

CONFERENCE ON ISSUES IN GLOBAL ELECTRONIC COMMERCE*

Annenberg Center for Communication
University of Southern California
Los Angeles, California

Conference Summary[†]

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Opening Session:

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ELECTRONIC COMMERCE: WHAT ROLE FOR GOVERNMENTS?

The conventional wisdom about the growth of electronic commerce and network economies holds that there is a headlong rush to replicate Silicon Valley. The assumption is that there will be one integrated, seamless, and undifferentiated e-economy defined by American technology, regulatory structures, and business practices. In this vision, we see the end of established hierarchies in social, economic, and political life and thus the end of the state as we know it.

The more likely counter-proposition is that the emerging e-economy is powerful and revolutionary in its implications but it will not sweep aside existing political and economic arrangements around the world. Rather, differences in politics, governance, and economic organization will drive variation within the e-economy by region and by sector. To gain some understanding of these likely variations and their implications, each of the panelists discussed an aspect of the state's role in the emerging digital economy. Peter Cowhey's remarks placed the development of the e-economy in comparative perspective; Tom Boasberg examined regulatory issues in light of demands for social equity within the e-economy (i.e., universal service in a new context); and Carlos Casaus set out the implications of the e-economy's growth for developing countries.

Remarks by: Peter Cowhey

Graduate School of International Relations and Pacific Studies

University of California, San Diego

Former Chief, International Bureau, FCC

Peter Cowhey noted that there have been two great eras of economic globalization: the British dominated 19th Century and the American led post-WWII era from 1945 to the 1970s. Both eras shared the characteristics of convertible currencies, innovations in transportation and communications, and a dramatic rise in the cross-national flow of goods. These characteristics are certainly present in the current era as well. However, there are a number of significant differences between those prior periods of globalization and the one in which we are now living. First, each epoch bore the stamp of the institutions and policies of the dominant power. The classical liberalism of the 19th Century, in which the state was limited to protecting currency, property rights, and national security, mirrored the political structure and policies of the U.K. at that time. The post-WWII era was made in the image of the United States' New Deal, including such basic tenets as the widespread acceptance of a social welfare state, a government role in the management of the economy, and a proactive and catalytic role for the state in integrating the world economy. The stagflation of the 1970s ended the unquestioned dominance of the New Deal model of governance and policy. Yet the arrival of Reagan and Thatcher did not end the role of the state or international institutions such as the World Bank and the IMF that had developed during the post-war period. These inherited institutions and modes of policymaking continue to shape both government policy and the process of globalization itself.

The New Democrat and New Labour coalitions in the U.S. and U.K. represent a hybrid between the modern activist state and the neo-liberalism of Reagan and Thatcher. The Internet and the e-economy emerged in this hybrid environment. Indeed, the e-economy looks quintessentially American. The core technology was developed and has diffused most rapidly in the U.S. The lead firms in e-commerce are American. The lead governance functions, such as the granting of domain names, are American or dominated by American interests. The Internet is by its very structure culturally pluralistic and, in its structural openness, it represents the ultimate vehicle for global economic liberalization, integration, and dynamism. For these very reasons, the rise of the Internet and the e-economy threaten entrenched interests and arouse deep-seated fears of loss of control over collective life and cultural identity.

The policy response to the Internet and the e-economy has been a classic instance of the New Democrat approach to governance and regulation. First, the Clinton Administration has largely eschewed new regulatory controls and taxes on e-commerce. Second, it has emphasized the role of intellectual property rights and their enforcement as the optimal mode of ordering this new economic space. Third, the Administration has endorsed a governance strategy for the e-economy that combines globalization with privatization. The American (and thus the world's) approach to the creation and registration of domain names may be an example of a new type of global governance institution: globally representative, comprised of private actors, but non-profit in character. International institutions have been significantly influenced by the American policy approach. The OECD has endorsed a policy of "neutral taxes" on e-commerce to prevent discriminatory tax policies that might inhibit this new form of economic activity.

The WTO has adopted rules to prevent the government telecommunications monopolies from halting or slowing the spread of the Internet and e-commerce.

But the revolutionary implications of the Internet and the e-economy now require the state to take on new roles and develop new policies and governance institutions. The increasingly global character of the e-economy has prompted advocacy of international governance bodies, the incorporation of foreign interests in American dominated institutions, and the development of new organizational forms for governance of the e-economy such as privatized or quasi-private governance institutions. The new information technologies have also inspired calls for the “reinvention of government” for the cyber age through the reduction of paper work and bureaucracy and the reallocation of policymaking and dispute resolution responsibilities to international forums. Disputes over these issues of governance and regulation will become most salient in the cases of specific issues such as security and encryption (which has been described as the “Balkans of the cyber age”). Further, the global distributional consequences of the e-economy appears to threaten even greater inequality between developed and less developed countries, thus generating pressures to ensure that the benefits of a global e-economy are spread more equally.

These considerations pose a number of challenges for governance and policymaking in the age of the e-economy. First, the U.S. emphasis on privatizing and limiting the role of government may ignore or impair the need for government to ensure competition in a networked world. Second, in an age of rapid and profound economic change government must play an active role in the restructuring of entire economies by breaking up state monopolies, deregulating the communications sector, and addressing

the dislocation caused by globalization and disintermediation. Third, these challenges to state authority and functioning may pose greater problems for smaller, more specialized economies such as those in Europe as rapid change disrupts the markets that define their comparative advantages. Accordingly, technology policy may become increasingly important even in the advanced industrial economies.

