFTA-DR, \(^{136}\) and a goal of regional arrangements from ASEAN\(^{137}\) to Africa\(^{138}\) to Mercosur.\(^{139}\) All of the bilateral Free Trade Agreements ratified recently by the United States—with Australia, Bahrain, Chile, Morocco, Oman, [Peru,] and Singapore—all include broad obligations to liberalize services. Unlike GATS, these bilateral agreements adopt a positive list approach to the sectoral commitments to liberalize trade in services, assuming that all services are covered except those that are specifically excluded.\(^{140}\) Their reach accordingly will likely prove especially broad.


\(^{137}\) See supra note 30 and accompanying text.

\(^{138}\) Treaty Establishing the African Economic Community Art. 4(2)(i) (setting out the objective of “[t]he gradual removal, among Member States, of obstacles to the free movement of persons, goods, services and capital…”).


Perhaps unsurprisingly, the first dispute heard by the WTO squarely involving services arose out of net-work. As I argue below, this decision lays the groundwork for extensive liberalization of net-work trade. I then elaborate some reforms to the legal infrastructure to accommodate net-work.

1. Measures Affecting the Cross-Border Supply of Gambling and Betting Services (Antigua v. United States)

The opening salvo in the struggle to remove barriers to net-work via global trade disciplines was sounded by the tiny island state of Antigua and Barbuda. Before the WTO, Antigua challenged American laws that bar online gambling but tolerate physical casinos, arguing that the requirement of physical establishment in certain specified zones disadvantaged foreign service providers. Antigua had found its plans to become an offshore center for online gambling operations stymied by American regulations, including notably the arrest of American expatriate and gambling entrepreneur Jay Cohen when he returned home from his operations in Antigua. Antigua claimed that the U.S. government’s actions ran afoul of its commitment to provide market access to trade in “other recreational services.”

Before the WTO Dispute Resolution Body, the United States offered a host of responses. It protested that it never agreed to open up trade in

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142 [CITE].

143 Paul Blustein, *Against All Odds*, WASH. POST, Aug. 4, 2006 (describing Cohen as instigating Antigua’s WTO complaint); United States v. Cohen, 260 F.3d 68, 78 (2d Cir. 2001) (affirming conviction of Cohen for violating Wire Act by facilitating crossborder sports betting over the Internet); Oral Statement of the United States, Measures Affecting the Cross-Border Supply of Gambling and Betting Services (Antigua v. United States) ¶ 36, WT/DS/285Feb. 21, 2005, avail. at http://www.antiguawto.com/wto/48_US_oral_stmt_Appellate_Body_21Feb05.pdf (“This dispute appears to have been inspired by the felony conviction under the Wire Act of just one American citizen operating from Antigua”).

144 Measures Affecting the Cross-Border Supply of Gambling and Betting Services (Antigua v. United States), WT/DS/285/AB/R at ___.

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gambling services, specifically excluding “sporting” from its liberalization commitment.\footnote{145} Canvassing a number of sources, the Appellate Body concluded that the United States had indeed committed to open up gambling services.\footnote{146} Controversy over whether a country committed to liberalize a particular service might seem awkward; after all, should not the parties to the trade agreement know what economic activities each side has agreed to liberalize? Because it often possible to characterize a particular service in multiple ways—some liberalized and some not—the parties to any dispute may have divergent views on whether a liberalization commitment exists. The dramatic changes in tradability (reflected most obviously in net-work) also make possible an increasing division of labor and thus a “splintering” of services into categories not previously anticipated.\footnote{147} Thus, it is likely that such most basic of disputes—did we make a liberalization commitment?—will prove a consistent thorn in the side of net-work.

Even if it had accepted a liberalization commitment with respect to gambling, the United States argued that it had satisfied its obligations. After all, Antiguan corporations were welcome to provide gambling services to Americans, as long as they set up shop in Las Vegas or Atlantic City or in some other American jurisdiction that permitted gambling. Such an invitation satisfied that national treatment requirement.\footnote{148} The United States offered that, because of their differing consumer experiences and regulatory risks, offline gambling and online gambling are two distinct services, and thus opening up one and not the other does not effectively deny national treatment. And the market access requirement, the U.S. argued, did not bar a \textit{total} prohibition on a particular service.

