
A TALE OF TWO COMMISSIONS: NET NEUTRALITY AND REGULATORY ANALYSIS

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I. INTRODUCTION

Two independent federal regulatory agencies, the Federal Communications Commission (“FCC”) and the Federal Trade Commission (“FTC”), both claim regulatory authority over broadband Internet access. Both have actively explored the costs and benefits of “net neutrality” regulation since 2005, when a series of FCC decisions declared that broadband is an information service rather than a telecommunications service. Since then, the FTC has held a public workshop and issued a 165-page Staff Report. The FCC has issued a Policy Statement, a Notice of Inquiry, and multiple regulations imposing net neutrality rules on 22 MHz of radio spectrum to be auctioned for commercial wireless services.

In general, “net neutrality” means that Internet service providers should treat all data packets identically.¹ Traditionally, Internet service providers transported data packets on a “best efforts” basis, with no particular packet receiving priority treatment. Today, Internet service providers can block, slow, or charge unequally for different content if they treat different packets differently. Such discrimination can help or harm consumers, depending on the circum-

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¹ Everything sent over the Internet—e-mails, eBay auction offers, and YouTube videos—is broken down into pieces called packets before it is transported.

stances. While antitrust and consumer protection laws already prohibit practices that would most clearly thwart competition or defraud consumers, advocates have nonetheless called for net neutrality regulation that would prohibit any special treatment of data packets.

With the exception, perhaps, of the FCC auction rules, the two agencies have taken a cautious approach toward new net neutrality regulation. As well they should. Thus far, the net neutrality debate has largely consisted of a shouting match focused on possibilities, instead of a sober analysis of probabilities.

The two expert agencies could bring much-needed clarification to the debate by employing the regulatory analysis utilized by most federal agencies to assess proposed regulations. Beginning in the 1970s, a series of executive orders required executive branch agencies to identify what problems they were trying to solve, assess alternative means of accomplishing their goals, and identify the benefits and costs of proposed regulations. The White House has not tried to require independent agencies, such as the FCC and the FTC, to conduct such analyses. This article suggests that the principles of good government and sound public policy compel the FCC and the FTC to conduct sound regulatory analysis before promulgating new net neutrality regulations for the broadband marketplace.

Part II of this article addresses the most basic question raised by the FCC in its 2007 Notice of Inquiry (“NOI”): Whether rulemaking is necessary given that the FCC has already issued a Policy Statement articulating net neutrality principles. This article contends that the Policy Statement is not binding because it was not the product of notice and comment rulemaking, and new net neutrality rules require rulemaking. Part III outlines the history of the regulatory review process in the United States and the framework for regulatory analysis employed by executive branch agencies. This regulatory analysis is well-suited to address whether net neutrality regulation is necessary, and if so, what form it should take. Part IV identifies specific considerations that must be addressed under each element of the framework to provide an analysis of net neutrality regulation sufficiently comprehensive and specific to guide action. Part V assesses how well the FTC and FCC have applied the framework to date. Part VI offers concluding comments.

II. ENFORCEABLE RULES REQUIRE RULEMAKING

Stated so bluntly, the title of this section might seem so obvious that it requires no further elaboration. Nevertheless, the FCC’s 2005 Internet Policy Statement made this an issue in the net neutrality debate. That policy statement identifies several network neutrality principles and was issued concurrently

with the FCC's order classifying Digital Subscriber Line ("DSL") as an information service.²

In its April 2007 Notice of Inquiry on Broadband Industry Practices, the FCC asked whether it has "the legal authority to enforce the Policy Statement in the face of particular market failures or other specific problems."³ In short, the answer is no, the Commission cannot enforce the Policy Statement because it is not a legally binding legislative or interpretative rule. Nevertheless, the FCC should be commended for asking this question so explicitly. This demonstrates that it is seeking to avoid a trap into which many regulatory bodies fall—namely issuing statements that are not legally binding, but, practically have a binding effect because the public is led to believe noncompliance will have negative consequences.⁴

Administrative rulemaking is governed by the Administrative Procedure Act ("APA").⁵ The APA requires agencies to observe a legislative process known as notice and comment rulemaking before a legally enforceable rule can be promulgated.⁶ Section 553 of the APA sets out the requirements for agency rulemaking, including that "notice of proposed rule making shall be published in the Federal Register,"⁷ and "interested persons [must be given] an opportunity to participate in the rulemaking through submission of written data, views, or arguments"⁸ As the District of Columbia Circuit Court in *Batterton v. Marshall* stated, the purpose of requiring notice and comment is "to reintroduce public participation and fairness to affected parties after governmental authority has been delegated to unrepresentative agencies."⁹ The court detailed

² *In re* Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements; Inquiry Concerning High-Speed Access to the Internet Over Cable Facilities, *Policy Statement*, 20 F.C.C.R. 14,986, ¶ 4 (Aug. 5, 2005) [hereinafter *Internet Policy Statement*].