Later in the discussion that followed the panel remarks, Cowhey noted that the privatization of governmental and governance functions supplies an attractive model in a time of prevalent anti-regulation and anti-government sentiment. The model may prevent new, greater, and conflicting regulatory initiatives by different governments. The model is akin to corporatism in its deployment and controlled sanctioning of private interests and actors for policy purposes.

Remarks by: Tom Boasberg

Esquire

Former Chief Counsel, FCC, Satellite Division

The Silicon Valley view is that the e-economy is part of the private sphere in which government should not interfere. This view is fundamentally wrong and self-contradictory. Government has always been involved in the construction and regulation of networks and communications systems in order to deal with network bottlenecks and to ensure the equitable distribution of access and services. These concerns remain despite the advent of radically new communications technologies. In fact, they may have become more central to social and economic policy. The commitment to open international markets in a digital age necessitates government intervention in those same markets.

The event that triggered the communications revolution was the breakup of ATT in 1984. The end of that epic antitrust battle destroyed the myth of telecommunications as a natural monopoly by setting up competition first in long distance services and then spreading to other telecommunications services, culminating in the competition among Internet service providers beginning in the mid-1990s. In contrast, cable does not have this competitive access feature and thus the wave of telecommunications mergers with cable firms raises potential competition problems. This creation of competitive markets required extremely intrusive government policies and actions. The terms of the market also continue to be set by the government. Access to long-distance market by the RBOCs required reciprocal opening of the local market to competition, thus breaking the RBOCs' monopolies on the "last mile" of phone line.

This activist marketization of telecommunications by the state has produced a trend in telecommunications deregulation (or demonopolization) first adopted by Mexico and then spreading to other countries. The internal (domestic) and external (international) deregulation of telephony established the setting for the potential global spread of the Internet and e-commerce.

The deregulation and marketization of telecommunications has not worked out as planned even in the U.S. Different models of competition have emerged rather than one. One of the goals of the policy was to foster competition among technologies. This has not occurred. First, telecom competition in the U.S. has been driven by service competition. In the U.K., facilities competition has driven the development of the market because of the penetration of private cable networks in competition with the government telephone monopoly. Second, increasing concentration in the American telecom sector

has resulted in the acquisition of multiple technologies among a set of oligopolistic competitors. Regulation of these entities under the inherited regulatory framework has become increasingly problematic. Wireless and cable are regulated under separate bodies of rules and do not fit within the framework established for hard wire telephony. Broadband transmission technologies also fit poorly within the existing telephony regulatory framework.

This fragmentation of regulation impairs the development of a coherent, comprehensive policy covering the emerging telecom giants. It may also be driving the trend towards concentration. For example, ATT's original strategy was to use the RBOCs to provide services. The RBOCs' maintenance of their local monopolies and the absence of comparable market access rules in the cable industry induced a shift in ATT's strategy in favor of the acquisition of cable networks as alternative means of service provision. ATT has thus pursued vertical integration as its chosen means of creating a comprehensive digital network. Service competition remains an important dynamic in the U.S., but the incentives for increased facilities competition among vertically integrated actors are growing.

Finally, the government retains the final responsibility for policies relating to universal service in an era of new information technologies. The problems in establishing universal access and service are as novel as the technologies and services themselves. In the old monopoly model of telephony, cross-subsidies to fund universal access were imposed by regulatory plan. This model now faces two principal threats. First, the old definition of universal service as a phone connection is obsolete because it is now too narrow. Universality must now be extended to a broader range of more

sophisticated services. Second, increasing competition in telecommunications and among ISPs undermines the subsidy scheme by eroding stable and secure sources of traditional profits and creating the incentives for innovation and innovation in the most profitable areas. Universal service does not figure into this new market structure.

The response by U.S. policymakers has been to fund universal service through a universal service tax. However, this plan is impaired by the rapidity of change in the Internet and e-commerce. New services are not included in the definition of universal services and thus the plan badly lags behind the market and technological realities it is supposed to address. Further, universal service subsidies must come out of general tax revenues (unless the U.S. government is willing to abandon its policy of not taxing e-commerce) which makes the plan politically vulnerable and contrary to the trend towards hidden taxes and subsidies. Under the Telecommunications Act of 1996, \$2 billion in tax subsidies were designated to wire schools and libraries for Internet access. Congressional Republicans cut this figure to approximately \$1 billion, although the FCC is now trying to restore the cuts. This constitutes a small portion of annual telecom subsidies in the U.S. when subsidies for rural services are included. However, the politics of domestic subsidization for universal Internet access is likely to remain contentious. The subsidy question is likely to arise in the international context as well. The U.S. has effectively subsidized the international telephone system through a pricing system that apportioned revenues between international providers to the benefit of foreign long-distance providers. The rise of Internet traffic over international telephone lines has increased the financial imbalances of the established pricing system. The U.S. and its ISPs simply will

not accept the increasing price distortions and aggregate subsidies entailed by the old model of international service.

Remarks by: Carlos Casasus

Director General

Telecommunications and Interactive Education, SC Mexico

Former head of Telecommunications Regulation, Mexico

Carlos Casasus warned that although the digital economy and electronic commerce promise vast rewards and benefits, they also threaten rich and poor societies with socio-economic dislocation and increasing domestic and global inequality. The rise of the Internet and e-commerce requires policies at the national and international levels that allow less developed countries (LDCs) to seize the opportunities presented by these developments. If the LDCs and developed countries fail to distribute the benefits of innovative information technologies and the economic organizations built upon them, the consequence may well be increased economic, social, and political instability.

