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Economic Analysis at the Federal Communications Commission

*A Simple Proposal to Atone for
Past Sins*

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Thomas W. Hazlett

1616 P St. NW
Washington, DC 20036
202-328-5000 www.rff.org

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Economic Analysis at the Federal Communications Commission: A Simple Proposal to Atone for Past Sins

Thomas W. Hazlett*

I. Introduction

Economic analysis to aid in the implementation of public policy made major strides in the 1960s when organizations such as the Rand Corporation and Resources for the Future began systematically applying benefit–cost analysis (BCA) to regulatory choices.¹ A further burst of enthusiasm for economic analysis swept the policy world in the 1970s and 1980s. This surge gained momentum from the nearly revolutionary impact of economist Alfred Kahn and his merry band of academic warriors² who disrupted long-standing political equilibria, brandishing economic analysis as their primary offensive weapon.³ The movement garnered support from the White House in both the Carter and Reagan administrations. During the latter an Executive Order issued in 1981 mandated that executive branch regulatory agencies formally include

* Professor of Law and Economics, George Mason University; FCC Chief Economist (1991–92). This paper was originally prepared for an RFF conference, held April 7, 2011. The author thanks Arthur Fraas and Randall Lutter for helpful comments, and is especially indebted to Martin Perry for key insights regarding potential FCC reforms. Still, all liability for errors remains with the author. More information can be found here:

<http://www.rff.org/Events/Pages/Can-Greater-Use-of-Economic-Analysis-Improve-Regulatory-Policy-at-Independent-Regulatory-Agencies.aspx>

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¹ Richard D. Morgenstern, *Introduction to Economic Analyses at EPA*, in R. Morgenstern, ed., *ECONOMIC ANALYSES AT EPA: ASSESSING REGULATORY IMPACT 1* (Wash. D.C.: Resources for the Future; 1997).

² Prof. Kahn's success in bringing economic analysis to, first, the New York State Public Service Commission and, next, the U.S. Civil Aeronautics Board, is masterfully described in Thomas McCraw's Pulitzer Prize-winning history, *PROPHETS OF REGULATION* (1984). Kahn's co-conspirators at the CAB included Elizabeth Bailey (who succeeded Kahn as CAB Chair), Michael Levine, and Darius Gaskins. McCraw (1984), pp. 273-74.

³ The other notable weaponry was a force multiplier—the disarming wit, stunning wisdom, and indomitable good cheer of the late Professor Kahn.

benefit–cost analysis in their evaluation of rules.⁴ The BCA approach was likewise endorsed by the George H.W. Bush, Clinton, George W. Bush, and Obama administrations to follow.⁵

Yet formal requirements to include economic analysis in government decisionmaking have often disappointed. One early study, investigating how the U.S. Forest Service responded to the requirement that it explicitly include BCA in its regulatory choices, found “no association between the sign of net present value and decision makers' recommendations about wilderness designation.” It concluded that the empirical record on agency performance was “consistent with the hypothesis that an economic efficiency information requirement will not insure its use in decision making unless the incentives facing managers change.”⁶ More recent work has tended to reach similar conclusions.⁷ As two leading experts on BCA, Robert Hahn and Cass Sunstein, write: “There is not strong evidence that the executive orders or the oversight process [promoted by the Office of Management and Budget, charged with enforcing the BCA requirements] has made a substantial difference in policy outcomes. Moreover, there is evidence that the benefit–cost analyses included as part of the regulatory oversight process suffer from serious flaws.”⁸

Despite disappointments in implementation, there remains a powerful case for promoting better economics at federal agencies. Observed disruptions in status quo outcomes—as in the Kahn-led airline deregulation effort—have had extremely large social payoffs.⁹ While such episodes cannot be attributed entirely to presentation of a compelling economic analysis, they appear to be driven at least in part by the creation and deployment of an effective economic efficiency case. This was Kahn's view.¹⁰ And his role in airline deregulation led naturally to the conclusion that the political context in which policymakers demanded his services was essential

⁴ Exec. Order No. 12,291, 3 C.F.R. 127 (1982). See also, Exec. Order No. 12,498, 3 C.F.R. 323 (1986), and Exec. Order No. 12,866, 3 C.F.R. 638 (1994).

⁵ Robert W. Hahn, Government Analysis of the Benefits and Costs of Regulation, 12 *Journal of Economic Perspectives* 201 (Autumn 1998), pp. 202-3.

⁶ John Loomis, *Economic Efficiency Analysis, Bureaucrats and Budgets: A Test of Hypotheses*, 12 *WESTERN JOURNAL OF AGRICULTURAL ECONOMICS* 27 (July 1987).

⁷ See, e.g., Eric Posner, *Controlling Agencies with Cost-Benefit Analysis: A Positive Political Theory Perspective*, 68 *UNIVERSITY OF CHICAGO LAW REVIEW* 1137 (2001).

⁸ Robert W. Hahn & Cass R. Sunstein, *A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis*, 150 *UNIVERSITY OF PENNSYLVANIA LAW REVIEW* 1489 (May 2002), p. 1515.

⁹ Steven Morrison & Clifford Winston, *DEREGULATION OF NETWORK INDUSTRIES: WHAT'S NEXT?* (2000).

¹⁰ Alfred E. Kahn, *Deregulation: Looking Backward and Looking Forward*, 7 *YALE JOURNAL ON REGULATION* 325 (1990).

to reform. Hence, the *economics as a productive input into policy reform* thesis has been stated most persuasively, perhaps, not by economists but by lawyers Kearney and Thomas Merrill. In their 1998 essay, *The Great Transformation of U.S. Regulated Industries Law*, they emphasize the importance of the political demand for Kahn's economic analysis as communicated in his appointment to head the Civil Aeronautics Board in 1977:

Kahn was a prominent regulatory economist who had achieved a considerable reputation as a reformer while head of the New York Public Service Commission. His nomination by President Carter was a clear signal to proceed full speed ahead with deregulation. Kahn responded with vigor, reorganizing the agency and installing a staff of "bomb throwers." Taking advantage of the broad and discretionary language of the Federal Aviation Act, Kahn's CAB encouraged widespread fare discounting and greatly liberalized entry. He then led the successful effort to lobby Congress to adopt the landmark Airline Deregulation Act of 1978, which locked the new policies in place.¹¹

Formally requiring an agency to generally consider the social costs and benefits of its actions is quite a different matter from initiating a particular political change that creates incentives for agency decisionmakers to support and embrace economic analysis. Generic changes wrought by executive orders have much the character of the former. These actions are found to affect regulatory outcomes very little. Compliance can be achieved by papering up orders with ex post economic justifications. The character of the latter, evident in the cited instance via presidential action to appoint a famous regulatory economist, requires a strategy. Pointed executive action, as taken by the Carter Administration, formed an ad hoc strategy, relying on the leadership of the president and the availability of an Alfred Kahn. It is not clear how that example could be duplicated, particularly in the context of the Federal Communications Commission.¹²

¹¹ Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUMBIA LAW REVIEW 1323 (Oct. 1998), p. 1366 (footnotes omitted).

¹² Ironically, Kahn – who had studied far more telecommunications policy than air fare regulation – had requested an appointment to head the FCC. The Carter Administration had already extended that offer to Charles Ferris, leaving CAB for Kahn. Susan Dudley, *Alfred Kahn Was A True American Hero*, DAILY CALLER (Jan. 2, 2011); <http://dailycaller.com/2011/01/02/alfred-kahn-was-a-true-american-hero/>. How history might have veered had Prof. Kahn been given his first choice is an intriguing question to ponder.

