Government and Markets

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Markets are generally viewed as the "web of relationships between buyers, sellers, and products that are involved in an exchange."] They can be defined in several ways according to a number of criteria. For example, markets can be local, regional, national, or global. They may be relatively open or closed to entry. They may be more or less competitive, and they may be restricted or not in the kinds of products and services exchanged. Finally, markets can encompass exchange relationships that are momentary or that endure over time and space.

A market's form affects the way it functions and how it meets national economic and social needs. In capitalist societies, the market system, for the most part, manages economic activity, coordinating supply and demand and allocating goods and services. To the extent that market structure reflects perfect competi - tion—i.e., each producer selects the factors of production that will maximize profits; each consumer maximizes preferences; and perfect information is available to all—the market system will distribute goods and services in the most economically efficient fashion.

Rarely, however, are all these conditions met. Producers and consumers are limited in their abilities to find, process, and use information in their decisionmaking processes.[2] Few markets are

True electronic commerce is in its in fancy, but the government may need to take steps to further assess its market implications.

[1] Peter Steiner, "Markets and Industries," *International Encyclopedia of Social Science* (New York, NY: Macmillan, 1968), vol. 9, pp. 571-581.

[2] As a result, individual actions will, according to Herbert Simon, "be intendedly rational but only I imitedly so." Herbert A. Simon, *Administrative Behavior (New* York, NY: Macmillan, 1961).

competitive in the classic sense; that is, comprised of buyers and sellers who are unable to influence market events. Most large modern corporations have considerable leverage in the marketplace. They can structure market relationships through their competitive strategies; influence preferences and tastes through marketing and advertising; determine the nature and quality of labor through their work organization and labor management; and help to define the economic rules of the game through lobbying and political activities.[3]

Markets diverge from the theoretical ideal because of economic, social, and political factors; they do not exist independent of their circumstances. Markets are historical phenomena, having emerged and evolved at a particular time and under a set of social and economic circumstances.[4] Markets are embedded in cultural, social, and institutional environments and operate in the context of these environments.[5]

The government helps to establish markets in a number of ways. At a fundamental level, it determines the social activities of the marketplace, as well as which commodities are bought and sold. Government also defines economic actors—proprietors, workers, and corporations-by establishing and enforcing their rights and obligations, the rules by which they interact, and the means they use for exchange.[6] These decisions are of major importance; they determine the economic opportunities for business, as well as the efficiency and performance of the economy as a whole.[7]

Government decisions about the market are not cast in stone, however. They need to be reevaluated to accommodate the changing business environment. Communication and information tech-

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[3] See Fred Block, *Post industrial Possibilities: A Critique of Economic Discourse* (Berkeley, CA: University of California Press, 1990); and Charles E. Lindblom, *Politics and Markets: The World's Political-Economic Systems (New* York, NY: Basic Books, 1977).

[4] For the market system to emerge and predominate required the secularization of society, the establishment of property rights that 'ere 'ree from feudal obligations, and the division of society into groups and rankings that, while based on economic interest, permitted social mobility. States and other ruling powers played a major role in establishing these conditions. They were responsible for breaking down the feudal system and bringing large territories under physical control. In addition, they established property rights; a common currency; and a reliable system of banking, investment, and contracts. They also eliminated internal market barriers. For discussions, see Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Cambridge, MA: Harvard University Press, 1986); Femand Braudel, *The Wheels of Commerce, Civilization and Capitalism 15th-18th Century, vol. 2* (Berkeley, CA: University of California Press, 1992); Albert O. Hirschman, *The Passions and the Interests: Political Arguments for Capitalism Before Its Triumph* (Princeton, NJ: Princeton University Press, 1977); and Randall Collins, "Weber's Last Theory of Capitalism: A Systematization," m Mark Granovetter and Richard Swedberg (eds.), *The Sociology of Economic Life* (Boulder, CO: Westview Press, 1992).

[5] Every economic transaction—however fleeting< ntails interaction and, therefore, requires a contextual basis for its interpretation. Thus, if the market itself is to function, economic participants must act in accordance with some agreed-upon norms of behavior such as honesty and fairness. See, for discussions, Talcott parsons, *7'he Structure of Social Action*, vol. 1 (New York, NY: The Free Press, 1949), and Emile Durkheim, trans. by W.D. Halls, *The Division of Labor in Society (New* York, NY: The Free Press, 1984).

6As described by Friedland and Robertson: "The contest over property rights is not one that is played out in the market, but in regulatory agencies, law courts, and legislatures. To understand how individuals work to maximize utility—the hostile takeover, dual classes of stock, 'golden parachutes' granting executives certain benefits in the event of a takeover, due process rights for employees, prenotification of workers in the event of plant closings, requirements that developers absorb public infrastructural costs, or environmental impact statements- requires that we bring power, and hence the state, from the margins of economic analysis to the very center. Because property rights attach to categories of actors and actions, some of the most important exercises of power involve the defense of transformation of systems of economic classification, the ways in which people construe, categorize, and measure economic activity." Roger Friedland and A.F. Robertson, "Beyond the Marketplace," in Roger Friedland and A.F. Robertson, *Beyond the Marketplace: Rethinking Economy and Society (New* York, NY: Aldine de Gruyter, 1992), p. 10.

[7] See Douglas C. North, *Institutions, Institutional Change, and Economic Performance* (Cambridge, UK: Cambridge University Press, 1990). See also, Joseph Stiglitz, "Social Absorption Capability and Innovation," CEPR Publication No. 292, Center for Economic Policy Research, Stanford, CA, November 1991.

nologies define relationships among economic actors and the ways the market is structured to conduct businesse[8]

In the past, when contacts and communications were limited, manufacturers produced on a small scale and out-sourced their marketing operations to middlemen—such as shippers, financiers, jobbers, transporters, insurers, brokers, and retailers—who brokered information as well as goods. There was little need for market regulation to preserve competition. Only at the end of the 19th century—with the development of transportation, the growth of interstate commerce, and the rise of the vertically integrated firm-was the federal government called on to establish national market rules and regulations (see box 7-1).

Today, communication and information networks are again reconfiguring the business environment. Serving as the infrastructure for electronic commerce, these technologies are already an integral part of many businesses. When networked for business, these technologies contribute to economic growth by reducing transaction costs, By channeling the flow of information and structuring economic interaction and exchange, they will partially determine who will reap the benefits.

True electronic commerce is in its infancy, but the government may need to take steps to further assess its market implications. Like electronic networks, social and economic institutions follow a set course, making it difficult to reorganize relationships after the fact.[9] The government could: 1) establish a commission that will investigate the implications of electronic commerce for future market rules and regulations; and 2) restructure the organization for communications decisionmaking to ensure that the economic and market implications of communication and information technologies are adequately considered.

OPTION A: Establish a Congressional Commission To Investigate the Implications of Electronic Commerce for Future Market Rules and Regulations

Building on the tradition of common law. U.S. laws and the legal system that acts to interpret them have proven to be remarkably resilient over time and in dealing with major social and economic change. For example, the intellectual property provisions provided in the Constitution, although originally for print media, have been extended over two centuries to incorporate an array of new communication and information technologies[10] (see box 7-2). Similarly, the Communications Act of 1934, which established national goals for radio and telephone, has survived despite technology convergence and a rash of new communication and information products and services (see box 7-3),

Incremental legal and institutional adjustments have provided acceptable responses to evolutionary changes in technology and the economy in the

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[8]See Richard DuBoff, "The Telegraph in Nineteenth Century America. Technology and Monopoly," *Comparative Studies in Society find History*, vol.26, October 1984, pp. *57 I -586,* and JoAnne Yates, "The Telegraph's Effect on Nineteenth Century Markets and Firms," *Business and Economic History*, 2d *ser.* 15 *(1986),* pp. 149-163.