Currently, the Internet remains primarily an American phenomenon, with 60% of users located in the U.S. and Canada. As e-commerce is tied to the Internet, it is also primarily an American phenomenon. This phenomenon is still evolving. Companies as successful as Amazon are not yet making a profit, and business models are fluid. The new information technology has driven the long growth cycle and accompanying productivity boom in the U.S during the 1990s. The technology and its rapid deployment by American business have allowed for persistently low inflation and unemployment combined with high growth and profit rates.

Perhaps the most important development in the U.S. is in business-to-business transactions. These may account for 30% of all e-commerce transactions by 2002. Accordingly, all businesses must now have an Internet strategy. Disintermediation through the growth of business-to-business usage and e-commerce retailing will cause further dislocation and compel strategic adjustment by business.

The U.S. economy has a number of features that have worked in concert with the new network information technologies to foster this current economic boom:

- The thorough penetration of credit cards and the credit card payment and settlement system provides an efficient payment system, in sharp contrast to most LDCs;
- The large pool of venture capital that has enabled the funding of ideas on a large scale;
- A well-developed and sophisticated transportation infrastructure;
- An effective technology policy (e.g., the NSF and other federal sources) to supply seed research funding for basic research (including the Internet itself) along with an excellent university system and innovative university-industry partnerships. The original backbone itself was funded by the NSF, attracting private sector participants such as MCI, who began to manage the backbone as the technologies matured. The new Internet 2 is funded by huge grants from the U.S. government, funneled through the university network.

Other government policies fostered the growth of e-commerce. The U.S. pioneered the fixed-rate pricing model in telecommunications that encourages greater use and development of facilities and network applications. This pricing model is now

spreading to other countries under increasing competitive pressure from U.S.-based service providers.

Second, the U.S. government deliberately chose to limit taxes on e-commerce transactions, effectively providing a subsidy for Internet-based transactions. This has driven the domestic penetration of the Internet and e-commerce and has encouraged the development of new services.

Moreover, the U.S. government has also pursued a policy of open trade, throughout the period of network roll-out. This effort required consistent state involvement and policymaking to maintain and strengthen the institutions of international trade such as the WTO and GATT, and deal with the dislocation caused by global economic changes.

This need to stabilize the domestic and world economy compels further development of institutional capacities at the domestic state and international levels. Such a program would call for the extension of trade agreements like NAFTA, the support of organizations like the WTO, and the creation of institutions and policies to counteract the threat of growing inequality between the educated and technologically sophisticated haves from a potential mass of have-nots. This is the case even within the U.S. where only 14% of the population is on-line. The imbalance is obviously more dramatic in the LDCs. In Mexico, telephone penetration is only 24%, and 30% of those lines are businesses. It follows that the LDCs are at an enormous disadvantage in capitalizing on the opportunities presented by the digital age.

But the success of NAFTA demonstrates the possibilities of contemporary economic development. Despite dislocation caused by the growth of cross-border trade, the economic benefits in the form of price and quality convergence have been great. Business-to-business use of digital networks has begun to work in Mexico. Mexican suppliers are linked through “just in time” networks. Business-to-consumer transactions remain limited by the absence of ubiquitous credit card or analogous payment systems, the poor development of telecommunications networks, and economic inequality.

A number of policies would further social and economic development of LDCs in the digital age. First, egalitarian policies to prevent the widening of socio-economic divisions are essential to create the stable conditions and mass markets needed for successful and swift development. Telecommunications must adopt fixed rate pricing models and market-based pricing for international telephone transmissions. Monetary stability remains essential for investment, economic growth, and thus social welfare gains. This might even include adopting the U.S. dollar as a currency. Finally, governmental revenues and subsidies should come from general taxes, while hidden taxes and subsidies should be eliminated to remove damaging distortions from immature markets.

Session I:
7 May 1999
TECHNOLOGY ISSUES IN E-COMMERCE

Chair: John Zysman
Professor of Political Science and Co-Director, BRIE
University of California, Berkeley

This panel was intended to raise a number of issues regarding the development of digital networks and competition in e-commerce. Whereas the dominant debate over global economic policy and technological leadership was once between the U.S. and Japan, it is now between the U.S. and Europe. An essential feature of this new debate is that it is not a trade debate. Rather, the emerging debate over the structure and governance of the e-economy is a “back to basics” struggle over establishing dominance in technological innovation and deployment.

A central question raised by the development of digital networks and e-commerce is whether one e-economy or several divergent e-economies will develop out of the current conditions. The Silicon Valley view is decidedly the former: economic and technological forces will compel convergence on the U.S. (and in particular the northern Californian) model. The alternative view hypothesizes that several parallel political economic models of the e-economy and associated business structures and strategies will emerge. The central empirical questions are (i) what structures are embodied in these networks and their evolution; (ii) what differences in technology usage and business strategies are characteristic of different network models and configurations; and (iii) what are the outcomes of different network structures in terms of market segmentation, competition, and pricing structures. Policy choices regarding universal service, as well as new

technologies such as broadband and wireless transmission technology, will have a substantial impact on the development of networks and separate e-economies.