More importantly, were Fred Kahn to be reincarnated as the next FCC chairman, how could that miracle be used to create the next—improved—economic analysis at the FCC? As an institutional matter, how could the agency be reformed? In short, what would Fred do?

II. The Normative Case for Positive Economics

While generic mandates for economic analysis seem to have performed poorly, agencies that have succeeded in promoting such analysis appear to have improved their work product. It is found that “economic analyses clearly helped improve the quality of [EPA] rules...”¹³ The movement towards market-oriented pollution abatement, transitioning from technology regulation to incentive mechanisms (such as tradable permits), has been widely associated with the increasing influence of economics within both regulatory agencies and the pressure groups that influence them.¹⁴ Careful analyses are able to uncover many such instances, where improved economic analysis has led to efficiency-enhancing reforms, both those leading to the repeal of price-increasing rules (as with airline deregulation) or the initiation of welfare-enhancing rules, as under OIRA “prompt letters.”¹⁵

There is widespread understanding that, whether or not economic analysis is performed well, or by expert economists, it will be undertaken. The choices made by regulatory agencies inherently involve choices incurring sacrificed alternatives. How the rival options are valued invokes economic thinking. Decisions can be made without explicitly confronting, exploring, or quantifying the alternatives. Yet, “[f]undamentally, there is no escaping economic analysis.”¹⁶

Economists can generally help to identify and describe the relevant opportunity set. It is because of this that a natural antagonism tends to exist between agency policy officials and autonomous economists within the organization. High-level officials achieve their positions,

¹³ Morgenstern (1997), p. 3.

¹⁴ Crediting the work of economists, Janet Yellen writes, “In America, the air is cleaner, the water is purer, the and the regulatory approaches that are being used to achieve these objectives are typically more market-friendly and cost-effective than in decades past.” Janet Yellen, Foreword, in R. Lutter & J. Shogren, eds., *PAINTING THE WHITE HOUSE GREEN* vii (Wash. D.C.: RFF Press, 2004), p. x. See generally, Rob Stavins, *Market-Based Environmental Regulation*, ENRP Discussion Paper E-98-02, Kennedy School of Government, Harvard University (Feb. 1998); http://belfercenter.ksg.harvard.edu/files/disc_paper_98_02.pdf.

¹⁵ Hahn & Sunstein (2002), p. 1222-23. OIRA is the Office of Information and Regulatory Affairs at the Office of Management and Budget.

¹⁶ Morgenstern (1997), p. 3.

realizing considerable personal benefits (including the creation of human capital making them far more valuable in commercial labor markets), via a political process. That process produces public policies, outputs that are non-excludable public goods. All members of society will “consume” them, even as costs and benefits are distributed heterogeneously. The political coalition that supplies these goods will naturally seek to emphasize the benefits, claiming credit for gains, while de-emphasizing costs. Often such losses can be blamed on other parties or circumstances, reducing the constraints on agency decision-makers even further.

Properly done, economic analysis provides an audit, tallying accounts to reveal bottom line effects. In fundamental respects, it is more independent, more easily understood, and more reliable than the information produced by policy makers who have crafted and implemented the policies in question. Those actors have a conflict of interest in performing the audit; they are monitoring their own actions. Competition among political parties, and among news organizations in their reporting of agency actions, may mitigate this conflict of interest, but collective action problems also challenge the effectiveness of these institutions. Political parties are riddled with free rider problems,¹⁷ as is the distribution of news to large audiences of disinterested readers. The latter primarily internalize the entertainment (news consumption) aspects of reports about government, gaining little utility from the purely informational components helpful for monitoring public officials.¹⁸ Indeed, economic analysis of public policy can be understood as constituting a non-excludable public good, benefitting society generally. It is relatively difficult to privately produce high-quality economic analysis of complex policy issues, improving regulatory choices, and to then appropriate a significant portion of the social gains in the sale of such work. Production is then left to the bureaucracies that supply the regulations (and are conflicted), as well as to the interest groups that seek (private) gains from altering the regulations – also conflicted.

To some considerable degree, the competition between conflicted private interests yields useful information. Firms with distinct positions in the marketplace often espouse opposing policy positions, mustering theory and evidence to marshal support for rival rules. Regulatory

¹⁷ The classic analysis is James Buchanan & Gordon Tullock, *THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY* (Ann Arbor: University of Michigan Press; 1962).

¹⁸ A similar argument is crafted in Michael C. Jensen, *Toward A Theory of the Press*, in K. Brunner, ed., *ECONOMICS AND SOCIAL INSTITUTIONS* (Martinus Nijhoff Publishing Co.; 1979).

agencies are well aware of the richness of the informational flow, and routinely examine the comments submitted by competing economic interests to learn about the markets they regulate.

Yet economic analysis, per se, generally enjoys only the support of relatively weak constituencies within the regulatory agency. Agencies have agendas that, loosely stated, are crafted to maximize support for their political benefactors (coalition partners) subject to the constraint that basic constitutional rules are obeyed. The social impacts of keenest interest are reliably communicated by coalition partners. Independent economic analysis of social welfare is neither necessary nor definitive. “[T]he ability of motivated bureaucracies to abuse economics to sell pet projects is not news.”¹⁹

The institutional problem is to create new structures, presumably within regulatory agencies, that reduce the free rider problem associated with economic analysis. This can, potentially, be achieved by endowing offices or divisions within agencies with the authority to conduct economic analysis of regulatory choices. Where such offices are controlled by economists, and endowed with a measure of both autonomy and influence, they can help advance the professional priorities of an important set of experts within the regulatory agency. As in the worker-managed firm structure of academic departments at universities, incentives to improve the human capital of the professionals heavily influence institutional choices and activities. Economists are driven to provide public goods, relatively reliable estimates of net regulatory benefits, in seeking to improve their standing within the economics profession. This may lead such employees to undertake certain activities or expenditures that enhance their interests but do not directly advance the goal of bettering agency decisionmaking. This is part of the price that is paid to incentivize the provision of public goods. Permitting economists to pursue career goals insulates them, to some degree, from co-optation by the bureaucracy.²⁰

It is broadly accepted that the antitrust enforcement agencies, the U.S. Department of Justice Antitrust Division (DOJ) and the Federal Trade Commission (FTC), exemplify how the tools of micro-economics can fundamentally improve decisionmaking. Both agencies incorporate

¹⁹ Randall Lutter, *Head in the Clouds Decisionmaking: EPA's Air Quality Standards for Ozone*, in R. Lutter & J. Shogren, *PAINTING THE WHITE HOUSE GREEN* 46 (Wash. D.C.: RFF Press; 2004), p. 62.

²⁰ The socially useful nature of “wasteful” rent seeking is often under-appreciated. See the revealing essay by Dwight R. Lee, *In Defense of Excessive Government*, 65 *SOUTHERN ECONOMIC JOURNAL* 674 (April 1999). Lee points out that, despite the \$600 hammers, the private gains realized by military contractors do effectively produce a constituency for national defense, a non-excludable public good.

the views of economists deeply within regulatory processes. Moreover, economists enjoy successful professional careers either with long tenure at the agencies, or by serving intermittently at the agencies. Service is a professionally prestigious appointment, and the agencies are seen to attract top academic talent.