Seized of the dispute, the WTO’s Appellate Body confined its analysis to the market access complaint, finding it unnecessary to resolve the national treatment complaint. The Appellate Body held that a blanket prohibition operated as a “zero quota,” and thus presented a quantitative restraint prohibited by the market access commitment.\footnote{149} But GATS

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\textsuperscript{145} Specifically, the United States committed to provide market access for modes one and two, and national treatment of all modes of delivery. \textit{See} Measures Affecting the Cross-Border Supply of Gambling and Betting Services (Antigua v. United States), WT/DS/285/AB/R at 138, 200.

\textsuperscript{146} [Cite to Appellate Body decision]

\textsuperscript{147} Bhagwati identified the process whereby a service input into a manufacturing process can be outsourced. Jagdish Bhagwati, \textit{Splintering and Disembodiment of Services and Developing Nations}, 7(2) \textit{World Economy} 133 (1984).

\textsuperscript{148} Executive Summary of the Second Written Submission of the United States ¶ 26, United States - Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WT/DS285, January 16, 2004, avail. at http://www.antiguawto.com/wto/22_US_Exec_sum_2nd_Written_Sub_16Jan04.pdf. (“… Antigua has not offered evidence of any restriction that would stop its suppliers from supplying their services by the same non-remote means available to domestic suppliers. Hence there is no national treatment violation.”).

\textsuperscript{149} Gambling AB, \textit{supra} note __, at ¶¶ 251-52.
permits derogation where “necessary to protect public morals or to maintain public order.” This clause serves as a crucial regulatory safety valve, ensuring that liberalizing commitments do not unintentionally jeopardize important local public policies. The Appellate Body accepted the American contention that the restraints on online gambling were necessary to protect concerns related to “(1) organized crime; (2) money laundering; (3) fraud; (4) risks to youth, including underage gambling; and (5) public health.”

This was because gambling via the Internet posed special concerns: “(i) the volume, speed and international reach of remote gambling transactions; (ii) the virtual anonymity of such transactions; (iii) low barriers to entry in the context of the remote supply of gambling and betting services; and the (iv) isolated and anonymous environment in which such gambling takes place.” The Appellate Body agreed that the “distinctive characteristics of the remote supply of gambling services may call for distinctive regulatory measures.”

But the Appellate Body caught the United States in an inconsistency. U.S. law appears to “authorize[] domestic service suppliers, but not foreign service suppliers, to offer remote betting services in relation to certain horse races.” Thus, the United States had to resolve this relatively minor inconsistency.

At first glance, this result appears to pose a substantial roadblock to net-work. After all, the Appellate Body held that the risks particular to electronically mediated transactions might justify ignoring a country’s free trade commitments (so long, that is, as the country bars all remote services, not just those provided by foreigners). But even in largely dismissing Antiguan claims, the decision laid the groundwork for a substantial erosion of barriers to net-work. The “chapeau” to Article XIV permits a public order-based violation of trade commitments only if it is not in fact a “disguised restriction” on trade in services. A country may not maintain an infringing trade barrier if a “reasonably available alternative” exists—one that “preserve[s] for the responding Member its right to achieve its desired level of protection with respect to” its public order or public morality objectives. But Antigua did not show that Antiguan gambling operators could alleviate the American concerns through technical or other

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150 GATS, supra note __, GATS, art. XIV(a) (making exception for measures “necessary to protect public morals or to maintain public order”); GATS, art. XIV(b) (making exception for measures “necessary to protect human, animal or plant life or health”).
151 Gambling AB, supra note __, at ¶ 283, 323-27.
152 Gambling AB, supra note __, at ¶ 323 (internal quotations omitted).
153 Id. at ¶ 347.
154 Id. at ¶ 361, 364, 371.
155 GATS, art. XIV(requiring that “measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services”).
156 AB Report, supra note __, at ¶ 308.
means. Rather Antigua simply relied on America’s stubborn refusal to discuss alternative means to achieving its regulatory goals. Antigua might have instead demonstrated practical alternatives to the American prohibition to achieve the desired regulatory goals. Antigua could have shown that it had redoubled its financial crime efforts, strictly enforcing international anti-money laundering principles, such as the international standards offered by the Financial Action Task Force.\footnote{FINANCIAL ACTION TASK FORCE, HANDBOOK FOR COUNTRIES AND ASSESSORS (2006), at http://www.fatf-gafi.org/dataoecd/3/26/36254892.pdf; FINANCIAL ACTION TASK FORCE, FATF DOCUMENTS ON THE FORTY RECOMMENDATIONS, http://www.fatf-gafi.org/document/28/0,2340,en_32250379_32236930_33658140_1_1_1_1,00.html.} It could require independent auditors from large international firms to audit compliance by Antiguan gambling operations, helping assure users that the computer systems and financial payouts were sound. Antigua could show that the steps it requires to add money to a gambling account would prove nearly insurmountable for youth. And it could require that gambling providers make available services for gambling addicts, including mechanisms for allowing people to limit losses or to lock themselves out.\footnote{http://www.partypoker.com/responsible_gaming/ (offering self-imposed wagering limits and ability of customer to bind self not to gamble on that website for specified period).}