³ *In re* Broadband Industry Practices, *Notice of Inquiry*, 22 F.C.C.R. 7894, ¶ 11 (Mar. 22, 2007) [hereinafter *Broadband NOI*].

⁴ Robert A. Anthony, *Interpretive Rules, Policy Statements, Guidances, Manuals, and the Like—Should Federal Agencies Use Them to Bind the Public?*, 41 DUKE L.J. 1311, 1328 (1992).

⁵ Administrative Procedure Act, 5 U.S.C. §§ 551–559, 701–706 (2000). The APA defines a rule as "an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency" *Id.* § 551(4). Rulemaking is the "agency process for formulating, amending, or repealing a rule" *Id.* § 551(5).

⁶ *Id.* § 553.

⁷ *Id.* § 553(b).

⁸ *Id.* § 553(c).

⁹ *Batterton v. Marshall*, 648 F.2d 694, 703 (D.C. Cir. 1980).

the legislative history of the APA, explaining that due to the unrepresentative nature of a regulatory agency, “public participation . . . in the rulemaking process is essential in order to permit administrative agencies to inform themselves, and to afford safeguards to private interests.”¹⁰ Rules promulgated as a result of the notice and comment process are legally binding and known as legislative rules.

Section 553 of the APA, however, states that the notice and comment requirement does not apply “to interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice.”¹¹ Interpretative rules clarify or restate existing laws or rules and, as a result, carry the force of law.¹² Because interpretative rules do not create new laws, but simply clarify existing laws without changing their substance, notice and comment is not necessary.¹³

Similarly, statements of policy also do not require notice or comment. However, they do not carry the force of law, and they are merely “designed to inform rather than to control.”¹⁴ An agency may issue, with or without notice and comment, statements on substantive matters that it has not previously addressed. However, such a “policy statement” will not have the force of law unless it observes the notice and comment legislative process mandated by Congress in the APA.¹⁵

Possible FCC rules can, therefore, be divided into three categories: legislative rules, interpretative rules, and policy statements. The first two categories of rules have the force of law and may be enforced against private parties, while the third serves only as an informational statement of agency intent.

Additionally, under the APA, once a legislative rule has been adopted, the agency must publish the new rule in the Federal Register before it can take effect.¹⁶ There are, however, exceptions to this publication requirement for interpretative rules and statements of policy.¹⁷

¹⁰ *Id.* at 703 n.47 (quoting S. DOC. NO. 79-248, at 19-20 (1946)).

¹¹ 5 U.S.C. § 553(b)(3)(A).

¹² Anthony, *supra* note 4, at 1324 & n.59.

¹³ *Id.*

¹⁴ *Am. Trucking Ass’n v. Interstate Commerce Comm’n*, 659 F.2d 452, 462 (5th Cir. 1981) (“The delegation of power to administrative agencies is essential to the implementation of legislative policy in a complex society. Yet Congress knew that governors must themselves be governed and regulators regulated. Congress therefore required an administrative agency to follow specific procedures in adopting regulatory rules. It exempted from these procedures, however, general policy statements designed to inform rather than to control. For this reason, the APA itself draws a distinction between rules and guidelines.”).

¹⁵ Anthony, *supra* note 4, at 1314 & n.7.

¹⁶ 5 U.S.C. §§ 552(a)(1), 553(b), (d).

¹⁷ *Id.* § 553(d).

The FCC's August 5, 2005 Internet Policy Statement does not have legal force because it was issued without notice or opportunity for comment. The policy statement was issued in the "Appropriate Framework for Broadband Access to the Internet over Wireline Facilities" docket,¹⁸ a proceeding that did publish notice and take public comments. However, that proceeding resulted in a legislative rule, apart from the policy statement, which classified DSL broadband as an information service.¹⁹

In the DSL Order, the FCC specifically noted that while it was concerned about interference with consumer access to Internet services, it did not find sufficient evidence in the record to issue rules on the matter.²⁰ The FCC's DSL Order proceeded to announce the adoption of the separate Internet Policy Statement, which it described as an articulation of principles the Commission valued, namely consumer choice and competition.²¹ In concluding, the DSL Order noted, "[s]hould we see evidence that providers of telecommunications for Internet access or IP-enabled services are violating these principles, we will not hesitate to take action to address that conduct."²² The implied "action" refers to the possibility of future adoption of the type of nondiscrimination rules the FCC declined to adopt in the DSL Order.²³

¹⁸ See *Internet Policy Statement*, *supra* note 2.