It appears that there are two major reasons for this outcome. First is the elevation of an economist-run office. A brief examination of rival agencies' organizational charts reveals that both antitrust enforcement bureaucracies feature high-level offices, managed by economists, dedicated to economic analysis. (See Appendices 1-4, displaying charts for EPA, FCC, DOJ and FTC.) The Environmental Protection Agency has a large number of offices, centers and divisions, of which two appear to be devoted to economic analysis. They are buried deep within the organizational chart. The Economic and Policy Analysis Branch (EPAB) in the Economics, Exposure and Technology Division (EETD), under the Office of Pollution Prevention and Toxics (OPPT), is charged with a wide range of analytical oversight functions (see Appendix 5). It can be used, or moved about (altering its role within the bureaucracy), as per the choices of agency officials outside of the Branch. The National Center for Environmental Economics (NCEE) is located in the Office of Policy, under the Office of the Administrator.²¹ Among the twelve listed EPA Offices listed separately from the Office of the Administrator, none feature economic analysis as a central mission.²²

The Federal Communications Commission goes further, providing no location anywhere in the organizational structure devoted primarily to economic analysis. This includes 10 offices and 7 bureaus. While the Office of Strategic Plans and Policy Analysis (OSP) includes economists, it is primarily staffed by non-economists, has been traditionally headed by a non-economist, and has been reshuffled (and renamed) by recent FCC Chairmen. There is a Chief Economist (CE) at the FCC, an academic visitor who serves a short-term (one-year or two-year) appointment made by the Commission Chair. This position does allow the FCC to receive professional economic advice, but of a very limited sort. Personnel can be assigned to assist the CE on an ad hoc basis, but there is no professional staff dedicated to serve under the direction of

²¹ Parallel organizations (along with NCEE) in the Office of Policy include the Office of Regulatory Policy and Management, the Office of Strategic Environmental Management, the Office of Sustainable Communities, and Climate Change Adaptation Activities. EPA Organization Chart; <http://www.epa.gov/aboutepa/opei.html>.

²² The Office of Policy does include several subdivisions, one of which is the National Center for Environmental Economics.

the CE. This, and the short duration of appointments, mitigate against long-term influence in rule makings that typically take many years to evolve.

The second major driver of serious economic analysis in the antitrust agencies is found in the manner in which the institutional home for economists is well-integrated within the agency's administrative decision-making. Were an economists' office to be isolated, it would not only lose persuasiveness it would be likely to pursue research topics of little interest or importance to agency officials. An equilibrium might be reached in which economists pursued "blue sky" inquiries, publishable in technical journals, while lawyers and other regulatory professionals supplied their own "back of the envelope" economics when churning out agency rules. Only by actively participating in rule makings or litigation will agency economists learn about the analytical challenges confronting policymakers, meaning that the autonomy of economists cannot – for such an office to be effective – be complete. "In 1973, when the Antitrust Division created the Economic Policy Office, they chose a functional form to give economists an independent voice, but tried to tie the Office more closely to [the] enforcement mission of the Antitrust Division."²³

Both the DOJ and FTC have achieved a measure of both independence and integration in the employment of economic expertise, and may serve as role models for the Federal Communications Commission. The DOJ features a structure where substantive actions of the Department are placed under the aegis of five Deputy Assistant Attorneys General (DAAG). One of these five is an economist, generally of high academic rank (taking leave from his/her home institution for government service), who assumes the position of DAAG for Economic Analysis for a limited term, generally one to two years. (The position has most recently been held by Carl Shapiro of U.C. Berkeley. His immediate predecessor was Dennis Carlton of the University of Chicago.) Three offices exist under this branch, all staffed and directed by Ph.D. economists. These economists have direct input into antitrust litigation and merger evaluations conducted by the agency, working in tandem with Antitrust Division lawyers. DOJ economists often serve as expert witnesses in cases brought by the Department. In addition, there is active professional involvement by the Economic Analysis Group; working papers are of peer-reviewed quality (and often published in mainline scholarly journals), and professors from leading academic institutions regularly give seminars at the agency. Both aspiring young PhDs, and successful

²³ Luke Froeb, Paul Pautler, and Lars-Hendrik Roller, *The Economics of Organizing Economists*, Vanderbilt Law & Economics Working Paper 08-18 (2008), p. 3.

mid-career scholars, compete to spend time working on the DOJ economics staff, which is considered a prestigious appointment for applied micro-economists. There are approximately 60 Ph.D. economists at the DOJ.²⁴

Similarly, the FTC is structured to include an office devoted to economic analysis. Among the five Bureaus at the Commission, the Bureau of Economics is managed and staffed by economists. Joe Farrell, from U.C. Berkeley, currently heads the Bureau (his predecessor was Michael Baye of Indiana University). Economists at the FTC are active in industrial organization research, attend professional meetings, and publish frequently in scholarly journals. They are well integrated in the substantive determinations of the Commission. There are about 70 Ph.D. economists at the FTC.²⁵

James Q. Wilson's 1980 book, The Politics of Regulation,²⁶ helps explain how the organizational approaches of the DOJ and FTC influence regulatory outcomes.²⁷ At either antitrust enforcement agency, lawyers and economists work jointly to select cases, to evaluate theories of consumer harm, and to fashion remedies for perceived violations of the antitrust laws. What has developed are characteristically distinct perspectives. Lawyers in the FTC Competition Bureau (managed and staffed by attorneys) and in the DOJ Civil Enforcement section tend to favor cases or challenges (in merger assessments) that promote strong enforcement and push existing law in new directions. They also look to select cases for litigation that are not so large or ambitious as to become decade-long projects. Many of the attorneys are recent graduates of highly-ranked law schools, and see government employment as a combination of public service and post-graduate education. Getting into court and acquiring trial experience is a natural way for them to supplement their human capital. Gaining professional reputation as a tough

²⁴ Lawrence J. White, *The Growing Influence of Economics and Economists on Antitrust: An Extended Discussion*, NYU Law and Economics Research Paper No. 08-07 (Feb. 1, 2008), p. 11.

²⁵ Ibid.

²⁶ James Q. Wilson, *THE POLITICS OF REGULATION* (New York: Basic Books; 1980).

²⁷ See, in particular, Suzanne Weaver, *Antitrust Division of the Department of Justice*, Chapter 4; Robert A. Katzmann, *Federal Trade Commission*, Chapter 5.

prosecutor also enhances market value in post-agency employment.²⁸ “The lawyers do not stand on personal ceremony or ideological principle in searching for ways to bring and win cases.”²⁹

Economists have strong professional incentives to subject the legal theories and regulatory strategies pursued by the agency to consumer welfare tests. The FTC “staff attorney... is prosecution-minded.”³⁰ The FTC staff economist is not. Given the strong structural position of the Bureau of Economics, legal theories subjected to BCA are often found wanting. Lawyers feel constrained by the challenges, and “economists are accused of being ‘case-killers.’”³¹ The same strains of professional disagreement emerge among lawyers and economists at the DOJ.