Even the most robust efforts might not prevent all potential wrongdoing. But even a flat prohibition of online gambling does not accomplish perfectly the regulatory goals. After all, underage persons can dissemble or sneak their way into casinos. Gambling addiction exists even without the online option (though the opportunities for gambling are not as vast). Cash transactions in offline gambling offer more opportunities for anonymity (and perhaps money laundering) than even an offshore bank account. The question is whether the proposed alternative achieves the “desired level of protection,”\footnote{See supra note 156 and accompanying text.} not whether it promises one hundred percent compliance. Contrast District Judge Marilyn Hall Patel’s standard for Napster, where she required the online service to remove one hundred percent of copyright infringing material, a standard that Napster rightly insisted was impossible to satisfy.\footnote{John Borland, Napster blasts court's technical meddling, CNET NEWS.COM, Aug. 9, 2001, at http://news.com.com/Napster+blasts+courts+technical+meddling/2100-1023_3-271351.html.} Even offline music distribution systems cannot guarantee against all infringement. The appropriate standard should be one where the online service should be required to achieve the regulatory goals at rates roughly equivalent to those achieved by offline versions of the service.

Such steps would raise the costs of doing business electronically as well as the costs for government of enforcing compliance. Quite often, perhaps, the costs may be so high as to make net-work economically
unfeasible. Perhaps governments might be willing to reduce compliance rates in some cases in view of the liberating and economizing possibilities of the electronic medium. But trade law should not require such a concession to net-work, as I will argue below in my discussion of glocalization.

Without discussion, the decision also seems to settle an important technical issue, also in favor of glocalization: whether net-work implicates trade mode 1 (cross-border trade) or mode 2 (consumption abroad). The Appellate Body assumes that the consumption of gambling services provided from Antigua is not “consumption abroad.” This resolves a metaphysical question that undergirds a regulatory question—for trade purposes at least, the consumer of net-work is not ______.

The distinction is important for regulatory purposes. If the metaphor of a person traveling abroad to consume services held, then regulation by the home jurisdiction of the service provider would seem more reasonable than regulation by the home jurisdiction of the consumer. After all, law does not typically interfere with a person’s actions while abroad. States have not, for example, typically sought to prevent their citizens from traveling abroad to engage in gambling (Nevada and Macao tourism depends on this fact). Indeed, attempts to extend one’s regulatory reach abroad might well run afoul of international law constraints on the extraterritorial exercise of jurisdiction. Thus, situating net-work firmly in mode 1 supports the argument for glocalization—requiring the foreign service provider to comply with local law.

Perhaps the strongest rebuttal to the American argument in Online Gambling comes from the Supreme Court of the United States. The dormant commerce clause serves, inter alia, to create a free trade area within the United States. In the recent case of Granholm v. Heald, the Supreme Court considered a dormant commerce clause-based challenge to Michigan and New York regulations barring out of state wineries from selling directly to Michigan and New York residents. While Granholm involved trade in goods, not trade in net-work services, both involve trade mediated largely by the Internet. In Granholm, as in Online Gambling, the defenders of trading restraints argued that they were necessary to preserve local values. New York insisted that its rules were “essential” to

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162 In certain narrow domains, such as sex tourism, countries have sought to limit consumption abroad by their citizens. See, e.g., End Demand for Sex Trafficking Act of 2005 (declaring goal of barring sex tourism).
164 Granholm, supra note __, at __ (“Technological improvements, in particular the ability of wineries to sell wine over the Internet, have helped make direct shipments an attractive sales channel.”).
“promoting” no less a value than “temperance,” as well as the more mundane goal of “collecting applicable taxes.” Requiring alcohol to pass through state sanctioned distribution channels, New York argued, allows it “to effectively monitor alcohol distribution and enforce its liquor laws.”