[9]As described by Powell and DiMaggio: "Institutional arrangements are reproduced because individuals often cannot even conceive of appropriate alternatives (or because they regard as unrealistic the alternatives (hey can imagine). Institutions do not just constrain options; they establish the very criteria by which people discover their preferences. In other words, strew of the most important sunk costs are cognitive." See Walter W. Powell and Paul J. DiMaggio (eds.). *The New Institutionalism in Organizational Analysis* (Chicago, IL The University of Chicago Press, 199 I), pp. 1 ()- I 1. See also North, op. cit., footnote 7.

[10]See Ray Patterson, *Copyright in Historical Perspective* (Nashville, TN: Vanderbilt University Press, 1969); and Nicholas Henry, *Copyright, Information Technology, Public Policy* (New York, NY: Marcel Dekker, 1967).

BOX 7–1: The Role of Government in Structuring the American Marketplace

In the early years of the American republic, business activities were regulated by the states With the growth of interstate commerce, the federal government was increasingly called on to establish national rules and regulations to govern business activities The federal government had the Constitutional authority to assume this role under the interstate commerce clause and the 14th amendment, which was broadly interpreted to include corporations within its due process provisions Despite its clear authority, however, the federal government was somewhat reluctant to act, it neither wanted to offend state governments nor to undermine the institution of private property [1]

Under these circumstances, businesses were relatively free to fend for themselves And fend they did The exceptional growth that characterized the period from the end of the Civil War to the turn of the century was accompanied by fierce competition, Growth in economic activity gave rise to overproduction, which led in turn to three severe economic downturns, from 1873 to 1877, 1885 to 1887, and 1893 to 1897 In this economic climate, the rate of business failure was exceedingly high To survive, businesses employed whatever measures they could—including cartels and other pooling arrangements, predatory pricing, or direct control through horizontal mergers-despite their blatantly anticompetitive nature [2]

It was in this context that the federal government came under strong pressure to Intervene Middle-class reformers, describing themselves as "progressives, " opposed the concentration of economic power, and called on government to control corporate abuses and to take posit we steps to reduce the negative Impacts of rapid industrialization and urbanization. Farmers and others living in the West accused big business, especially the oil companies and railroads, of price gouging In addition, labor, now emerging as a movement in its own right, became increasingly critical of business[3]

The political climate, which once provided unquestioned support for business, had clearly changed But despite the public outcry against big business, few people were certain about what the role of government, in relationship to business and the marketplace, should be This issue, which dominated American politics from the turn of the century until World War II, continues to reverberate today

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[1] Neil Fligstein, *The Transformation of Corporate Control* (Cambridge, MA Harvard University Press, 1990)

[2] Louis Galambos and Joseph Pratt, *The Rise of the Corporate Commonwealth L/ S Business and Public Policy in the Twentieth Century (New* York, NY Basic Books, 1989)

[3] Ibid

SOURCE Off Ice of Technology Assessment, 1994

BOX 7–2: Intellectual Property Law

To provide an incentive for the creation and dissemination of scientific information and creative works, the Founding Fathers Included a specific clause in the Constitution (Section 1, Article 8, clause 8) authorizing Congress to establish Intellectual property rights Rights granted under the first copyright act of 1790 corresponded to the capabilities of the printing press, these were the rights to print, reprint, publish, and vend a writing During the 19th and 20th centuries intellectual property rights were gradually extended and expanded to take into account the development of new kinds of information technologies The "right to perform" was first granted in 1856 for dramatic compositions, and in 1897 it was applied to musical compositions In 1909, Congress granted musical compositions a "mechanical recording right, " at which time the duration of copyright was also lengthened from 14 to 28 years, and on renewal, to 56 years In 1976, the term of copyright was extended to the life of the author plus 50 years, in 1980, copyright was extended to cover computer software and in 1984 chip masks were provided protection under the Semiconductor Chip Protection Act

As Intellectual property rights were extended to Incorporate new technologies, the issue of how to bound these rights repeatedly reemerged Although one of the primary purposes of Intellectual property rights was to promote free and competitive markets the continual expansion of rights has sometimes had the opposite effect Striking the appropriate balance between Intellectual property protection and the need for information access is a difficult task that continues to challenge policymakers today

SOURCE Off Ice Of Technology Assessment 1994

BOX 7–3: The Communications Act of 1934

The flexibility of the law and role of the courts in Interpreting it is well Illustrated in the case of the Radio Acts of 1912 and 1927 and the Communications Act of 1934, which—incorporating the radio acts—formally established national communication goals for broadcasting and telephony The standard set for broadcasting to serve the public interest convenience or necessity" was stated so vaguely as to leave room for compromise So too was the goal for prowding "so far as possible, to all the people of the United State, a rapid efficient Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges" for this definition did not provide criteria for defining adequacy and reasonableness Although from 1976 to 1980 Congress did reevaluate communication policy goals these efforts to revise the 1934 Communications Act failed for lack of consensus As a result, in recent years—in the absence of clearly defined and consistent goals—-natlonal communication policy is often set by the courts

SOURCE Office of Technology Assessment 1994

past. But this approach may not be suitable today, given the structural changes taking place in the world economy.[11] In fact, if small adaptive changes merely provide temporary relief to U.S. economic problems, they could mask the need for the more radical adjustments needed to sustain economic performance over the long term.[12] In this regard, the rules and regulations governing market structure and market interactions will be critical, as well as the cost and availability of information. These arrangements determine transaction costs and, hence, the incentive structure that drives economic behavior; they also define the scope and form that markets take.[13]

Many of the rules and regulations for economic interactions in the United States were established in the last half of the 19th century for a national market that prompted the growth of large, vertically integrated firms.[14] The policies that the government then selected to cope with those developments, however, stem as much from U.S. political culture as from the events themselves.[15] Americans are fierce supporters of a free-market, competitive economy.[16] At the turn of the century, when the government acted against the abuses of large businesses, it did so in a uniquely American, pro-market fashion.[17] America's preference 'or competitive market solutions is demonstrated in

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[11] As Andrew Schotter has pointed out: "Economic and social systems evolve the way species do. To ensure their survival and growth, they must solve a whole set of problems that arise as the systems evolve. Each problem creates the need for some adaptive feature, that is, a social institution. Every evolutionary economic problem requires a social institution to solve it. . . . Those societies that create the proper set of social institutions survive and flourish; those that do not, falter and die. The distressing fact is that what is functional to meet today's problems may be totally inadequate in meeting the tests our society faces tomorrow." Andrew Schotter, *The Theory of Social Institutions* (Cambridge, UK: Cambridge University Press, 1981), pp. 1-2.

[12] As described by Polanyi: "A nation may be handicapped in its struggle for survival by the fact that its institutions, or some of them, belong to a type that happens to be on the downgrade-the gold standard in World War 11 was an instance of such an antiquated outfit. Countries, on the other hand, which, for reasons of their own are opposed to the *status quo,* would be quick to discover the weaknesses of the existing institutional order and anticipate the creation of institutions better adapted to their interests." Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston, MA: Beacon Press, 1957), p. 28.