These intra-agency conflicts are both natural and productive. They require a structure in which economists are driven by professional standards that may be in conflict with agency priorities. An office with sufficient autonomy so as to conduct independent economic analysis, as driven by economists’ career goals, buffers efforts to achieve other ends. Both antitrust agencies have developed such institutions, advancing from earlier decades when economists, while employed by the antitrust agencies, enjoyed no organizational authority. Hired by lawyers and serving as minions within the bureaucracy, the economists on staff at the DOJ Antitrust Division were—as Richard Posner wrote in 1971—“handmaidens to the lawyers, and rather neglected ones at that.”³²

Through a series of fortuitous developments, however, the power of economists to shape policy at both agencies has substantially altered regulatory processes and outcomes.³³ What is now the Economic Analysis Group was initiated at the DOJ in 1973, driven by the temporary appointment (at DOJ) of Cornell University economist George Hay. The Bureau of Economics at the FTC, while launched decades earlier, gained considerable influence within the agency in the

²⁸ “Private attorneys as well as government lawyers approve of colleagues who are vigorous prosecutors. There is no particular mystery in this, since the private antitrust defense bar tends to make money when the government attacks its clients.” Weaver (1980), p. 150. Of course, corporations also seek to hire vigorous prosecutors, capturing a premium generated by acquiring knowledge of – and defenses for – the most damaging government strategies.

²⁹ Weaver (1980), p. 145.

³⁰ Katzmann (1980), p. 175.

³¹ *Ibid.*, p. 172.

³² Richard A. Posner, *A Program for the Antitrust Division*, 38 UNIVERSITY OF CHICAGO LAW REVIEW 500 (Spring 1971), p. 532.

³³ These are described in White (2008), pp. 10-11. Interestingly, the reforms did not involve congressional legislation.

1970s. With court rulings, which have increasingly come to rely on economic analysis, antitrust regulation has been transformed. “Economics has had an enormous positive effect on the evolution of antitrust policy over the last 30 years or so.”³⁴

The intra-agency tension between lawyers and economists is healthy. It pulls a broader set of considerations into the analysis of government action. Why it has become more developed within the antitrust enforcement bureaucracies relative to other parts of the government is a question ripe for analysis. But the purpose of this paper is to note this relatively strong tension within the DOJ and FTC, and to propose a similar institutional feature for the Federal Communications Commission. Before doing that, however, I detour to note the historical irony such a development would suggest.

III. The Curious History of Economics at the FCC

The era of putting auction theory to work began in 1993-94, with the design and operation of the radio spectrum auctions in the United States.³⁵

Perhaps the most successful policy suggestion ever put forth by an economist was the proposal for auctioning radio spectrum rights offered by Ronald Coase in a 1959 article.³⁶ When competitive bidding for wireless licenses was then adopted in the U.S. and other countries, some 30 years later, the reforms became textbook examples of how micro-economic thinking could improve government regulation.

Ironically, however, federal government economists actively discouraged the use of competitive bidding to distribute spectrum rights for many years. The Federal Communications Commission (FCC), successor to the Federal Radio Commission, allocated airwaves and assigned usage rights under a 1927 statute that authorized the agency to act according to “public interest, convenience, or necessity.” Selling licenses to high bidders was neither permissible nor, given the FCC’s view of the matter, advisable.

³⁴ Dennis Carlton, *Does Antitrust Need to be Modernized?* 21 JOURNAL OF ECONOMIC PERSPECTIVES 155 (Summer 2007), p. 174.

³⁵ Paul Milgrom, *PUTTING AUCTION THEORY TO WORK* (N.Y.: Cambridge University Press; 2004), p. 1.

³⁶ Ronald H. Coase, *The Federal Communications Commission*, 2 JOURNAL OF LAW & ECONOMICS 1 (1959).

In 1951, Leo Herzel, a law student at the University of Chicago, challenged this state of affairs.³⁷ Herzel argued that the efficient way to assign rights, such as those for television broadcasting, was not via “comparative hearings” but competitive bidding. Revenues would go to the U.S. Treasury and rights would be assigned to those enterprises that valued them most highly. Herzel based his analysis on economic theory, as developed by Abba Lerner and Frank Knight, showing how economic choices made under conditions of market competition generally optimize resource use for society.

The article received sufficient attention as to merit a response from the Chief Economist of the FCC, Dallas Smythe.³⁸ This article was dismissive, mocking Herzel’s reliance on analysis that is “the fashion of economists to amuse themselves.”³⁹ The FCC economist presented the view that market allocation of airwave rights was not worthy of serious consideration:

Surely it is not seriously intended that noncommercial radio users (such as police), the nonbroadcast common carriers (such as radio-telegraph) and the nonbroadcast commercial users (such as the oil industry) should compete with dollar bids against the broadcast users for channel allocations.⁴⁰

This prompted a rejoinder from Herzel:

It certainly is seriously suggested. Such users compete for all other kinds of equipment or else they don't get it. I should think the more interesting question is, Why is it seriously suggested that they shouldn't compete for radio frequencies?⁴¹

Ronald Coase, then researching the origins of the British Broadcasting Corporation, had been thinking about the feasibility of using private property rights to regulate radio spectrum use, but was undecided. Reading this exchange clarified his thinking:

[O]n reading Herzel's article I did not immediately jump to the conclusion that a market with pricing would be superior to regulation by the FCC. It was necessary to take into account the existence of transaction costs. The question... was, however, clinched for me by the reply to Leo Herzel's article... written by Dallas

³⁷ Leo Herzel, ‘Public Interest’ and the Market in Color Television Regulation, 18 UNIVERSITY OF CHICAGO LAW REVIEW 802 (1951).

³⁸ Dallas R. Smythe, *Facing Facts About the Broadcast Business*, 20 UNIVERSITY OF CHICAGO LAW REVIEW 96 (Autumn, 1952).

³⁹ *Ibid.*, p. 98.

⁴⁰ *Ibid.*, p. 100.

⁴¹ Leo Herzel, *Rejoinder*, 20 UNIVERSITY OF CHICAGO LAW REVIEW 106 (Autumn 1952), p. 106.

Smythe, who had been chief economist of the Federal Communications Commission. His objections were so incredibly feeble... that I concluded that, if this was the best that could be brought against his proposal, Leo Herzel was clearly right.⁴²

It also led Coase to think about the errors in Smythe's approach which asymmetrically considered the costs of administrative rules vis-à-vis those of the price system.⁴³ The insights garnered there led directly to his 1960 paper on social cost, which became the most cited scholarly article in the social sciences.⁴⁴

When Coase used these insights to explain how markets could potentially allocate radio spectrum, substituting for administrative allocations at the FCC, he was not taken seriously either. In presenting his analysis to the Commission at a public hearing, the first question asked was by Commissioner Philip Cross: "Are you spoofing us? Is this all a big joke?"⁴⁵

⁴² Ronald H. Coase, *Law and Economics at Chicago*, 36 JOURNAL OF LAW & ECONOMICS 239 (April 1993), p. 249.

⁴³ Smythe wrote:

It is an engineering fact of life, learned the hard way in the chaotic period of market control of AM broadcasting, July, 1926 to February, 1927, which led to the conscious national decision to abandon the market controls and to substitute statutory and administrative controls as the basis of our radio policy. (Smythe 1952, p. 101)

Coase saw that the relevant policy options were mischaracterized. The choice was not between "chaos" and "administrative controls," but among different mechanisms for delineating control over resources using different forms of property rights. A regime of central planning might be more advantageous than one relying on decentralized resource (airwave) owners, but the question could not be decided by assuming away the marketplace alternative to a government regulation default. It was necessary to examine the costs and benefits of the relevant alternatives. This was the crux of Coase (1959). Later research would show fatal flaws in the historical interpretation of Smythe. The "chaotic period" of July 1926 to Feb. 1927 was caused by a lapse in the enforcement of priority-in-use broadcasting rights. Due to conflicting federal court decisions, and a strategic decision by the Secretary of Commerce, Herbert Hoover, the Commerce Department withdrew its enforcement of these rights on July 9, 1926. This led to a "period of the break-down of the law," as it was called at the time. This truncation of ownership rights – implicitly acknowledged by Smythe, who dates the "chaos" from July 1926 – interrupted the orderly development of the radio broadcasting market, which had occurred to that point under common law property rules. Thomas W. Hazlett, *The Rationality of U.S. Regulation of the Broadcast Spectrum*, 33 JOURNAL OF LAW & ECONOMICS 133 (April 1990).