¹⁹ *In re* Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Universal Service Obligations of Broadband Providers; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements; Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises; Consumer Protection in the Broadband Era, *Report and Order and Notice of Proposed Rulemaking*, 20 F.C.C.R. 14,853, ¶ 12 (Aug. 5, 2005) [hereinafter *DSL Order*].

²⁰ *Id.* ¶ 96.

²¹ *Id.*

²² *Id.*

²³ The D.C. Circuit has found policy statements are often precursors to rulemakings, but do not carry any legal force themselves:

In *Pacific Gas & Electric Co. v. Federal Power Commission*, this court delineated the distinction between a substantive rule and a policy statement. The court noted that 5 U.S.C. § 553(b)(A) allows an agency to issue a general statement of policy, which differs from a substantive rule in that a policy statement is "neither a rule nor a precedent but is merely an announcement to the public of the policy which the agency hopes to implement in future rulemakings or adjudications." In this sense, a policy statement is "like a press release" in that it "presages an upcoming rulemaking or announces the course which the agency intends to follow in future adjudications."

Panhandle E. Pipe Line Co. v. Fed. Energy Regulatory Comm'n, 198 F.3d 266, 269 (D.C. Cir. 1999) (quoting *Pacific Gas & Elec. Co. v. Fed. Power Comm'n*, 506 F.2d 33 (D.C. Cir. 1974)). Additionally, the Internet Policy Statement itself acknowledges that it is not adopt-

The Internet Policy Statement was not meant to be part of the greater legislative rule, but rather, a general statement of principles and intent carrying no legal force. The Internet Policy Statement was issued on the same day as the DSL Order, yet separate and apart from that order. The cautionary note in the DSL Order, implying that future action might be taken to address violations of principles by providers, demonstrates that the Internet Policy Statement was not intended to address such violations. Further, the DSL Order was published in the Federal Register as is required of all legislative rules, while the Internet Policy Statement was not.²⁴

Notwithstanding, some might erroneously argue that the Internet Policy Statement qualifies as an interpretative rule that carries the force of law. It does not. While interpretative rules are exempt from the legislative requirements of the APA, courts have consistently stated that such rules must only interpret a statute or legislative rule whose language has some clear meaning.²⁵ For example, if the FCC were allowed to issue new binding substantive regulations by simply interpreting the meaning of non-specific terms such as “just and reasonable” or “public interest” without notice and comment, the exception to the APA process would swallow the rule.²⁶ Again, in issuing an interpretative rule “an agency is merely explicating Congress’ desires,” and such action is distinct “from those cases in which the agency is adding substantive content of its own.”²⁷

As a foundation for its findings, the Internet Policy Statement cites section 230(b) of the Communications Act, which states that it is the policy of the United States “to preserve the vibrant and competitive free market that presently exists for the Internet”²⁸ and “to promote the continued development of the Internet.”²⁹ It also cites section 706(a), which charges the FCC with “encourag[ing] the deployment on a reasonable and timely basis of [broadband] to all Americans.”³⁰ The principles outlined in the Internet Policy Statement may be consistent with this language in the Act, but they are not an enforceable interpretation of the Act. The statutory language that is conceivably being interpreted is only a statement of policy itself, and not an enforceable positive statement of law. Moreover, the principles outlined in the Internet Policy

ing rules. *Internet Policy Statement*, *supra* note 2, at 3 n.15.

²⁴ Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, 70 Fed. Reg. 60,222 (Oct. 17, 2005).

²⁵ *Am. Hosp. Ass’n v. Bowen*, 834 F.2d 1037, 1045–46 (D.C. Cir. 1987).

²⁶ *See id.* at 1044–45.

²⁷ *Id.* at 1045.

²⁸ 47 U.S.C. § 230(b)(2) (2000).

²⁹ *Id.* § 230(b)(1).

³⁰ *Id.* § 157.

Statement add new substantive requirements that the drafters of the Act did not contemplate. While the FCC may have the authority under its Title I ancillary jurisdiction to mandate specific nondiscrimination rules, it must issue such regulations subject to the APA's legislative requirement of notice and comment.