The policy questions that remain concern the identification of the institutional and policy factors that might drive these divergent developmental trajectories and how these different e-economies can be reconciled if they do in fact emerge. While their economic and institutional implications remain uncertain, we can identify a host of issues that have and will continue to have a significant impact on the development of the digital economy. These would include competition policy, telecommunications regulation and deregulation, intellectual property, privacy and encryption, and content regulation.

Peter Cowhey offered what he termed a set of stylized facts about the U.S. network in terms of pricing and competition, the evolution of the network, and universal service. The U.S. network story is a function of the decision to introduce competition into telecommunications, and thus into the data networking industry. This decision enabled a revolution in the price and availability of networking to take place in the U.S. far earlier than the rest of the world. The E.U. tried to offer network services without introducing service-based competition, but this did not lead to more flexible pricing. In the U.S., the flat rate fee for universal service in telephony opened the way to a flat rate for the Internet, which has propelled the nation towards universal access.

The Internet has led to an explosion of national networks, accompanied by a revolution in pricing dynamics and the terms of competition. There are now eight full-scale fiber optic networks in the U.S., with no international counterpart in sight. The infrastructure for international communications is considerably underdeveloped in comparison. Most of the global network is held by an international consortium of the

major telecommunication companies (telcos) – and not by competing networks. In contrast, the 1996 Telecommunications Act specified that there were to be at least five telcos in every U.S. region.

The next cutting edge issue is how to break the local loop bottleneck to take advantage of wireless technologies. The strategic bet placed by U.S. policy makers has been to allocate spectrum through competitive auctions and to allow competition in technology standards, in order to drive innovation. Europe has placed different bets here. The main consideration has been universal service: how to keep prices politically acceptable to the rural and poor populations. In traditional services, a huge amount of money, approximately \$50-60 billion, is spent on the subsidization of universal service. The next challenge for universal access will be its extension to wired access. The political battles over who pays and how for this massive and ongoing subsidization will be fierce. The initial costs of subsidies for wiring U.S. schools alone are now \$1 billion and the FCC and Clinton Administration are pushing for \$2 billion.

No one can predict where the market is going. Information transmission over wireless networks may well transform the technological dynamics, the market economics, and the policy requirements of e-commerce. Once you change the mode of delivery, you change the enabling software -- with major consequences for competition.

Jean-Claude Derian, a Paris-based telecommunications consultant discussed how the flat rate model for telephone and now Internet services in the U.S. is a major difference between the U.S. and Europe. Internet users in most European countries have no choice of service provider; consumers must go through the public-switched telephone network (PSTN) of the incumbent operator; or, in the case of corporations, use expensive

leased lines. Another major difference is that France and neighboring countries lack an equivalent to the “second line,” which is used so prevalently in the U.S. for Internet access. The aspiration for permanent access (as opposed to temporary “switched” access) is dependent on a solution to this problem. There are expectations for ADSL and cable to offer potential solutions.

Mr. Derian spoke with particular reference to France, in noting that France Telecom has been slow to identify and exploit the growing importance of IP protocols in networking and digital communications. Instead, it has used its dominance in telephone services and very strong position in cable to block innovation in the local loop.

French telecommunication regulators are now considering a public debate on ADSL in the next few months. But there is no regulatory provision for the unbundling of communications services, and France Telecom is not in a great hurry to cannibalize its lucrative leased lines business by endorsing an early ADSL deployment. Were France Telecom to allow unbundling of some kind, it would most likely push for facilities-based competition, as in the U.K., and not the U.S. model of service-based competition. The U.S. model allows an Internet service provider (ISP) to provide a value-added service over the incumbent’s lines. For example, firms like Covad and Northpoint provide DSL services for high-speed Internet access by using the local telco’s facilities. With facilities-based competition in Britain, British Telecom (BT) offers turnkey service, where the ISP has no control over the local loop or technologies. Mr. Derian sees the U.K experience with facilities-based competition as disappointing.

While France Telecom (FT) has dominated the value-added service market in Paris and other major cities, services in the regional markets have been limited to basic phone services. Value-added services have only been available in areas where there is a high concentration of demand, consumers and companies in less-concentrated (and therefore less profitable) regions have not had access to the same services as those in major cities. The response by the French regional government has been to sponsor local networks, or to share costs with the service operators.

François Bar, Assistant Professor, Department of Communication, Stanford University, explained that we are shaping a new marketplace embedded in the configuration of digital networks. While e-commerce hype emphasizes the flexibility of this emerging virtual world, we find that conceptions of place still matter in cyberspace. As with traditional markets, the architecture of the Internet shapes the transactions that take place there. Its rules determine how buyers and sellers interact, market access issues, what kind of goods are sold, tax rates, etc.

While the hype about e-commerce is so often about the sale of digital goods over the Internet, there are many different varieties of e-commerce. The low-end starts with the sale of traditional goods via electronic transactions; the high-end of e-commerce reaches to the sale of electronic goods via electronic transactions (for example, E-bay), with several levels in between.

There are two great myths to the Internet economy: the concept of friction-free transactions, and the idea that the Internet will lead to the disintermediation of the business value chain. Electronic transactions are theoretically friction free in the sense that they appear to remove the “middle man,” or intermediate players. With the sale of

traditional goods, on-line business transactions remove the distribution component of the value chain, linking the retail activities of the e-commerce site straight to the manufacturer. The company itself does not hold the physical inventory of the product. With an electronic good, obviously, there is no intermediary at all, the website is both retailer and “manufacturer” at the same time.