⁴⁴ Ronald H. Coase, *The Problem of Social Cost*, 3 JOURNAL OF LAW & ECONOMICS 1 (1960). See also, Thomas W. Hazlett, David Porter, and Vernon L. Smith, *The Disruptive Clarity of Ronald Coase*, 54 JOURNAL OF LAW & ECONOMICS (forthcoming, Nov. 2011).

⁴⁵ Ronald Coase, *Comment on Thomas W. Hazlett: Assigning Property Rights to Radio Spectrum Users: Why Did FCC License Auctions Take 67 Years?* 41 JOURNAL OF LAW & ECONOMICS 577 (Oct. 1998), p. 579.

Interest in the intriguing idea nonetheless led the Rand Corporation to fund a study to operationalize the reform. Ronald Coase, joined by William Meckling and Jora Minasian, wrote a two-hundred page monograph offering a compelling economic and institutional analysis.⁴⁶ But Rand then refused to publish the paper, written in 1962, on advice of economists who reviewed the paper and warned the think tank that the auctions idea Coase espoused was radical and dangerously controversial. One wrote, “I know of no country on the face of the globe—except for a few corrupt Latin American dictatorships—where the ‘sale’ of the spectrum could even be seriously proposed.”⁴⁷ It went on to sound dire warnings about the “public relations” problems that would haunt Rand if it were to publish the study, citing the

fire and counterfire of CBS, FCC, Justice, and most of all—Congress. But as the (report) is presently designed, I am afraid that to issue it ... is asking for trouble in the Washington–Big Business maelstrom because we haven't in the first place measured up to the intellectual requirements of the problem selected for study.⁴⁸

Another reviewer, identified as economist Daniel Ellsberg, told the authors that “by definition, the spectrum was a public good and consequently a market solution was not appropriate and that the project represented a waste of Rand's resources.”⁴⁹ Within the FCC, experts were equally dismissive of Coase. H.H. Goldin, who served as Chief of the Research and Education Division of the FCC and, later, as a professor of communications, argued that Coase could not claim any empirical support for his proposition that spectrum rights would admit, in a practical sense, to market allocation. Moreover, a strong consensus rejected his (Coase's) views:

After the initial shock of rationally considering the use of the pricing mechanism in frequency allocations, the virtually unanimous view of communications specialists would be that the multiplicity of users both national and international (for all frequencies technically belong to all peoples and not to any single national unit), the interference characteristics of radio with signals at relatively low energy levels interfering at diverse points many hundreds of miles away (and not confined to national borders) and the hundreds of thousands of licensees involved

⁴⁶ Ronald Coase, William Meckling, and Jora Minasian, *Problems of Frequency Allocation*, Rand Corporation DRU-1219-RC (1995).

⁴⁷ Coase (1998), p. 579.

⁴⁸ *Ibid.*, p. 580.

⁴⁹ Rand quarantined the paper. It was finally released for publication in 1995, one year after the FCC began auctioning licenses. It is now available online, without charge at the Rand website; <http://www.rand.org/pubs/drafts/DRU1219.html>.

in addition to the many millions of consumers make the pricing mechanism unworkable for frequency allocation. Certainly that is my view. And until Dr. Coase or a friendly ally makes the study he refers to and overturns the "establishment's" view on this point, I doubt whether Dr. Coase's suggestion will ever get into the mainstream.⁵⁰

Let us recall that the ideas that Coase had put forth were those that would win him a Nobel Prize in Economics in 1991. On that basis, it may fairly be asked: what chance did other good ideas have at the agency? In fact, some progress has been made over the ensuing decades. Market efficiencies have been advanced through measured deregulatory moves, creating greater flexibility in the use of spectrum for wireless licensees.⁵¹ Auctions are used for license assignments as per a 1993 act of Congress.⁵² These reforms have spread around the world, often being adopted in more radical versions applying Prof. Coase's market allocation insight not in the sales of wireless licenses, but for the underlying radio spectrum.⁵³

It is the premise of this paper that such pro-consumer policy changes might have come more rapidly, more fully, and more successfully were economic analysis given a stronger, more independent voice within the agency. This is difficult to establish, perhaps, from the ironic history of economic analysis at the Commission. But it is discerned from simple theories of agency decisionmaking, as well as from the pattern at other federal agencies, in particular the DOJ and FTC.

⁵⁰ H.H. Goldin, *Discussion of "Evaluation of Public Policy Relating to Radio and Television Broadcasting: Social and Economic Issues"* (Coase), 41 *LAND ECONOMICS* 167 (May 1965), p. 168.

⁵¹ John R. Williams, *Private Frequency Coordination in the Common Carrier Point-To-Point Microwave Service*, OSP Working Paper No. 21 (Sept. 1986); Howard Shelanski & Peter Huber, *Administrative Creation of Property Rights to Radio Spectrum*, 41 *JOURNAL OF LAW & ECONOMICS* 581 (Oct. 1998); Thomas W. Hazlett, *Optimal Abolition of FCC Spectrum Allocation*, 22 *JOURNAL OF ECONOMIC PERSPECTIVES* 103 (W 2008).

⁵² Thomas W. Hazlett, *Assigning Property Rights to Radio Spectrum Users: Why Did FCC License Auctions Take 67 Years?* 41 *JOURNAL OF LAW & ECONOMICS* 529 (Oct. 1998).

⁵³ Thomas W. Hazlett, *Property Rights and Wireless License Values*, 51 *JOURNAL OF LAW & ECONOMICS* 563 (Aug. 2008).

IV. Proposing an Office of Economic Analysis⁵⁴

Basic Structure

To enhance the quality of economic analysis in FCC regulation, this paper proposes the creation of an Office of Economic Analysis (OEA) within the Federal Communications Commission. The purpose is to create an institutional home for economists, well-trained in analytical concepts and highly competent in evaluating welfare changes associated with FCC regulation, to appraise policy issues at the agency and thereby influence agency outcomes. This program will succeed in raising the quality of regulatory decisionmaking to the degree that such economists are independent, insulated from the conclusions reached by other policy analysts at the agency, and are actively engaged in the process of writing Notices, Rule Makings, Reports, and Orders.

The structural mechanism to achieve such independence and influence is based on the creation of an economist-managed OEA. The Director would be a Ph.D. economist with relevant expertise in communications markets, and would supervise a staff of economists, most having Ph.D.s. The Chief Economist position would remain, as it brings prominent academic visitors to cross-pollinate with Commission staff, a valuable collaboration. This visiting position, presumably housed within the OEA, would work with OEA economists but not have direct management responsibility for more than a small research staff dedicated to the CE. As at the DOJ and FTC, strong authority for the Office would be achieved via an OEA Director serving as a long-term policy maker with ongoing authority (flowing, in part, from institutional knowledge and relationships) within the organizational structure. The Office would formally participate in major regulatory proceedings, publish separate analyses of Commission agenda items, and issue Working Papers.