[13] As described by North: "Institutions provide the structure for exchange that (together with the technology employed) determines the cost of transacting and the cost of transformation. How well institutions solve the problems of coordination and production is determined by the motivation of the players (their utility functions), the complexity of the environment, and the ability of the players to decipher and order the environment (measurement and enforcement)." North, op. cit., footnote *7,* p. 34.

[14] See Alfred Chandler, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, MA: Harvard University Press, 1977); and James Beniger, *7-he Control Resolution: Technology and the Economic Origins of the Information Society* (Cambridge, MA: Harvard University Press, 1986).

[15] See for discussions of the effects of culture on institutions and organizations, John W. Meyer and Brian Rowan, "Institutionalized Organizations: Formal Structure as Myth and Ceremony," in Powell and DiMaggio (eds.), op. cit., footnote 9; Fred Block, *Postindustrial Possibilities: A Critique of Economic Discourse* (Berkeley, CA: University of California Press, 1990); and Neil Fligstein, *The Transformation of Corporare Control* (Cambridge, MA: Harvard University Press, 1990), pp. 53-55.

[16] As Galambos and Pratt describe: "What did vibrate through America was praise for the creator of new Ventures, whether on the farm, in transportation, or in manufacturing and commerce. The materialistic culture was translated into specific political improvements when the states and localities supported internal improvements, encouraged resource use, eased the route to incorporation, and carefully protected property rights. The entrepreneurs of that day could expect few threats and much support from government." Louis Galambos and Joseph Pratt, *The Rise o/ the Corporate Commonwealth: U.S. Business and Public Policy in the Twentieth Century (New* York, NY: Basic Books, 1989), p. 23.

[17] Although these values were often supported more by rhetoric than practice, they were greatly popularized by the progressive movement, which had its heyday in the late 1800s. Members of the progressive movement helped to expose a number of scandals that linked politicians and business, reinforcing American suspicions of government. Ironically, the reputation of big business was actually improved. As Walsh notes, "Laissez-faire economic theory seemed newly justified by the record of great corporate successes between 1889 and 1929. The role of Government in that development was discounted and its reputation tarnished." Annemarie Hauch Walsh, *The Public's Business: The Politics and Practices q/Government Corporations* (Cambridge, MA: The MIT Press, 1978), pp. 25-26. See also, David Vogel, "Giwemment-industry Relationships in the United States. An Overview," in Stephen Wilks and Maurice Wright (eds.), *Comparative Government-Industry Re/a/ions* (Oxford Clarendon Press, 1987), ch. 5.

four areas where the government intervened to channel market activities—antitrust law, regulatory policy, information policy, and trade policy.

Antitrust law, for example, was codified with the passage of the Sherman Act of 1890. Building on common law prescriptions that dated from the 1840s, this act sought "to protect trade and commerce against unlawful restraints and monopolies." The Sherman Act was somewhat ambiguous. however, because it did not describe which particular practices constituted either "a restraint on trade" or "an attempt to monopolize. " Nor did the act provide an institutional mechanism to undertake investigations or enforce the law. [18] Instead, responsibility for implementation was left to the courts, and notification of violations was made the responsibility of the damaged parties. Given such ambivalence, it is clear that the Sherman Act was not meant to be anti business nor anticapitalist. On the contrary, the act opposed trusts and other forms of big business precisely because they were anticompetitive and their behavior precluded other businesses from fully participating in the market economy. It was widely believed that if the monopolistic practices of business could be curbed, there would be less reason for government to intervene in the economy. [19]

Regulatory policy created a similar dilemma for government. The railroads were the first in line for regulation because of their central role in the nation's economy. [20] When overbuilding and cutthroat competition at the turn of the century led railroad owners to resort to anticompetitive practices, such as pooling arrangements and discriminatory pricing, the public called for reform. As in the case of antitrust, there was little agreement on how to proceed. Some favored cartelization, and called on government to enforce pooling arrangements. Such an approach, however, would not have been politically acceptable. At the other extreme was nationalization, which was out of the question, given American political culture and the costs involved. [21] After much debate, Congress adopted a hybrid solution-the independent regulatory commission. This approach left business in private hands, while limiting the potential for monopoly abuse (see box 7-4).

In contrast to antitrust and regulatory policy, which were inspired by turn-of-the-century events, the government's use of information policy to structure markets dates back to the founding of the nation itself. [22] Operating as a common carrier, the government used its postal monopoly not only to disseminate information, but also to assure that there would be equitable access to it. Policies relating to the distribution of newspapers were key to early commerce. Newspapers carried most of the business news, and also

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[18] Such powers were only provided in 1914 under the Clayton Antitrust Act, which established the Federal Trade Commission.

[19] Because the Sherman Act was vague, it was open to liberal interpretation. Thus, with few exceptions, it was not applied against existing business arrangements. Although it outlawed cartels, trusts, and pooling, it permitted mergers through holding companies and vertically integrated corporations. In the period that followed the passage of the Sherman Act, there was a rash of horizontal mergers. Several years later, when this approach proved unsuccessful, these holding companies were replaced by vertically integrated firms. See Galambos and Pratt, op. cit.. footnote 16; and Fligstein, op. cit., footnote 15.

[20] The railroads presented government with a special case. Although the railroad magnates were considered to be guilty of some of the worst market-related abuses, most people recognized that a national rail system was critical for economic growth and development. The railroads, c\eryone recognized, had made it possible to open up the West, a fact that had led the government to subsidize their development through huge land grants and other financial benefits. The Union Pacific Railroad, for example, was given 12 million acres of land, while the Central Pacific recen Cd 11 million. Railroad performance continued to affect all other aspects of economic life. The nation's financial markets, for example, were greatly influenced by railroad financing, and commodity prices were directly linked to railroad rates. See L.C. A. Knowles, *Economic Development in Nineteenth Century: France, Germany, Russia and the United States* (New York, NY. Augustus M. Kelley Pub] ishers, Reprints of Economic Classics, 1 967), pp. 91-93.

[21] Galambos and Pratt, op. cit.. footnote 16, pp. 91-93,

[22] See Gordon Hook, *The Creation Of the American Republic, 1776-1787* (Chapel Hill, NC: University of North Carolina Press, 1959).

BOX 7–4: The Interstate Commerce Cc

To regulate the railroads, the Interstate Commerce Commission (ICC) was established in 1887 with the passage of the Interstate Commerce Act. Its overall mission was to assure that rates were "just and reasonable" In addition, price discrimination and pooling arrangements were prohibited To carry out this mandate, the President was to appoint five commissioners who were to serve for 6 years Although the ICC responded to the immediate call for government action, its impact on business practices was quite limited. Having little expertise, scanty information, and no investigative authority, the ICC lacked the wherewithal to effectively execute its role. [1]

The ICC'S impact over the long term was, however, much more significant. It not only set an important precedent for regulatory intervention, but it also helped to firmly establish the principles of common carriage and equal access to essential facilities Moreover, despite the ICC'S failings, it served as the organizational model for the regulation of a number of subsequent technologies.