III. EVOLUTION OF THE FRAMEWORK FOR REGULATORY ANALYSIS

To evaluate the need for regulation and to guide the development of any new rules, the FCC and FTC regulators should employ the same framework for regulatory analysis employed by other federal agencies when evaluating market performance and the costs and benefits of prospective regulation. Such analysis would assist the FCC and the FTC in navigating the numerous comments they receive debating various regulatory proposals.

Effective decision making requires knowledge of the consequences of alternative courses of action, as well as independent value judgments that allow the decision maker to determine which outcomes are the most desirable. Regulatory analysis is a tool for understanding causation—what *will* or what *would likely* happen as a result of various policy initiatives. To decide what *should be done*, decision makers must combine the results of regulatory analysis with value judgments that reflect their assessments of what is worth doing.

But just as analysis is not a substitute for judgment, values are not a substitute for understanding. Values determine the outcomes that decision makers want to pursue, but values alone do not provide the causation analysis necessary to determine how those outcomes can be accomplished most effectively. Without the benefit of a firm grounding in reality provided by regulatory analysis, decision makers are flying blind.

For several decades, a series of executive orders have required federal agencies to perform economic analysis on the effects of proposed regulations.³¹ The Office of Information and Regulatory Affairs (“OIRA”), within the Office of Management and Budget (“OMB”), currently oversees agencies’ regulatory analyses and can delay some regulations if it finds those analyses inadequate.³² The executive branch has not sought to require independent agencies, such as

³¹ See Exec. Order No. 12,866, 3 C.F.R. 638 (1993), *reprinted in* 5 U.S.C. § 601 (1994), *amended by* Exec. Order No. 13,258, 67 Fed. Reg. 9385 (Feb. 28, 2002), *amended by* Exec. Order No. 13,422, 72 Fed. Reg. 2763 (Jan. 23, 2007).

³² Murray Weidenbaum, *Regulating Process Reform: From Ford to Clinton*, 20 REGULATION 20, 22 (1997), *available at* <http://downloads.heartland.org/72764b.pdf>.

the FCC and FTC, to perform regulatory analysis or submit regulations to OMB for review.³³

The cost of federal regulation is very great. The most recent estimate suggests that compliance with federal regulations costs the government, businesses, and individual taxpayers in the aggregate approximately \$1.1 trillion.³⁴ As a result, every president since Gerald Ford has relied on a formal system to check his own administration's regulations and to review new regulations before they are issued. The president implements regulatory review programs largely through executive orders. These review programs consistently require that regulatory agencies consider possible alternatives to achieving their targeted outcomes, and that they estimate the costs of these alternatives. Regulatory review is the executive's tool "to combat the tunnel vision that plagues the thinking of single-mission regulators," as former OIRA Administrator John Graham has said.³⁵ The District of Columbia Circuit recognized in *Sierra Club v. Costle* that regulatory review is within the president's purview:

The court recognizes the basic need of the President and his White House staff to monitor the consistency of executive agency regulations with Administration policy. He and his White House advisors surely must be briefed fully and frequently about rules in the making, and their contributions to policymaking considered. The executive power under our Constitution, after all, is not shared—it rests exclusively with the President.³⁶

Regulatory review has its origins in President Richard Nixon's "Quality of Life" review process.³⁷ Soon after the establishment of the Environmental Protection Agency ("EPA") in 1970, the White House noticed the cost—both to society and to the treasury—of the new regulation spawned by the Clean Water Act and other newly enacted environmental laws.³⁸ Alarmed by the EPA's

³³ Independent agencies are federal agencies established by statute that exist outside the executive departments and "whose members are not subject to the plenary removal power of the President." Cass R. Sunstein, *Constitutionalism After the New Deal*, 101 HARV. L. REV. 421, 492 (1987).

³⁴ W. MARK CRANE, U.S. SMALL BUS. ADMIN., THE IMPACT OF REGULATORY COSTS ON SMALL FIRMS 4 (2005), available at <http://www.sba.gov/advo/research/rs264tot.pdf>. This figure far exceeds the figures reported in the OMB's annual report on the costs and benefits of federal regulations because the OMB report covers only those regulations adopted during the previous ten years. See OFFICE OF MGMT. AND BUDGET, DRAFT 2007 REPORT TO CONGRESS ON THE COSTS AND BENEFITS OF FEDERAL REGULATIONS 2 (2007), available at http://www.whitehouse.gov/omb/inforeg/2007_cb/2007_draft_cb_report.pdf.

³⁵ John D. Graham, Remarks to the Board of Trustees of the Keystone Center (June 18, 2002), available at http://www.whitehouse.gov/omb/inforeg/keystone_speech061802.html.