Economists working at the FCC are today spread throughout various Offices and Bureaus. Their work is supervised, in the main if not entirely, by non-economists, and they exercise little independent jurisdiction over the projects they analyze or how they budget their time. They are unable to exploit economies of scale or scope; opportunities to work with other economists are highly limited, and their research choices are too highly constrained. In agencies

⁵⁴ This proposal leans heavily on the 2004-05 proposal of Martin Perry.

where economists are able to engage in team projects and to develop deep knowledge about subject areas relevant to the agency's mission, they are able to generate more productive contributions.

Personnel

The OEA would hire professional economists to evaluate FCC policy choices, using the standard tools of academic economists. Such personnel would also benefit from familiarity with communications markets, and from the sub-disciplines of industrial organization, econometrics, and law and economics. Economists scattered through the FCC could remain scattered; there is no need to force a consolidation where all FCC economists are concentrated within the OEA. Even if such an approach were possible to implement (can the General Counsel's office not hire a particular lawyer if she is also an economist?), it is inadvisable. Having economic expertise in the Wireless Telecommunications, Media, or Wireline Competition Bureau may continue to prove helpful to those departments, and indeed increase in effectiveness as the OEA builds new and more independent analytical functionality.

Institutional Mandate and Staff Responsibilities

The OEA would operate as other FCC offices operate, participating in the writing of regulations, commenting on proposals, and producing research for both internal and public consumption. The Office would receive assignments from Commissioners, most often the Chair, assignments that may be prompted by suggestions from the expert economists hired to work at OEA.

The Office would function similarly to the Bureau of Economics at the FTC, which has no specific line of authority. Alternatively, it is possible to mandate that an economic analysis, or BCA, be included with each FCC Order involving more than some threshold level of economic activity (roughly analogous to requiring, under Hart-Scott-Rodino, government approvals for corporate acquisitions of more than \$15 million). The proposal here is to allow the Office, as constituted, to emerge and pursue its own mandate. Were it excluded from productive participation, an approach requiring a BCA might serve as Option B. But the evidence as to the ineffectiveness of formal requirements for BCA suggest that the more important focus is on constituting an Office that will have incentives and opportunities to push economic analysis as a full partner within the agency.

Economists within the OEA would be expected to conduct active research programs, publishing in peer-reviewed journals, to host seminars and scholarly conferences, and to give

presentations at professional meetings, universities, technical colloquium, industry or trade shows, and think tanks. While proprietary information is properly protected by regulatory agencies, it is important that staff be given wide latitude to share research and participate in public discussion of ongoing regulatory issues. It is through such exchanges that the public comes to understand what challenges regulators are facing, and the regulators to learn what ideas may be available to improve the rule regime.

The practice, in recent years, of barring FCC staff from attending or speaking at public fora is highly objectionable on multiple grounds. Under Chairman Kevin Martin, 2005-09, FCC staffers were subject to strict rules about participating in conferences, including those held by other branches of the federal government. This hampered both the effectiveness of the conferences, dedicated to regulatory issues of primary concern to the FCC, and the effectiveness of FCC staff members, who were unable to engage in potentially fruitful discussions.⁵⁵

A natural line of authority that could be vested in the OEA would involve creation and maintenance of major FCC databases. Economists, working with staff experts elsewhere in the agency, could potentially improve the manner in which statistics are collected and the resulting data displayed. This process is ongoing; economists have already played a role, given their employment in the various branches and divisions.

⁵⁵ In addition to my personal experience on the matter, the FCC restrictions were documented in a congressional report.

Astonishingly, FCC employees were even instructed not to talk to their colleagues in the agency without first going through the chain of command. FCC employees were also told they were restricted from talking to employees at other Federal agencies as well. Examples included not being able to attend or fully participate in working groups, meetings, task forces, and outside telecommunications events. Not surprisingly most employees we interviewed found restrictions on intra- and interagency communication unreasonable, frustrating, and counter-productive.

In addition, at a time when the agency was called on to publicly answer allegations that two internal ‘localism’ reports had been suppressed, Chairman Martin’s office issued a directive that economists were also prohibited to cease working on all ‘unapproved’ research and papers. The employees were also prohibited from working on ‘previously authorized work.’ In a statement that is almost as humorous as it is uninformative, the agency told its employees that

“Projects that were authorized in the past are not necessarily considered to be authorized at this time.”

Deception and Distrust: The Federal Communications Commission Under Chairman Kevin J. Martin, Majority Staff Report prepared for the Committee on Energy and Commerce, U.S. House of Representatives, 110th Congress (Dec. 2008), p. 21 (footnotes omitted; emphasis original).

Size and Scope

Given budgetary constraints facing the agency and, indeed, the federal government, it is unlikely that a full-blown OEA, employing 60 or 70 Ph.D. economists (as in the DOJ and FTC offices), will instantly emerge. To the extent that a new Office is feasible, it will likely incorporate several existing FCC economists, supplemented with additional slots transferred from other bureaus, and then build over time.

In FY2011 the FCC is operating with 1917 employees (full-time equivalents) and a budget of \$354 million.⁵⁶ The Commission notes that, as part of its responsibility to produce a National Broadband Plan (which was released in March 2010), it has “brought on close to 54 data experts, statisticians, econometricians, economists, and other expertise” since the beginning of 2009.⁵⁷ Even if much of this staff is being shed, it presents a potentially opportune resource pool to help launch an important institutional reform. Indeed, as this skill set in economic analysis was specifically acquired to assist in the analysis undergirding the National Broadband Plan, and as the FCC budget lists “Broadband” as one of its six strategic agency-wide focus areas, it may be possible to support the emergence of the OEA through positions or funds already in place for analytical support regarding competition and regulation in broadband markets.

V. Conclusion

As of the early 1960s... the two [antitrust] enforcement agencies had few well-trained economists on their staffs, and the appearance of an economist as an expert in support or testifying on behalf of the plaintiffs or defendants in antitrust litigation was rare. Today, by contrast, both agencies have sizable staffs of well-trained economists, and most antitrust cases of any kind have economists involved on one or both sides.⁵⁸

The basic requirements for creating an Office of Economic Analysis at the FCC is that a critical mass of economic expertise be assembled in one location; that the office be directed by an economist of high rank and authority within the agency; that the office be given latitude to select research teams, relevant study projects, and to thereby acquire deep knowledge of relevant markets and policies; that the staff professionals be active in scholarly research; and that this sophisticated analytical base is productively participates in FCC policymaking. This latter, most

⁵⁶ Federal Communications Commission, *Fiscal Year 2012 Budget Estimates Submitted to Congress February 2011*; http://www.fcc.gov/Daily_Releases/Daily_Business/2011/db0214/DOC-304636A1.pdf, pp. 1, 7.

⁵⁷ *Ibid.*, p. 1.

⁵⁸ White (2008), p. 2.

important, condition requires ready access to the FCC chair, to other commissioners, and to bureau chiefs outside of OEA. Seeing how the DOJ and FTC have developed mature, independent, institutional bases for economic analysis gives one hope that it may indeed be possible to upgrade the role of economists from “handmaidens to the lawyers.”

Conjuring an institutional structure that would accomplish these goals is not a simple task and yet, sadly, the ideas advanced herein are very simple. Hopefully, they will stimulate better thinking. Indeed, I offer virtually no guidance as to how such a policy might be implemented given the practicalities of politics, agency structure, and budget constraints. I leave those more arduous tasks to personnel working above my pay grade.