In reality, we see a new configuration of the traditional value chain, with some sites becoming the new intermediaries. As recent news stories about Yahoo and Amazon attest, their sites are not removed from the interests of the distributors -- the customer just doesn't see them. The character of on-line information is not free-flowing and perfect, but “sticky” and used strategically to push customers towards a particular product or site. For example, Amazon.com gets paid by publishers to recommend the books on their list; and search results on Yahoo.com do not blindly reflect the best site matches of an unbiased query, but turn up sites that have paid Yahoo for top billing in the results of a search query. The e-commerce marketplace is neither friction free or disintermediated but sticky and intermediated.

There are multiple ways to organize electronic marketplaces, each variety reflecting a different set of dominant players and interests. In France, e-commerce has a long history, beginning with Minitel in the 1980's. The architecture of this marketplace has been shaped by national rules on privacy protection and equal access. These concepts are stretched from their origin in public service. For example, France Telecom provides infrastructure and advice to small businesses to help them with their websites, and even helps them work with banks to create payment infrastructure. In the U.S., there is a

Yahoo store which similarly helps companies set up e-commerce web sites, but it is unclear how Yahoo's influence here will shape the e-commerce market.

Wally Baer of RAND evaluated the evolution of network infrastructure. The general belief is that within three to five years, the technology will be widely available for high bandwidth internet connections that are always on, relatively cheap, universally accessible, robust and competitive. At RAND, they have considered modes of transmission -- wireless, cable and land-line -- from a cost and technical perspective. Cable and fixed copper lines will continue to fight it out, whereas the future of wireless is less certain. Cable providers know that the future lies in flat rate pricing, to the extent that it is permitted by cost.

The development of the Internet has been a tremendous enabler of e-commerce. The open availability of Internet Protocols in the public domain fuels rapid innovation in services and applications, with relatively low barriers to entry. The success of this model is the simplicity and open end-to-end platform. IP is the lowest common denominator of technology that all can use, which has been critical to innovation.

Competition and the evolution of technology may eviscerate traditional boundaries between lines of business, but perhaps only up to a point. It is still a question whether access providers will successfully be able to offer proprietary content as well. For example, cable ISPs such as @Home offer selected content to subscribers within their network at lightning speed, but once you exit the network to access outside content, access speed drops dramatically to something like the standard 56K. @Home subscribers who want high-speed internet access via cable, but still want content from companies such as AOL have to pay both the @Home rate, and an additional fee to AOL, and since

AOL is not in the @Home universe, the access speed is limited. Companies like AOL will want to improve access to their content by striking a deal with the cable ISPs or finding alternative broadband solutions.

Mr. Baer demarcates the public-private sector division of labor into four levels. The private sector should define technical standards and facilitate interconnection. Non-governmental organizations are appropriate for the mandate of the Internet Corporation for Assigned Names and Numbers (ICANN). On issues like U.S. privacy policy, the government needs to set framework and leave the implementation to business. Last, there are areas, such as competition, the regulation of prices, property rights, and access, in which explicit government intervention is essential to define a functioning market.

Tom Boasberg first responded to Peter Cowhey's question "Is AT&T's expansion into cable [by purchasing cable provider TCI] a violation of the 1997 WTO agreement?" by saying that while the WTO invokes special obligations to provide open competition in communications services, cable is not covered by the agreement. Nor is cable regulated under the Telecommunications Act of 1996 as are telephone service providers. Nonetheless, AT&T entry into delivery of content via cable has raised the question about whether the FCC should introduce competition into the cable industry. Microsoft's plan to acquire of 2-3% of AT&T stock, certainly hasn't helped AT&T's image, and may give the impression that AT&T wants to control and perhaps create a key bottleneck in the provision of network services. Hence, the investment may have been a strategic error for both firms as concerns over market power, concentration, and network monopoly threaten to inspire calls for antitrust scrutiny or new regulation.

However, the FCC will not impose the same open-access deal in cable that it does in traditional telecommunication markets. The AT&T deal with TCI was welcomed in Washington, D.C. The deal provided AT&T with a network to offer cable and telephony to the home, and thus will introduce greater competition into the local loop. It is unclear to what degree the ability to bundle services will provide a competitive advantage to AT&T. While the 1996 Telecommunications Act articulated the economic importance of bundling services, the ability to bundle long distance and local telephone service has not been as significant as anticipated.

The AT&T merger with MediaOne is seen as a way for AT&T to enter the local service market by using MediaOne's cable infrastructure to bypass the local phone companies. The fear is that AT&T has gone beyond a mere vertical merger towards a horizontal merger, by adding MediaOne's video delivery capabilities. Traditionally, the FCC has been worried that horizontal mergers in cable would limit choices in programming. However, this merger will not arouse major concern. The AT&T merger with TCI did not really affect @Home (owned in part by TCI, and now AT&T). While it broadens @Home's potential service offerings and gave them a brand name in voice services, it is unclear how the merger would increase their share of the broadband market.

The real question is whether cable will become the primary medium to achieve broadband to the home, and if so, does the cable industry warrant the same level of regulatory scrutiny as traditional telephony? Cable's future competitive position vis-à-vis the telcos is not obvious. For the time being, cable is neither as ubiquitous, nor as robust as the traditional telco network. Universal access is a concrete advantage for the telcos on which they can now capitalize. In addition, the telco network offers symmetrical

speeds of uploading and downloading information. In contrast, cable is asymmetrical; the download speeds are much faster than the upload speeds. This could hinder any interactions via the Internet that require the home user to send large amounts of data. If indeed cable overcomes these disadvantages, and becomes a viable and ubiquitous competitor to the telcos, competition and regulatory policy may need to be changed.