The Supreme Court was unpersuaded. New York and Michigan, it held “provide little evidence for their claim that purchasing wine over the Internet by minors is a problem.” In any case, the states could “minimize any risk with less restrictive steps, such as requiring an adult signature on delivery.” With respect to tax compliance, the Court rejoined that “New York’s tax collection objectives can be achieved without discriminating against interstate commerce, e.g., by requiring a permit as a condition of direct shipping.” The states’ “[o]ther rationales—facilitating orderly market conditions, protecting public health and safety, and ensuring regulatory accountability—can also be achieved through the alternative of an evenhanded licensing requirement.” The fundamental question, the Court asked, is whether a State’s discriminatory regime “advances a legitimate local purpose that cannot be adequately served by reasonable nondiscriminatory alternatives.”

The Supreme Court’s “reasonable nondiscriminatory alternatives” comes strikingly close to the WTO’s “reasonably available alternative.”

[More to come]

B. Protecting Law

1. Preventing a Race to the Bottom

The footloose nature of net-work increases the likelihood that a service provider might relocate to take advantage of regulatory environments it finds favorable. Because net-work can be performed from virtually any location, a provider can more readily decamp to a jurisdiction that offers fewer burdensome regulations. The fear is that this might lead to a race to the bottom, as providers search out the jurisdiction with minimal or even no regulation. Will net-work now find refuge in offshore havens?

The bottom of such a race might well be found in the self-declared principality of Sealand. Established on a floating platform used for British air defense during World War II, Sealand provides “the world's first truly

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166 Id.
167 125 S.Ct. at ___.
168 125 S.Ct. at ___.
169 125 S.Ct. at ___.
170 125 S.Ct. at ___.
171 125 S.Ct. at ___ (internal quotations omitted).
offshore, almost-anything-goes electronic data haven.”

Through its web hosting company, helpfully named “HavenCo,” Sealand offers “the ‘freedom’ to store and move data without answering to anybody, including competitors, regulators, and lawyers.” Free, as in without regulation. Yet even HavenCo has its limits, described variously as prohibiting “spamming, obscenity, and child pornography” or prohibiting activities “against international law, linked with terrorism, or contrary to international custom and practice.”

Thus far, with few exceptions, net-work has not migrated en masse to Sealand or other offshore havens. Perhaps this demonstrates that regulatory competition might in fact improve regulation, not destroy it entirely? Where earlier scholars saw regulatory competition as inexorably resulting in a calamitous deregulation, today’s scholars have identified potential virtues in the process. Rather than a race to the bottom, they predict a race to the top or, alternatively, a race to the global welfare-maximizing ideal. Regulatory competition might pressure regulators to bring regulation to global standards or allow private parties to locate the most well-tailored rules to govern a particular transaction. Competition might lead to the optimal regulation, where optimality is defined as the minimum regulation necessary to correct market failure. Regulatory competition “has the potential to discourage harmful regulatory laxity as well as extreme regulatory rigor.”

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172 Simson Garfinkel, Welcome to Sealand. Now Bugger Off., Wired (July 2000) (cover story describing Sealand as offering “an offshore, fat-pipe data haven that answers to nobody”).
173 Garfinkel, supra note __.
174 Garfinkel, supra note __.
176 For example, companies headquartered in the United Kingdom and the Caribbean offer online gaming within the United States, where it is banned.
177 Sealand’s web-hosting is foundering, suffering its latest blow in the form of a fire earlier this year. http://www.sealandgov.org/notices/pn03106.html. The phenomenon of offshore scofflaws is popular in certain areas. For example, companies headquartered in the United Kingdom and the Caribbean offer online gaming within the United States, where it is banned.
179 Bagheri and Nakajima note that the international market for regulation might itself be subject to market failures and thus may not lead to optimal regulation. Bagheri & Nakajima, supra note __, at 523. They suggest accordingly that “competition needs rules of game that can only be established through cooperation,” specifically, international treaties and international law.
Ralph Winter offered this encouraging vision of regulatory competition with respect to the internal affairs rule in corporate law.\textsuperscript{181} That choice of law rule adopts the law of the state of incorporation to regulate the corporation’s internal governance. Winter offered that rather than resulting in a race to the bottom, as managers sought out the most lax jurisdiction in which to incorporate, the dynamic was more salutary. Managers, Winter argued, would seek out jurisdictions with regulations that were likely to satisfy their shareholders.

[More to come]

III. CONCLUSION
[To Come]