Appendices

Appendix 1.⁵⁹

EPA Organizational Structure



Headquarters offices:

Office of Administration and Resources Management 202-564-4600 About OARM	Office of Air and Radiation 202-564-7404 About OAR	Office of Chemical Safety and Pollution Prevention 202-564-2902 About OCSP	Office of the Chief Financial Officer 202-564-1151 About OCFO
Office of Enforcement and Compliance Assurance 202-564-2440 About OECA	Office of Environmental Information 202-564-6665 About OEI	Office of General Counsel 202-564-8040 About OGC	Office of Inspector General 202-566-0847 About OIG
Office of International and Tribal Affairs 202-564-6600 About OITA	Office Research and Development 202-564-6620 About ORD	Office of Solid Waste and Emergency Response 202-566-0200 About OSWER	Office of Water 202-564-5700 About OW

⁵⁹ EPA website; <http://www.epa.gov/aboutepa/organization.html>.

Appendix 1. (cont'd).⁶⁰

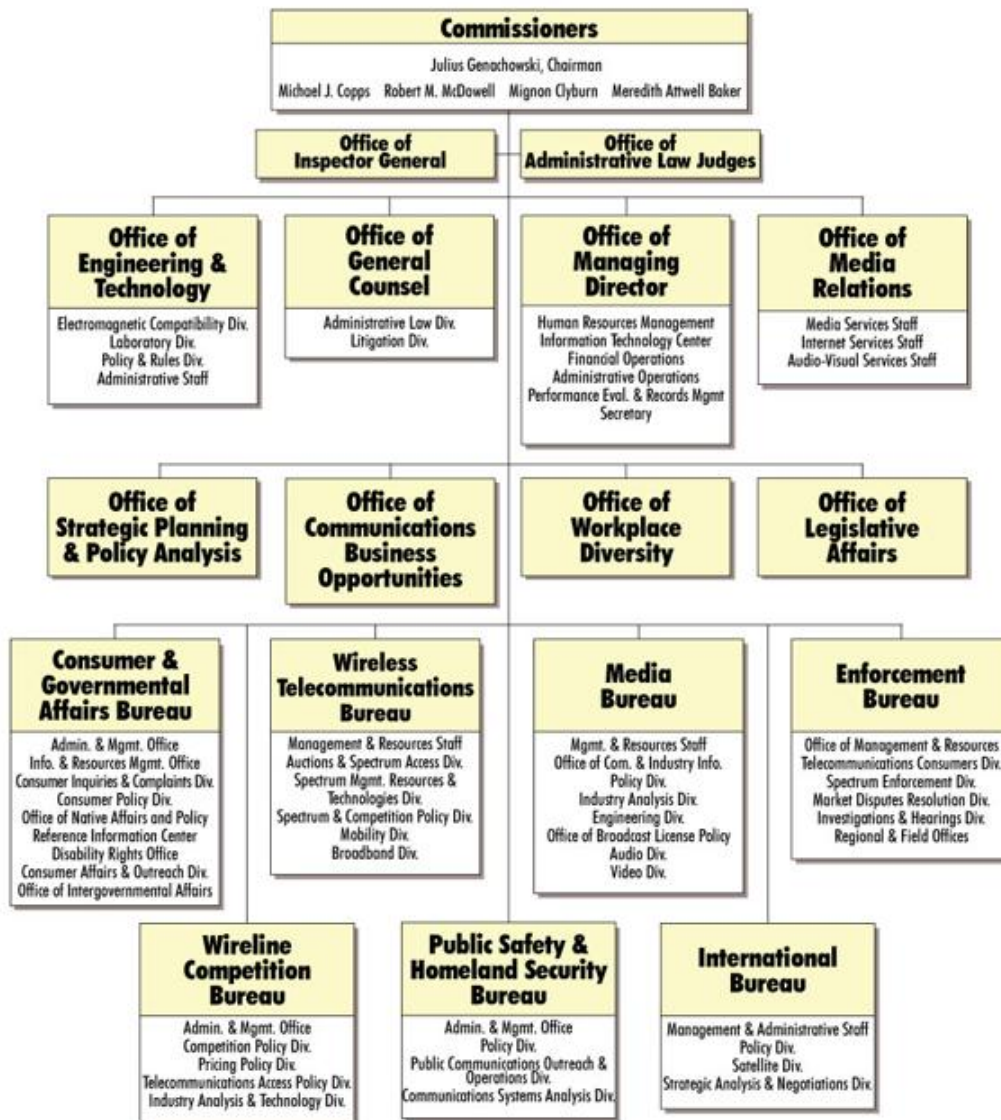
Organization Chart for the Office of Chemical Safety and Pollution Prevention (OCSP)



⁶⁰ EPA website; http://www.epa.gov/aboutepa/orgchart_ocspp.html.

Appendix 2.

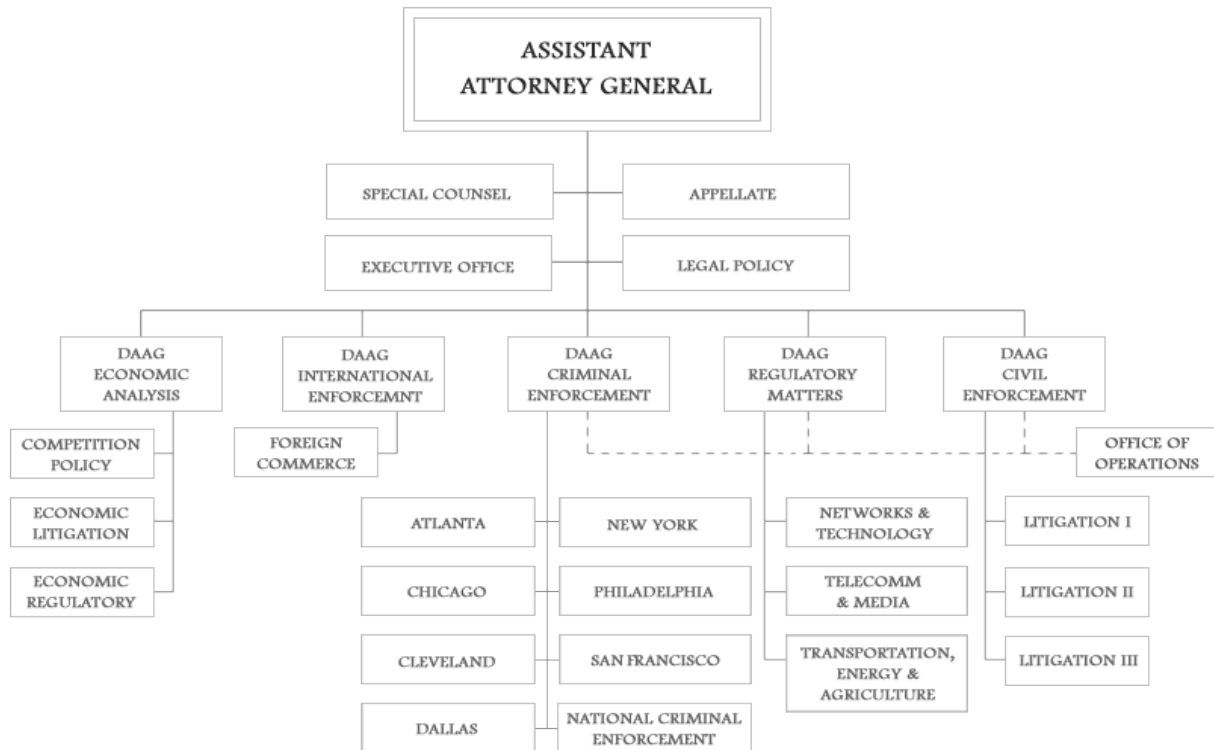
Organizational chart of the Federal Communications Commission.⁶¹



⁶¹ FCC website; <http://www.fcc.gov/fccorgchart.html>.