Carlos Casaus sees the U.S. as different from the rest of the world in competition regulation because of the strength of U.S. government institutions to enforce competition policy. In Mexico, institutional control of competition does not exist; there is not even strength to impose meaningful restrictions.

Separate from issues of institutional strength, the very fluidity of technological change works against attempts to regulate. At present, the U.S. is worried about regulating the cable industry, eventually it will be something else. If you over-regulate, you can make a mess through creating a situation of continuous contestability. There is still room for innovation and competition, regardless of the size of the major players. AT&T and the cable companies are like big elephants. There is still much room for entrepreneurial companies, the mice, to sneak under the elephants and provide innovative services.

Jon Goodman, Executor Director, EC2, Annenberg Center for Communication disputed much of what had been said by the other panelists. She made the point that we can assume bandwidth is already here (though it may take some time to arrive to your area) and that the real issue is content. The killer applications have not been identified yet. We do not know, for example, whether people are really interested in interactive television. Goodman further argues, against popular belief, that there are no new

business models on the Internet. What is different is how markets are sliced and diced, and changing consumer choices.

Moreover, the ability of the government to define the market is over. Time has compressed. Given the rapid evolution of delivery technology, any regulatory reaction risks disrupting innovation. The only real areas left for government to play a role are in standards and intellectual property protection. Until these two things are developed, we will not see a fundamental change in the distribution of content.

Worrying about the AT&T/TCI merger is misguided. AT&T's investment in both @Home and Roadrunner, two cable ISP firms, does raise the question of whether AT&T threatens a stranglehold in cable ISPs over time? But newly emerging technologies, funded by venture capital, may undercut the incumbent players.

Discussion:

While it seems that past U.S. regulatory choices have turned out very well, will new developments in regulation sustain or destroy the current dynamic of innovation? It remains to be seen if competition policy is enough to ensure innovation. It is not easy to convince consumers to switch between competing technologies. To extend a metaphor used earlier, in the world of the feudal e-conomy, people are bundled into different kingdoms and find it difficult to pass from one kingdom to the next. This metaphor can be used to explain the continued dominance of dial-up access over cable ISPs. Another example is the way ISP subscribers are often satisfied with the content provided to them by their service. For example, as Henry Lichstein from Citibank noted, only one sixth of

AOL subscribers actually use AOL as a point of access to rest of the web. It is highly possible this “stickiness” could be replicated within the @Home network.

Another major question that emerged was whether there is one e-economy or several? Will the U.S. and Europe take fundamentally different paths, or will their e-economies converge on a global best standard (if there is such a thing)? Issues like competition and access reflect different choices about how a national e-economy is organized, with no clear right or wrong answer. While countries like the U.S. may emphasize competition and the provision of innovative service solutions without the guarantee of neutral access, many European countries have not introduced competition to their communications market but facilitate equal access for small business and consumers.

Session II:
POLICY ISSUES IN E-COMMERCE

Chair: Peter Cowhey
Professor, Graduate School of International Relations and Pacific Studies
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Digital information technology and the Internet have produced a revolution in the organization of business. The very novelty of the business models arising from this technological and market environment creates new regulatory challenges and requires new regulatory and policy responses by state actors. The industrial revolution required policies and legal frameworks both to organize the scope and scale of the new mass markets and to compensate for the growing power of the national corporations. The explosive growth of the Internet and e-commerce poses the same order of challenge for policy makers and regulators today.

John Richards, Department of Economics, Stanford University, focused his remarks around the questions of whether government can use competition policy to capture markets and comparative advantages in the global digital economy and whether the character of markets and market competition is changing fundamentally as a result of digital networks and e-commerce.

In 1980 IBM dominated the computer industry to such an extent that the U.S. government had brought an anti-trust suit against the company. The structure of IBM's operations was vertically integrated from supply to sales. Through this vertically integrated structure the company, like the "national champions" of Europe, sought to provide "total solutions" to customers within its encompassing market. Similarly, government PTT's dominated the provision of telephony and other telecommunications

services within national markets. These integrated firms and protected markets operated within an environment of government management of the economy and market entry and exit. This resulted in stable, vertically ordered market structures well matched to the public policy tools used to regulate it.

Today, a larger number and range of firms seek access to the information technology and telecommunications markets. Liberalization of telecoms sectors and markets begun with the 1984 breakup of ATT in the U.S., and continued with the 1996 Telecommunications Act, has produced a vertical disaggregation within increasingly global IT and telecoms markets. Telecommunications and other sectors of digital network industries have separated into vertically arranged “layers”. However, this disaggregation has occurred just as cooperation between technologically complementary layers is increasingly necessary to ensure the functionality and interoperability of networks.

Although today there are fewer regulatory barriers to market entry and a proliferation of market niches to fill, public policy may still play a powerful role in shaping markets and competition through setting or influencing the technical standards that define markets in digital goods and services. Capture of the standard that defines a sector or market segment allows the dominant firm to effectively commodify its competitors’ products, force them into punishing cost-based competition, and thus “steal” rents from them. This is particularly important for the European Union, which has both the capacity and motivation to use its authority to set standards favoring European interests.