[1] Louis Galambos and Joseph Pratt, *The Rise of the Corporate Commonwealth U S Business and Public Policy in the Twentieth Century (New* York, NY Basic Books, 1989), pp 57-59

SOURCE Off Ice of Technology Assessment, 1994

provided the fastest and cheapest way of gathering information. [23] In 1836, the Post Office also inaugurated postal express services to speed information-especially market intelligence—in advance of the regular stagecoach mails.[24]

The laws to protect intellectual property rights, also authorized by the Constitution, were designed to foster information dissemination. James Madison—the principal author of the intellectual property clause—was aware of the monopolistic connotations of such a governmentally granted, exclusive right. However, he distinguished the American system of intellectual property rights from previous ones that he believed to be more

23 Perhaps the clearest expression of the government policy to promote the widespread dissemination of news was the postage-free exchange of newspapers among printers. Long before the advent of press associations, editors obtained nonlocal information by culling out-of-town newspapers, their so-called exchanges. In an arrangement that today's journalists might find foreign and offensive, the government in essence operated the nation's news-gathering services. These printers' exchanges furnished most nonlocal news throughout the first half of the 19th century. See, for a discussion, Richard B. Kielbowicz, "The Press, Post Office, and the Flow of News in the Earl y Republic," *Journal of the Early Republic, vol.* 3, fall 1983, pp. 255-280.

24 Newspapers could send slips postage-free; other mailers paid triple the regular rates. Policymakers assumed that newspapers could thereby obtain timely market intelligence through the government-subsidized service, making it available to all readers and thereby counteracting the advantages enjoyed by speculators who had access to private communication channels. Public support for such policies intensified as the nation expanded westward. Postal debates reflected a concern about the issue of equitable access to information. See Richard B. Kielbowicz, '"Modernization, Communication Policy, and the Geopolitics Of News, 1820- 1860," *Critical Studies in Mass Communications, vol.* 3, March 1986, pp. 21-35.

pernicious.[25] To avoid the evils of monopoly, Madison intended that the exclusive rights afforded by copyright be narrowly circumscribed; owned by "many" and "granted for only limited periods of time."[26] The role of the government was also confined to that of registrar; it was up to the holders of intellectual property rights themselves to monitor infringements and enforce their own rights .27 Despite the Founding Fathers' intentions, however, the issue of how to bound these rights, and the role of the government with respect to them, has repeatedly reemerged as intellectual property rights were extended to incorporate new technologies.[28]

The government's inconsistency with respect to market rules and regulations was most apparent in the case of trade and tariff policy. Although Americans strongly supported free market competition in the domestic marketplace, this was not true with respect to foreign trade. Until World War II, the United States was the most protectionist industrialized country in the world.[29] This protectionist stance was justified on a number of grounds—the need to raise revenues, protect infant industries, and defend against cheap foreign labor.[30] However, the country position on tariffs also needs to be understood in terms of the overriding concern at the time about integrating the nation and developing a national market. It is likely that the economic costs of high tariffs were difficult to perceive. Consumers enjoyed an ever-increasing number of products at increasing y lower prices, as a result of a national market that could support mass production.[31] It was much later, after the U.S. economy had grown sufficiently to be integrated into the world economy, that the United

[25] In a letter to Jefferson, Madison wrote: "Monopolies are sacrifices of the many to the few. Where the power is in the few it is natural for them to sacrifice the many to their own partialities and corruptions. When the power is in the many not in the few the danger cannot be very great that the few will be thus favored." Letter from James Madison to Thomas Jefferson, dated Oct. 17, 1788, as quoted in Bruce Bugbee, *The Genesis of American Patent and Copyright Law* (Washington, DC: Public Affairs Press, 1967), pp. 84-125.

[26] Numerous other features of the first copyright law ensured that the bargain struck between the author and the public would not constitute a monopoly. For example, the term of copyright protection was limited to 14 years, after which the work would return to the public domain and anyone would be free to print it. The copyright term ended with the lifetime of both the author and his reading public, so that, even if copyright were a monopoly, it was one that could not last long. Moreover, copyright was initially vested in the author, although he could thereafter assign his copyright to others. By creating as many copyrights as there were authors, the law avoided the concentration of market power. See Patterson, op. cit., footnote 10.

[27] Henry, op. cit., footnote 10, pp. 56-57.

[28] See OTA, *Intellectual Property Rights in an Age of Electronics and Information*, OTA-CIT-302 (Washington, DC: U.S. Government Printing Office, April 1986); and OTA, *Finding a Balance: Computer Software, Intellectual Property and the Challenge of Technological Change*, OTA-TCT-527 (Washington, DC: U.S. Government Printing Office, May 1992).

[29] Knowles, op. cit., footnote 20, p. 304.

[30] It should be noted that tariff policy was a major issue in American politics, which greatly contributed to the breach between the North and the South. Dependent on European markets to sell its cotton, the South consistently opposed high tariffs. The North, on the other hand, looked to tariffs to protect their newly emerging manufacturing concerns.

[31] In no other country was there a geographic market large enough to absorb the output of a single standardized commodity or stable enough to sustain continual large-scale production. Nor was there anywhere else a labor or consumer market equivalent to that in the United States that could take advantage of an ever-expanding volume of mass-produced capital and consumer goods. See, for discussions, Harold Williamson (ed.), *The Growth of the American Economy* (New York, NY: Prentice Hall, 1951), p. 722; and Michael J. Piore and Charles F. Sabel, *The Second Great Industrial Divide: Possibilities for Prosperity* (New York, NY: Basic Books, 1984).

States became the leading advocate for free trade.[32]

Today, these four market-related policy mechanisms are overlapping because of the convergence of information and communication technologies and the shift to a knowledge-based, global economy. For example, trade policy can no longer be considered apart from information, regulatory, and antitrust policies. Increasingly, it is not tariffs per se, but rather nontariff barriers— such as data protection laws, regulatory rules of interconnection, and domestic cooperative business relationships—that serve as constraints on trade. Similarly, the resolution of antitrust disputes increasingly revolves around issues having to do with intellectual property rights, regulatory policies, and whether or not there is a global consensus on antitrust rules. For example, whether an electronic business network constitutes an antitrust infringement might depend on the way that standards are set, and/or the way that intellectual property rights and privacy laws are applied to commercial networked information systems.

Determining how to apply traditional market rules and regulations is also likely to be problematic in the future. Electronic business networks fall somewhere between the classical notions of markets and firms. While serving to enhance efficiency and effectiveness, they can shape the structure and functioning of the marketplace in profound ways. Because of the many interdependencies entailed in networks (whether social or technological), their mode of operation often conflicts with the prerequisites for competitive markets.[33] Members of business networks, for example, are not "price-takers" as classical theory would dictate .34 At the turn of the century, economic actors sought to control future prices and reduce their transaction costs by vertically integrating their activities within a corporation; today, many businesses are hedging against the future by establishing long-term commitments through networking .35

In developing such networks, members are motivated by both social and economic factors.[36] Studies show, for example, that businesses will accept a cost disadvantage in selecting suppliers. Instead of seeking the lowest cost provider, they prefer to deal with suppliers with whom they have ongoing relationships. Similarly, in selecting partners for a strategic alliance, businesses often choose to work with people they have known and dealt with for a considerable period of time.[37]

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[32] See Robert Gilpin, *The Political Economy of International Relations* (Princeton, NJ: Princeton University Press, 1987). At the end of the 19th century, the debate about tariffs also became intertwined with the issue of antitrust. The debate took place along party lines. Republicans under the Roosevelt Administration pushed had for antitrust regulation, but favored high tariffs. Democrats, on the other hand, adamantly opposed the Sherman Act, arguing that it was high tariffs, not pooling and cartel arrangements, that gave rise to competitiveness problems. If tariffs were lowered, they contended, trusts would face enough competition from abroad. Many years later it was the Republican Administration, under president Reagan, that— in its effort to limit the scope of antitrust infringements-argued a very similar case.

[33] See Cristiano Antonelli "The Economic Theory of Information Networks, in Cristiano Antonelli (cd.), *The Economics of Information Networks* (Amsterdam, The Netherlands North Holland, 1992), pp. 5-29.