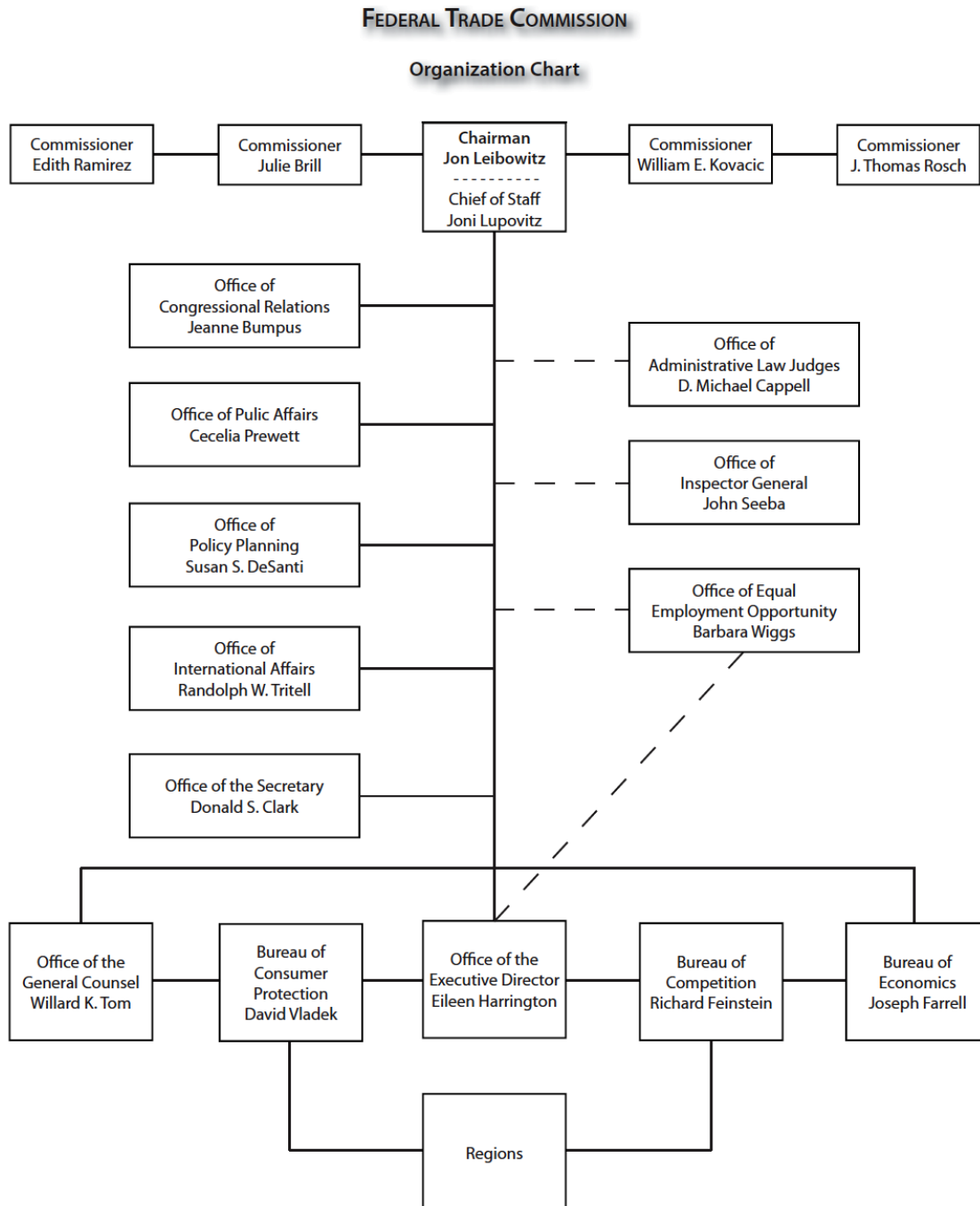
Appendix 3.

U.S. Department of Justice Antitrust Division organization chart.⁶²



⁶² U.S. Department of Justice Antitrust Division website; <http://www.justice.gov/atr/about/org.html>.

Appendix 4.⁶³



⁶³ FTC website; <http://www.ftc.gov/ftc/ftc-org-chart.pdf>.


Appendix 5.

The domain of the Economic and Policy Analysis Branch (EPAB) in the Economics, Exposure and Technology Division (EETD), under the Office of Pollution Prevention and Toxics (OPPT), in the Environmental Protection Agency (EPA).

The Office of Pollution Prevention and Toxics (OPPT) conducts economic analyses as part of its decision making process, for example, during strategic planning or priority setting, development of voluntary actions and regulations, and the measurement of results. Economic analyses include market studies, financial feasibility studies, and industry sector studies. More detailed economic analyses, commonly referred to as regulatory impact analyses (RIAs), incorporate risk findings with valuation to assess benefits of actions being considered and compare these benefits to estimated costs. Economic analyses provide Agency decision makers with information about potential economic impacts of actions developed to protect human health and the environment. Economic analyses performed in OPPT are the responsibility of the Economic and Policy Analysis Branch (EPAB) in the Economics, Exposure and Technology Division (EETD).

Economic analysis and related activities in OPPT include:

Benefit-Cost Analysis: conducting analysis of benefits, costs, and socio-economic impacts of regulatory and non-regulatory actions for OPPT under the following statutes:



 Links outside EPA Web space are identified by **

- [Toxic Substances Control Act](#)**
- [Pollution Prevention Act](#)**
- [Asbestos Hazard Emergency Response Act \(AHERA\)](#)**
- [the Asbestos School Hazard Abatement Act \(ASHAA\)](#)**
- [TSCA Title IV: Lead Exposure Reduction](#)**

Program Support: preparing analyses of chemical markets, industry trends, chemical substitutes and chemical uses as required to support regulatory program activities including [New Chemicals](#) and [Existing Chemicals](#) and voluntary programs including [Design for the Environment](#) (DfE) and [Pollution Prevention](#). Support includes the assessment of the economic effects on chemical manufacturers, processors, and users and the impact on small businesses, employment, the national economy, international trade, and technological innovation. Support is also provided to other EPA media programs on occasion in the form of chemical market studies, and use and substitutes studies.

Economic/Policy Studies: providing economic/policy studies requested by senior management and developing special studies and conferences.

Regulatory Development Process: participating in the development of regulations (e.g. [The Lead Program](#) and the [Inventory Update Rule Amendments](#)), ensuring that economic and social issues are fully considered in regulatory decision processes, and preparing Regulatory Impact Analyses, Regulatory Flexibility Analyses and other economic analyses required by statute or

Executive Order, including [E.O. 12866](#) , [Regulatory Flexibility Act of 1992](#) , the Small Business Regulatory Enforcement Fairness Act (SBREFA) and E.O. 12898 (Environmental Justice).

Developing Techniques: ensuring that economic and market analysis techniques are state-of-the-art and in compliance with accepted practice and OPPT and EPA guidelines.

Economic and Environmental Indicator Model Development: developing economic and policy models, including the [Risk-Screening Environmental Indicators Model](#), [Cost of Illness Handbook](#), and the EcoBenefits Model.

Methodology Development: developing methodology to incorporate pollution prevention and economic incentives into the rulemaking and non-rulemaking activities of OPPT.