The assumption underlying European policy making is that the U.S. dominates digital technologies and thus the standards embodied within them create powerful first mover advantages, barring any governmental intervention. A priority for European policy is to address the technological and regulatory first-mover advantages of the U.S. Examples of this policy strategy already exist. The EU's role in setting the next generation of OS and transmission standards for wireless communications are premised on the hope that dominance in standards will be leveraged into market dominance. The development of UMT standards favors European interests in the hope that the new dominant firms will be European and that local application designers will reap corresponding advantages over foreign competitors. This is a new global dynamic combining policy, regulation, technology, and markets. The firms that triumph in this emerging form of competition must be global in vision and scope. SAP, the German software firm, is successful because of its global strategy—not because it is based in and focuses on the European market. However, local market conditions will continue to matter in e-commerce. In short, technical standards, politics, and policy will drive competition among globally dominant firms in this new environment, while smaller niche firms will seek to exploit local variations in markets and consumer preferences.

John W. Cioffi, Department of Political Science, and Research Associate, BRIE, University of California, Berkeley, noted that any period of fundamental economic change has social and political repercussions and that social values play an important role in how public policy responds to the strains of economic transformation and its impact on social life. It is under conditions of increasing socio-economic uncertainty and potential dislocation that deeply held social values come to play a more prominent role in politics

and the framing of policy. The general question of how social values affect public policy on e-commerce must be broken down into three analytically separate queries. First, which values and norms matter for the development and regulation of the e-economy? Second, whose interests do these values and norms reflect or embody? Third, how do different political and legal systems translate these values and norms into policy and law?

Debates over policy indicate that the salient policy areas relating to e-commerce are privacy security (i.e., encryption), competition, intellectual property, and restrictions on content. Each of the areas implicate deeply held value judgments on the nature of social life and the relationship between public and private power. Already these issues have fueled intense domestic and international debate. Further, differences in how these issues are resolved could well drive variation, and perhaps division, in the global e-economy. The alignment of economic interests with these underlying values remains contingent on market position and business strategy, and they may well be equivocal and crosscutting. For example, on-line retail interests may favor of legal protection of privacy and security and oppose it, depending on whether they believe they will profit more from the sale of personal data or from increased on-line business volume generated by greater consumer confidence in privacy protection. Thus, the most important determinant of how policy reflects social values, and therefore which values generate open political conflict, is the political and legal institutions through which values are translated into policy and law.

The current domestic and international debate over privacy provides an idea example of how these issues play out in practice. The Clinton Administration has adopted a general, though inconsistent, “minimalist” approach to the regulation of e-

commerce. American policy embodies an implicit priority of market values and processes over other, potentially competing, values such as privacy. This policy approach is indebted to contemporary neo-classical economic theories that are put into practice through the current neo-liberal politics of the American policy making process. Polls indicate that Americans value their personal privacy quite highly and are concerned over technologies that threaten to compromise it. This process takes place within a structural context in which corporate interests are far better organized and represented than consumer groups and coordinated economic policy is difficult to formulate and execute. As a result the protection of personal privacy in cyberspace has been left to the market and government policy has been restricted to the encouragement of self-regulation.

In contrast, the European Union has adopted Directive on privacy rights in cyberspace that reflects a sharp conflict with neo-liberal values and policies. The Directive imposes significant regulatory requirements on business to secure consumer consent to the disclosure of personal data and prohibits the transmission of personal data by and to firms in countries that fail to meet the EU's "adequacy" standards for the protection of privacy. The resulting conflict between the U.S. and the EU over the issues of privacy and the enforcement of the Directive suggests that despite the widely heralded "death of privacy" (most recently on the cover of the Economist magazine), the political conflict over this sensitive issue will likely continue and spill over into the economy.

A second area in which social values differ sharply is competition policy. Competition policy reflects, in part, a society's underlying values concerning the proper allocation and maintenance of public and private power. The American model of

antitrust regulation and enforcement has favored the limitation of regulatory power by restricting it to episodic intrusions into the private marketplace to curtail monopoly power and restore competition. The rise of digital networks and the e-economy fundamentally alter the economic terrain on which competition policy operates. Network economies tend towards monopoly and other anti-competitive pathologies. Thus, this new technological and market environment may require the increasing intervention of the state into the structure and functioning of the market economy at a time when the U.S. government has pursued a policy of minimal intrusion. The ongoing Microsoft antitrust case reveals this paradox. By waiting for monopoly to emerge fully developed, the government may be forced to take extreme action.

Governments can await the emergence of monopolies and then seek to break them up, or they can regulate markets and market actors more comprehensively either to prevent the creation of monopolies or to control their conduct. The American tradition, reflected in law, institutions, and ideology, favors the first strategy. European political economies have well-established institutions and ideological traditions far more disposed to intrusive forms of state regulation and intervention in the economy. It remains to be seen which approach the EU and its member states will favor as e-commerce develops in Europe, and recent liberalizing trends come into conflict with increased anti-competitive behavior.

Carlos Casaus noted that one of the most important values at stake in the development and globalization of e-commerce and digital networks is equity. The new information technologies present potentially great benefits for those who can exploit them, but they also threaten an exacerbation of economic inequality in terms of the

distribution of wealth and access to the technology that generates it. The growing importance of digital information technology in every phase of economic activity has made problems of social and economic stratification worse both within individual countries and internationally. The means to redress these tendencies unleashed by modern technology and e-commerce will require contentious political battles and painful adjustments. NAFTA provides an analogy and a precedent. The treaty was extremely successful in generating trade and economic benefits for both the U.S. and Mexico, but steep prices were paid on both sides of the border as anticipated. Accordingly, political debates both before and after the passage of NAFTA have been frequently bitter. Hence, both the growth of e-commerce and achievement of greater equity among nations will likely produce equally painful sacrifices and contentious conflicts of interest.