[34] As noted by Hirschman: "Under perfect competition there is no room for bargaining, negotiation, remonstrations or mutual adjustment and the various operators that contract together need not enter into recurrent or continuing relationships as a result of which they would get to know each other well.'" Albert 0. Hirschman, "'Rival Interpretations of Market Society: Civilizing, Destructive, or Feeble'?''./ourna/ o/ *Economic Literature*, vol. *4*, No. *20*, p. 1473.

[35] G. Hodgson, *Economics and Institutions* (Cambridge, UK: Polity Press, 1988), p. 209. See also Jay B. Barney and William G. Ouchi, "Basic Concepts," in Jay B. Barney and William G. Ouchi (eds.), *Organizational Economics* (San Francisco, CA, Jossey-Bass Publishers, 1986), pp. 24-25.

[36] See Mark Granovetter, "The Old and the New Sociology," in Friedland and Robertson, op. cit., footnote 6; and Mark Granovetter, "Economic Action and Social Structure: The Problem of Embeddedness," in Mark Granovetter and Richard Swedberg (eds.), The *Sociology of Economic Life* (Boulder, CO: Westview Press, 1992).

[37] See Mario Benassi, "Organizational perspectives of Strategic Alliances," in Gernot Grabher, *The Embedded Firm: On The Socioeconomics of Industrial Networks* (London, England Routeledge, 1993), p. 104.

Studies of innovation also show that innovation tends to be greater when the relationships between buyers and sellers is cooperative rather than competitive.[38] Labor markets likewise often exhibit these kinds of network characteristics.[39]

Business networks also violate the ideal condition for competitive markets that requires that market information be symmetrically available. Whereas in competitive markets the only information required is price, in business networks the amount of information that needs to be shared is much greater.[40] In some cases, this kind Of information exchange will be confined to the network, and thus can serve as a major competitive advantage and a formidable barrier to market entry.[41] In fact, it is clear that networks are often designed precisely to play such a role.[42]

Some market problems relating to networked information systems have already arisen—for example, multiple-listing services (MLSs) in the real estate business. These networks are designed not only to connect buyers and sellers, but also to share the cost of searching facilities across a broad base of users, Although such networks have existed for years, it is only recently that MLSs have been computerized, allowing real estate information to be updated on a daily basis.[43] Real estate listings for a given area are pooled in a computer database and distributed to realtors over an electronic network. Realtors use the system to preview houses for customers, allowing them to compare homes according to a variety of criteria without having to visit each one. Brokers are willing to share their listings because they reduce their costs and receive a commission on each property sold by another participating broker.[44] Multiple-listing services are often administered by the local Board of Realtors, which maintains and updates the computer register. However, these systems are not open to all brokers and a number of membership stipulations apply.[45] Restricted membership, it is said, is designed to provide quality control. On the other hand, those who are excluded from such services often argue—and at times with the courts' concurrence-that closed MLSs give rise to anticompetitive behavior.[46]

Multiple-party networking services not only reduce search costs; they also allow transactions and exchange to take place online. Computer reservation systems (CRSs) also provide such services. Travel agencies use these systems to select

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[38] E. Von Hippel, *The Sources of Innovation* (Oxford, UK: Oxford University Press, 1988).

[39] Mark Granovetter "The Sociology and Economic Approaches to Labor Market Analysis, " in Granovetter and Swedberg, op.cit., footnote 36, pp. 233-263.

[40] See T. Scitovsky, "Two Concepts of Network External Economies, "*Journal of Political Economy*, April 1954, p. 150.

[41] Bruce Kogut Weijian Shan, and Gordon Walker, "Knowledge in the Network and the Network as Know ledge," in Grabher, op.cit., footnote 37, p. 77,

[42] For a discussion, see Robin Mansell, "Information, Organization, and Competitiveness: Networking Strategies in the 1990s," in Antonelli, op. cit., footnote 33, pp. 217-227.

[43] As Lopatka and Simons point out, manually operated multiple-listing services date back to the early 1900s. Like many of the other industry wide organizational arrangements that came into existence about this time, multiple-listing services were designed to bring (waler, and thus greater efficiency, to the industry through the establishment of some agreed-upon standards and practices, See John E. Lopatka and Joseph J, Simon, "'Real Estate Multiple Listing Services and Antitrust Revisited, " in Steve S. Wildman and Margaret Guerin-Calvert, *Electronic Services Networks: A Business and Pub/it Policy Challenge (New* York, NY: Praeger, 1991), pp. 207-208.

[44] Ibid

[45] For example some MLSs require that only exclusive right-to-sell listings be placed in the system; others require that members place all properties for which they have an exclusive listing in the service; while others prohibit membership in competing multiple-llst]ng services. Ibid.. pp. 217-219.

[46] See ibid. for example, who defend (he use of MLSs on quality and efficiency grounds.

and book flights. These systems are so efficient that they have become essential for doing business.[47] Today, there are four national CRS providers that serve over 95 percent of all travel agents.[48] When deployment achieves such levels, the electronic network can truly be said to represent the market.

The first computer reservation systems—SABRE and APOLLO-were established by the two largest airline companies, American and United. Because these companies had already developed their own internal reservation systems and had large markets, they were able to use these systems to both increase efficiency and gain strategic competitive advantage.[49] S ince travel agents used CRS terminals and data that were provided by the airlines themselves, their selection of flights was often biased in favor of the provider's airline service. The airlines not only listed their own services first, but they also provided bonuses to agents on the basis of volume sales. In addition, the prices that American and United charged to allow others to post flights on their CRS systems discriminated against competitors. Antitrust actions led the Civil Aeronautics Board, in 1984, to establish rules prohibiting display bias; limiting the terms of CRS contracts with travel agents to 5 years; and prohibiting discriminatory pricing with respect to both booking fees and access charges. However, despite these rules, previous market patterns have persisted, suggesting that there are still significant barriers to entry .50

Although automated teller machine (ATM) networks are now operated on a relatively open and shared basis, they have, like other electronic markets, run into antitrust problems[51] (see box 7-5). In the case of ATMs, the problem is with pricing. ATM networks are operated as joint systems comprised of a networking service provider, who provides electronic funds transfer services; and ATM sponsors, such as banks or other financial service providers, who own and operate the ATMs. Whenever customers use an ATM to access the ATM of a different sponsor, the network provider receives a switching fee from the first ATM owner. That same owner also has to pay a service fee to the sponsor of the ATM accessed by the customer through the network. ATM owners may also pay the network provider a fixed fee for access to the network, as well as a royalty fee for each ATM card issued.[52] The ATM providers may, in turn, charge the customer a fee for the ATM card, a fee for each transaction, and a fee for accessing a foreign ATM sponsor. Whether or not ATM sponsors should be free to set rates independent y of the network service provider is an extremely controversial issue. Network providers argued that fixed, universal rates are necessary for the effective func -

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47 Estimates are that Using CRSs, airline companies have been able to reduce (he costs of making a reservation from $7.50 to $0.50, while travel agencies have increased their productivity by as much as 43 percent. See Margaret E. Guerin-Calvert and Roger G. Nell, "Computer Reservation Systems and Their Network Linkages to the Airline Industry, " in Wildman and Guerin-Calvert, ibid., p. 147.

48 Andrew, N. Kleit, "Computer Reservation Systems: Competition Misunderstood, "' *Antitrust Bulletin*, vol.32, winter 1992, pp. 833-861.

49 Ibid. See also D Copeland and J. McKenney, "Airline Reservation Systems: Lessons from History," MIS Quarterly, vol.12, No.3, September 1988, pp. 353-370; and U.S. Department of Transportation, *Study of Airline Computer Reservation Systems* (Washington, DC: U.S. Government Printing Office, May 1988).

50 Guerin-Calvert and Noll, op. cit, footnote 47, pp.144-187.

51 There were a number of reasons why ATM network providers found it in their interest to have compatible systems. Interconnection allowed banks to gain economies of scale, increasing the rate of usage while averaging operating costs. In addition, providers were able to offer services outside of [heir local marketing areas. Alan Gart, "How Technology 1s Changing Banking," *Journal of Retail Banking*, spring 1992, vol. xiv, No. 1.

52 Richard J. Gilbert, "on the Delegation of Pricing Authority in Shared Automatic Teller Machine Networks, "in Wildman and Guerin-Cal- \ ert, op. cit., footnote 43, pp. 114-144. As noted by Richard Mitchell, these fees can add up for multiregional banks that have to pay membership fees for a variety of networks. Richard Mitchell, "Electronic Payments Services: Watershed in EFT Consolidation," *Bank Management*, October 1992, pp. 73, 76.

BOX 7–5: Automated Teller Machine Netw

Automated teller machine networks (ATMs) also function as electronic markets, providing both automated and networked banking services These networks reduce the costs of executing transactions by allowing banks to shorten teller hours and build smaller and fewer branches At the same time, consume gain by having much more convenient banking services, with access 24 hours a day from a number of different providers across a wide geographic area

While initially slow to take off ATMs have greatly increased in popularity [1] By 1990, there were 45,0(ATMs deployed, as compared to only 2,000 in 19732 As usage Increased, so did the number and variety competitors seeking to provide ATM services Nonbank financial restitutions such as Visa, Mastercard, Plus, and Cirrus quickly entered the fray Being unregulated, these financial service providers had the advantage of being able to offer nationally based services More recently, providers of data-processing services a getting into the market In the fall of 1992, for example, EDS announced its intention to enter the electron funds transfer market, deploying 10000 ATM machines by 1995, while Affiliated Computer Systems noted its plans to Increase its ATM base during the same period from 800 to 5,0003 To maintain their market posi tion existing ATM owners are seeking to differentiate their services by adding value, and to establish a n tional platform and reduce their costs by entering into mergers and alliances Leading the way is Electron Payments Services (EPS), a joint venture of four major banking companies [4]

Today's enhanced ATM services attest to this growing competition ATMs are now available in almost any locale—bank premises urban streets, airports, shopping malls, gas stations, universities, and hospital Moreover the range of services offered is expanding all the time Customers can obtain cash, transfer funds across accounts make deposits, and obtain cash balances using the latest technology [5]In son cases they can communicate with bank personnel via interactive video, pay bills, and make nonbank pur chases of such things as stamps, subway cards, and even gift certificates.[6]ATM services can also be a cessed Internationally By negotiating across shared ATM networks, for example, Hong Kong Bank now allows customers to get cash at 120,000 ATMs in 50 countries Similarly, Citibank provides cash access from 150000 machines worldwide [7]

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[1] The slow pace of deployment was due not only to customer resistance According to Peter Keen even as late as 1982 ma banks were still skeptical about the profitability of ATMs Peter Keen, *Competing in Time* Using *Telecommunications for Competiti* ***Advantage*** (Cambridge MA Ballinger Publishing Co 1986)

[2] Alan Gart How Technology is Changing Banking, ' *Journal of Retail Banking* spring 1992, VOI xiv, No 1, p 42

[3] Richard Mitchell 'Electronic Payment Services Watershed in EFT Consolidation, ' *Bank Management,* October 19 p 76

[4] At the outset EPS will link 1 400 financial institutions with 13,000 ATMs in 16 states, processing an estimated 1 billion transactio per year This adds up to about 20 percent of the nation's switched ATM services Thomas Hoffman, "Regional Banks Form ATM N work *Computerworld* July 27 1993

[5] Lauri Green How Buck Rogers Is Bailing Out ATMs ' *Bank Management,* November 1992, pp 65-67, see also, Mark Arer High-Tech Banking Centers Add Value to Branches, *ABA Banking Journal,* November 1992, pp 39-46

[6] Ibid See also Joe Asher Seafirst Expands Card Delivery System, " *American Banking Journal, April* 1991 PP 76, 78

[7] Mark Clifford Touch an ATM for Money," *Far Eastern Economic Review,* Sept 24, 1992 pp 62-63

SOURCE Office of Technology Assessment 1994

tioning of the network and to promote ATM usage; others, in particular ATM sponsors, contend that rate-setting, when imposed by network providers, is anticompetitive. Court rulings on the issue to date have been inconsistent. However, these kinds of cases will likely increase in the future, given the increase in competition.[53]

Sorting out these issues in an environment of virtual corporations and electronic commerce will become extremely difficult, requiring concurrent expertise in such areas as antitrust law, regulatory policy, networking technology and standards development, intellectual property and privacy law, and trade policy. Given the complexity of the issues, the economic costs of institutional failure, and the tendency of people to continue to view situations through the lens of old paradigms, Congress might want to establish a Commission or authorize a major study to analyze the implications of conducting business via electronic networks and enterprises for market rules and regulations.

In the past, national commissions have been especially useful in focusing the nation's attention on issues, such as electronic commerce, that are likely to have a broad impact on everyone.[54] The costs of setting up a commission are relatively small. Because national commissions are generally established to deal with a specific set of problems and have a limited tenure, there is virtually no risk of generating an enduring, and eventually unnecessary, government organization. Moreover, because commissions are temporary and unique in nature, they can often attract outstanding individuals with broad experience who would not be available on a long-term basis. This would be especially important in understanding the long-term market implications of electronic commerce because the range of knowledge that is required is so broad, and experts in the field are unlikely to have a basis for association and interaction. By heightening the public's awareness of a problem and by engaging the public to debate its solution, a commission to examine electronic commerce could also serve an important legitimating function at a time when the economy is undergoing such fundamental change; when government and the private sector are reconsidering and reworking their relationships; and when firms need to rethink and revise how they conduct their businesses.[55]

One model that might be followed in setting up a commission is that of the National Commission on New Technological Uses of Copyrighted Works (CONTU). This commission was established as part of an effort to comprehensively revise U.S. copyright law in the light of technological change and the greatly enhanced value of information. Following 3 years of deliberation, the commission presented its recommendations to Congress; many were incorporated into the 1986 Copyright Act, thereby extending copyright protection to computer software.[56]

OPTION B: Restructure the Organizational Basis for Communication Decisionmaking

Decisions about the structure of the marketplace are not necessarily made deliberately. Often such choices result from decisions made in what might

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53 For an economic analysis of these issues, see Gilbert, ibid. For a discussion of the legal cases, see also, Karen L. Grimm and David A. Balto, "How the Antitrust Laws Limit Pricing Policies of Shared ATM Networks," *Banking Law Review*, *vol. 4*, winter 1992, pp. 15-24, In *National Bank Corporation v. Visa USA*, the court upheld the right of the network to fix credit card interexchange fees, whereas in *First Texas Savings Association v. the Court* held that, when an ATM network has market power, it could fix fees only if, at the same time, it allowed ATM owners to impose surcharges or rebates. In *Valley Bank v. Plus System*, Inc., the court concluded that it was not necessary to fix fees, since a number of ATM networks operated successfully without having to do so.