There is a profound need to rise above the level of rent seeking and the cynical use of market power in politics. The value of equity must be accorded a higher priority in domestic and international policy making. Further, institutional and policy mechanisms to deal with economic dislocation caused by the spread of new technologies and forms of economic organization. This requires both domestic policies for social welfare and international commitments and institutions devoted to bringing developing countries into the international trade circuit on equitable terms. If developing countries are to open to the new forms of trade and economic organization, they must be reasonably assured of two things. First, they must be given access to a fair trade regime (at a time when the U.S. is becoming more protectionist). Second, they must have reasonable assurances that they will be able to gain sufficient benefits from the new digital economy to offset the social and economic costs and the political risks of transition.

Discussion:

In the discussion following the speakers' remarks, attention focused on the impact of regulation and policy on the development of networks, first-mover advantages in technology and regulatory policy, and the increasingly international character of regulation and policy making. The U.S. has set the parameters for e-commerce because of its dominance of the technology. Europe, through the EU, has countered with policy-driven agenda that is strengthened by the EU's capacity to speak with one voice on policy and regulatory issues and size of its market within the global economy. Europe's privacy directive was viewed by a number of panelists as a significant example of first mover advantages in seizing the regulatory initiative. The EU policy framed the debate and elicited support from non-EU countries for greater legal protection of privacy, while the U.S. is now seeking to negotiate "safe harbor" standards to protect American firms from enforcement actions by European regulators.

In a range of issues, Europe has taken on a leadership role in the governance of the digital economy. This shift in power has been most notable and visible in the privacy debate. The EU has also emerged as a powerful force in regulating the allocation of wireless and satellite spectrum rights, and in competition policy as European authorities actively review mergers of U.S.-based multinational corporations (e.g., the MCI-Worldcom merger). The Clinton Administration, through the Magaziner Report on U.S. information technology and e-commerce policy adopted an explicitly international policy favoring market-led growth and development of standards and practices. In effect, the U.S. is pressing the rest of the world to adopt its neo-liberal policies. We are now witnessing the first signs of opposition to that policy. In the privacy debate the U.S. and

EU are seeking to check each other's ambition to become the dominant force in setting policy and regulatory standards worldwide. However, the EU and its member states are still hampered by their lag in deregulating their telecom systems. To date, they have failed to converge on a single EU-wide telecom and digital network model that would produce the global market share and economies of scale that would strengthen their competitive position vis-à-vis the U.S. Accordingly, some of the most vital regulatory and policy matters relating the development of e-commerce will be intra-European. To emphasize this point, one participant objected that one should not speak of "Europe" as a unified, singular political economic unit; it remains a fractious region of competing and conflicting interests defined by nation and locale.

A number of participants also noted that the spread of digital networks has fundamentally challenged established regulatory regimes and governance structures. Regulation has traditionally been imposed to redress market failures and to realize social values and goals. Network technologies have blurred, if not destroyed, the boundaries of sectors that have defined areas of regulation, such as broadcasting, telecommunications, and content providers. Current U.S. policy has sought to achieve both these goals through competition policy. This approach is inadequate to accomplish either of them. Likewise, the emergence of a global e-economy undermines the geographical bases of jurisdiction for tax purposes. Combined with the disintermediation made possible by e-commerce, this may trigger a substantial redistribution of tax revenues cross-nationally and intense political conflict as a result. This "death of distance" will generate a wide range of issues in national and international law concerning jurisdiction, conflicts of laws, and forum selection in litigation and other forms of dispute resolution.

These conflicts reveal the increasingly global character of the e-economy and the need for some sort of international governance institutions. But global governance by international bodies is not a foregone, or even an optimal solution. There may be practical reasons to divide policy domains among nations (as is the case with oceans and air) such as allocating the power to grant domain names on a national basis (e.g., Yahoo.us). The appropriate level of governance and regulation requires difficult judgments regarding the economic efficacy of creating international bodies to govern and resolve disputes within the e-economy. Further, the political feasibility of creating such institutions must be carefully considered.

Another threshold problem is the determination of the extent to which the Internet is global—and to which it is local. While the Internet and network technologies have lowered barriers to market entry, they have also produce a horizontal “layering” of the industry, from finance to retail marketing, within which increasing concentration has been the clear and dominant trend. The question remains whether this concentration will replace national markets and firms, whether the new actors such as Yahoo and E-Bay will adopt nation-specific strategies that will recreate national space within a global e-economy, or whether established national firms will emerge as locally dominant. Further, different appropriations of network technologies may be driven by established patterns of economic organization. For example, American firms may tend to employ the open character of the Internet to create more transparent markets among suppliers to intensify cost competition and thereby keep supply costs down. In Europe and Asia the same technologies might be used to improve and tighten the integration of existing, long-term supply networks to enhance supply chain performance or just-in-time production.

These alternative developments will favor the adoption of certain governance and regulatory structures over others. Conversely, the development of global or national institutions may drive the evolution of networks and business strategies in one direction or another. Which choices will be made—and in which order—remains to be seen.

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