54 For one discussion of the role of commissions, see Frank Popper, *The President's Commission* (New York, NY: Twentieth Century Fund, April 1970).

55 Ibid.

56 See *Final Report of the National Commission on New Technological Uses of Copyrighted Works* (Washington, DC: Library of Congress, 1979).

appear to be a totally different arena. Because communication and information technologies undergird all social and economic activities, the "spillover effects" of regulatory policies can have far-reaching consequences. In a knowledge-based economy, special care will be needed to ensure that regulatory policies are responsive to, and consistent with, national economic and social goals. One major problem that has prevented such policy reconciliation in the past has been the extremely fractionated nature of the U.S. communication policy decisionmaking process. To avoid these problems in the future, a more coherent policymaking process will be needed.

The Clinton Administration has taken a number of steps in this direction. Acknowledging the critical importance of the national information infrastructure (NII) in a global knowledge-based economy, the Administration has recently laid out a vision for its development. To assist in articulating and implementing this vision, a National Information Infrastructure Task Force (IITF) has been established. Membership includes high-level representatives of all federal agencies having a major role to play in the development and application of information technologies. Input from the private sector will be channeled through an advisory council of key stakeholders including industry, labor, academia, public interest groups, and state and local governments. In addition, the IITF has established an electronic bulletin board system that will provide IITF schedules, committee reports, and public minutes of meetings.[57] The White House Office of Science and Technology Policy (OSTP), together with the National Economic Council, is responsible for directing the operations of the Task Force, with the Secretary of Commerce acting as Chair.[58] Much of the staff work will be carried out by the National Telecommunications and Information Administration (NTIA) of the Department of Commerce.

Although the IITF represents a major step forward in the development of a coherent communications policy, in keeping with other national policy goals, it is questionable whether such an ad hoc process can resolve the jurisdictional problems that traditionally have characterized U.S. communication policymaking over the long term.[59] These problems will only be exacerbated in the future, given the continued convergence of technology across industry and policymaking boundaries, the greatly enhanced value of information, and the globalization of the communication marketplace. A more permanent, organizational solution may be required in order to consider communication policy in terms of all of its social and economic ramifications.

One possible organizational option, for example, would be to formally designate NTIA as the lead agency to coordinate national communication policy. NTIA, in the Department of Commerce, is a likely candidate. In 1978, Executive Order 12046 established NTIA to "provide for the coordination of the telecommunication activities of the Executive Branch. '*Go NTIA has itself pro-

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57 *IITF Committee Report,* Dec. 9,1993.

58 Ibid. According to the Executive Order establishing *the* National Economic Council, its charge is to "advise the IITF on matters related to the development of the NI 1, such as: the appropriate roles of the private and public sectors in NII development; a vision for the evolution of the NII and its public and commercial applications; the impact of current and proposed regulatory regimes on the evolution of the NII privacy, security, and copyright issues, national strategies for maximizing interconnection and interoperability of communication networks; and universal access. " The Council is also expected to invite experts to submit information to the Council.

59 For a detailed discussion of these problems see OTA *Critical Connections: Communication for the Future,* OTA-CIT-407 *(Washington,* DC U.S. Government Printing Office, 1990), esp. ch. 13.

60 47 U.S.C. 151.

posed this option in its report, *NTIA Telecom 2000,*[61] arguing that the current organizational structure for communication policy suffers from an outlook that:

- often tends to be reactive and skewed toward achieving short-term objectives;
- focuses too much on the status quo; and
- is too concerned with balancing particular interests, rather than
- with long-range policy planning.[62]

According to NTIA, the present, fragmented decisionmaking process encourages stakeholders to shop around for the policy forum in which they are likely to receive the most sympathetic hearing.[63] An executive branch agency, it is argued, can be more proactive than an independent agency such as the Federal Communications Commission (FCC). Moreover, an executive branch agency can more successfully bring together a cross-disciplinary depth of skills and command greater acceptance and respect within both the government and the private sector than can the FCC, which has a narrowly conceived regulatory (and some would say deregulatory) role.[64]

The idea of transferring authority from independent agencies to the executive branch as a means of enhancing policy coordination is not a new idea. A number of Presidential commissions created to analyze the organization of government have recommended such a realignment of power.[65] One of the most recent was the Ash Council established by President Nixon in 1969. It criticized the independent regulatory commissions for being neither responsive to the public interest nor coordinated with national policy.[66] It is important to note, however, that in prescribing the integration of a number of independent agencies, the Ash Council made an exception of the FCC. It argued that FCC should remain independent, given the sensitive role that it has played with respect to the mass media.[67]

Were NTIA to play a greater role in policymaking, its staff and resources would clearly need to be upgraded. Only recently—with a strong Presidential vision of the NII and a Democratic majority in the Congress—has NTIA shown an ability to address a consistent national communication policy. Nor has the NTIA been successful in performing the former Office of Technology Policy (OTP) task of coordinating the U.S. communication policy position for presentation in international policy fora.

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61 According to NTIA: "The Executive Branch should have the authority to *establish* policy, while the FCC should remain the agency for *implementation of policy* [emphasis in the original]." It should be noted that, if this proposal were adopted, the executive branch and legislative agencies would, in effect, be reversing their traditional roles.

62 U.S. Department of Commerce, National Telecommunications and Information Administration, *NTIA Telecom 2000: Charting the Course for a New Century* (Washington, DC: U.S. Government Printing Office, 1988), p. 165.

63 Ibid.

64 Ibid., pp. 167-172.

65 For example, in its report to Congress, the Brownlow Commission, established under President Roosevelt, recommended that 100 independent agencies, administrations, boards, and commissions be integrated into 12 executive departments. The report was particularly critical of the independent regulatory agencies, characterizing them as the "headless fourth branch of Government." The first Hoover Commission, set up after World War 11, made similar recommendations, arguing that the executive branch ought to be reorganized to create an integrated, hierarchical structure with the President as an active manager. So, too, did the J.M. Landis *Report on Regulatory Agencies to the President Eleel,* U.S. Senate, 1960. See, for a discussion, "The Federal Executive Establishment: Evolution and Trends," Library of Congress, Congressional Research Service, prepared for the Senate Committee on Governmental Affairs, May 1980. See also Ronald C. Moe, "The Two Hoover Commissions in Retrospect," Library of Congress, Congressional Research Service, Nov. 4, 1981.

66 "A New Regulatory Framework: Report on Selected Independent Regulatory Agencies," The President Advisory Council (m Executive Organization, 1971. For a discussion, see Moe, op. cit., footnote 65; see also Harvey Mansfield, "Reorganizing the Federal Executive Branch: The Limits of institutionalization," *Law and Contemporary Problems*, vol. 35, summer 1970, pp. 460-495.

67 "A New Regulatory Framework," op. cit., footnote 66, pp. 31-46.

The FCC would most likely oppose a transfer of any authority to the executive branch. Members of congressional committees responsible for FCC oversight, who in the past have protected their jurisdictions in this regard, are also likely to oppose such a measure.[68] Given the historical litany of complaints against independent regulatory commissions, their continued longevity in the face of such criticism attests to the strength of congressional stakeholder opposition to any change.[69]

The FCC could also serve as the central locus of policymaking. Established by the Communications Act of 1934, FCC was designed, in part, to implement the act "by centralizing authority heretofore granted by law to several agencies. "[70] However, the mushrooming of other agencies and authorities to deal with burgeoning communication and communication-related issues has seriously challenged FCC's role in this regard.

Created as an independent agency, FCC is linked and responsible to the legislative, rather than to the executive, branch.[71] Because it is the job of the legislature to make policy, it can reasonably be argued that FCC should be assigned the task of reconciling national communication policy objectives and jurisdictional disputes on a day-to-day basis. This legislative connection might also serve to ensure that, when developing communication policy, a broad range of interests are taken into account. Because compromise is inherent in the congressional environment, the legislative perspective is often eclectic and inclusive of many minority points of view.[72]

This tendency to be all-embracing, however, is both a strength and a weakness of the FCC. The congressional focus on winning political favor and fashioning political compromises can serve to put the brakes on any major policy departures.[73] Some might also take issue with the option of transferring considerable policymaking authority to FCC on grounds of democratic theory, which requires that policy organizations be held directly accountable to the public for their actions.[74] Although shifting this authority to FCC would not shield the policymaking process from public influence, it might change the nature and process of the debate about policy issues.

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68 As Moe has pointed out: "Congress is not well organized to deal with abstract principles, such as a unified executive branch. The committee structure is more appropriate for dealing with specific problem areas and with distinct units w ithin the executive branch. .Given its constitutional power to establish units in the executive branch, and given its institutional tendency to seek influence in the making of agency policy, Congress increasingly has been inclined to create agencies which have a high degree of independence from Presidential supervision." Moe, op. cit., footnote 65, p. 12.

69 See Glen O. Robinson (cd.), *Communications j& Tomorrow: Policy Perspectives for the 1980s* (New York, N Y: Praeger, 1978)

70 47 U.S.C. 1 5 *I*.

71 Although independent regulatory agencies have traditionally performed a combination of legislative, administrative, and Judicial functions—and, in fact, this was one of the original justifications for their existence—they are, in theory, regarded as "arms of the Congress." For a general discussion of independent regulatory agencies, see U.S. Congress, Senate Committee on Governmental Affairs, *Study on Federal Regulation v. Regulatory Organization*, prepared Pursuant to S. Res. 7 I (Washington, DC: U.S. Government Printing Office, December 1977).

72 Although many scholars and administrators have taken issue with the concept of the independent regulatory commissions, a number have strongly defended it. Most early advocates focused on the role of such agencies as administrative expert, separate and untarnished by the political process. This rationale was not long in vogue, however, becoming over time a major source of criticism of independent regulatory agencies. More recently the argument has been made that, instead of being protected from abuse and invidious influences, the commission form helps to assure that different views will be taken into account at the highest agency level. See Glen Robinson, "Reorganizing the Independent Regulatory Agencies," *Virginia Law Review*, vol. 57, September 1991, pp. 947-995.

73 As Glen Robinson" has pointed out, this tendency of Congress to be conservative is considered by some to be a benefit. As he notes: "For landbound conservatives. . . Congress' incapacities are more of a virtue than a vice, they discourage facile legislative solutions to social and economic problems—solutions that often prove short-sighted and ultimately mischievous." Robinson, ibid., p. 358.

74 For this point, see Robert G. Dixon, Jr., "The Independent Commissions and Political Responsibility," *Administrative Law Review*, vol. 25, No. 1, winter 1975, **pp. I -16.**

If the FCC were assigned an enhanced role in developing and coordinating national communications policy, it would clearly need more resources. Congress' decision to deregulate the cable industry has put a tremendous drain on the commission's staff. With the mounting public interest in the NII, the commission is also being pressed to accept petitions and filings online. Although such a policy would clearly open the FCC to a broader range of inputs, given present resources, it will surely lead to information overload. Given a broader range of issues to deal with, the staff composition will also need to become more interdisciplinary. Designed primarily to perform traditional regulatory functions, the FCC has been dominated professionally by lawyers, engineers, and regulatory economists.

Over time, organizations develop a "mystique" of their own that affects how the public, other agencies, and Congress relate to them .75 Once established, the character of an organization is extremel y difficult to change, often requiring nonorganizational measures that expand an agency's constituency, the complete reconfiguration of administration systems, and a different mix of professional skills.[76] Keeping these factors in mind, it could be argued that—given the numerous problems experienced with the previous organizational arrangements for dealing with communication policy, and the growing national importance of communication issues—the time may be right to create an executive agency specifically designed to deal with communication policy. Depending on the degree of prominence that Congress wants to attach to such a mission, an agency might be structured as an independent executive agency (like the Environmental Protection Agency) or a Cabinet-level department.[77]

As noted above, the virtues of the executive branch form of organization have long been touted by a number of scholars and commissions on governmental organization. Among the advantages typically cited are: enhanced policy coordination; greater efficiencies in division of responsibility and the execution of tasks; greater accountability; and greater ability to attract high-quality personnel.

Regardless of the merits of this option, establishing an executive department is not simple. Historically, Congress has not been eager to create new departments, often requiring an agency to serve a period of apprenticeship before being promoted to the status of an executive department. This reluctance is not surprising, given the close interrelationships between the executive and legislative branches. Any major changes in the executive branch are likely to have considerable impacts on the distribution of power and responsibility in Congress. Thus, Congress has the ultimate say with respect to any significant organizational changes.

The states also might look askance at the creation of a Department of Communication. As early as 1789, they were concerned that the growth of the executive branch would take place at the expense of their own authority and policymaking prerogatives. It was for this reason, for example, that the states opposed the establishment of the Department of Education. Given this history, and

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75 As Harold Seidman has noted: "The quest for coordination is in many respects the twentieth century equivalent Of the medieval search 'or the philosopher's stone. If only we can find the right formula for coordination, we can reconcile the irreconcilable, harmonize compelling and wholly divergent interests, overcome irrationalities in our government structure and make hard policy choices to which no one will dissent." Harold Seidman, *Politics, Position, and Power: The Dynamics of Federal Organization (New* York, NY: Oxford University Press, 1980), p. 205.

76 Ibid.

77 Executive agencies residing outside the departmental structure were rare until the turn Of the 20th century, becoming increasingly prominent after World War II. Their growth parallels, in a sense, the growing complexity of society. Many independent agencies were established in response to the lobbying pressure of a particular constituency. Examples are the Departments of Agriculture, Labor, and Education. Others such as the Environmental Protection Agency were created, in part, as a symbolic gesture to give prominence to a particular national concern. I bid., pp. 29-3 1

the number and intensity of recent disagreements between the federal and state governments about communication policy, the states might be averse to setting up an executive agency for communication.

A number of other stakeholders are likely to be ambivalent about creating a new agency to deal with communication policy issues. Although many may be frustrated by the lack of consistency and coherence in the present situation, they have learned how to operate effectively within it. The establishment of a new agency would be fraught with uncertainty. Since federal agencies have often served to promote certain constituencies, many stakeholders would oppose or favor an executive branch agency for communication, depending on whether they thought it would enhance or detract from their particular interests.

In considering these options, however, it is important to remember that organizational change is not a panacea and cannot substitute for real policy agreement. Because of the connection between organizational structure and policy orientation, stakeholders' preferences concerning where the organizational responsibility for coordinating communication policy should 1ie are often colored more by their policy preferences than their views about public administration.[78]

[78] As described by one authority on pub] ic administration: "'As a rule, however, reorganization proposals should have as their objective the furtherance of some public policy. Indeed, reorganization appears to be a basic political process through which Individuals and groups gain power and influence over others in order to achieve the social and political change they consider desirable." See Ronald C. Moe, "Executiv e Branch Reorganization An oven iew," Library of Congress, Congressional Research Service, 1978, p. 6.