³⁶ *Sierra Club v. Costle*, 657 F.2d 298, 405 (D.C. Cir. 1981) (challenging the executive's power to influence agency rulemaking; in this instance the Carter White House's involvement in influencing an Environmental Protection Agency rule).

³⁷ GEORGE C. EADS & MICHAEL FIX, RELIEF OR REFORM?: REAGAN'S REGULATORY DILEMMA 46 (John L. Palmer & Isabel V. Sawhill eds., 1984).

³⁸ *Id.* at 46–47.

multi-million dollar supplementary budget request in December 1970, the OMB concluded that the effects of the EPA's regulation on the budget and on the private sector were going unchecked.³⁹

In order for agencies' regulations to remain controlled, at least for budgetary reasons, they needed to be reviewed before they were promulgated—something the White House had not yet done. OMB Director George Schultz sent a letter to EPA Administrator William Ruckelshaus in 1971 asserting “authority to review *and clear* EPA's regulations.”⁴⁰ At the same time, the White House established a “Quality of Life Committee” composed of Cabinet members, including the EPA administrator, and senior White House staff. Its purpose was to formulate a regulatory review process for significant regulations in order to ensure that the costs of alternatives had been considered.⁴¹

The resulting review process was established in a 1971 memorandum from OMB Director George Schultz.⁴² The process required the affected agencies to submit to OMB “a schedule . . . covering the ensuing year showing estimated dates of future announcements of all proposed and final regulations, standards, guidelines or similar matters”⁴³ that were “significant”⁴⁴ in nature. More notably, the process also required the agencies to submit these significant proposed rules to OMB at least thirty days before their publication, accompanied by the regulation's objectives, alternatives considered to the proposed actions, comparisons of the expected federal and non-federal costs and benefits of alternatives considered, and reasons for selecting the proposed alternative.⁴⁵ OMB would then circulate the proposed rules to other agencies for comment and forward the feedback to the issuing agency, just as it does with most policy statements and proposals.⁴⁶

Intentionally omitted (for political reasons) from this interagency review process was a mechanism through which conflicts among agencies could be resolved.⁴⁷ In practice, the White House often served as arbiter.⁴⁸ If nothing

³⁹ *Id.* at 47.

⁴⁰ *Id.* at 48 (emphasis in original).

⁴¹ *Id.*

⁴² Memorandum from George P. Schultz to Heads of Department and Agencies (Oct. 5, 1971), available at <http://www.thecre.com/ombpapers/QualityofLife1.htm>.

⁴³ *Id.*

⁴⁴ A “significant” rule was defined as one that would have: a significant impact on the policies, programs, and procedures of other agencies; or impose significant costs on, or negative benefits to, non-Federal sectors; or increase the demand for Federal funds for programs of Federal agencies which are beyond the funding levels provided for in the most recent budget requests submitted to the Congress.

Id.

⁴⁵ *Id.*

⁴⁶ EADS & FIX, *supra* note 37, at 48.

⁴⁷ *Id.* at 48–50.

else, the Quality of Life Review process, by requiring agencies such as the EPA to answer certain questions, curbed reflexive rulemaking and forced regulators to consider the costs of the rules they proposed and whether alternative solutions were available.

While the Quality of Life review process continued through 1977,⁴⁹ Ford expanded regulatory review to address national concerns about the effect of regulation on inflation.⁵⁰ Ford sought and received legislation establishing the Council on Wage and Price Stability (“CWPS”) in August 1974,⁵¹ which was charged with reviewing regulation to ascertain its impact on the economy.⁵² Three months after establishing the CWPS, Ford issued Executive Order 11,821 establishing procedures for preparing Inflation Impact Statements, which addressed the economic effects of proposed rules on productivity and competition.⁵³ Ford was also interested in addressing the impact of regulation by independent regulatory agencies. Because independent agencies are “not subject to the jurisdiction of presidential executive orders,” Ford met with officials from ten independent regulatory commissions to try to “coax them into following the spirit, if not the letter, of his directive” by reforming their regulatory processes.⁵⁴

While the FTC simultaneously began a program of self-assessment similar to the Inflation Impact Statements,⁵⁵ other independent agencies such as the Nuclear Regulatory Commission established policy offices to engage in similar regulatory analysis. To date, independent agencies, such as the FTC and the FCC, continue to remain outside the scope of executive regulatory review.

President James Carter continued formalizing the regulatory review process begun by the Ford administration. In 1978, Carter established the cabinet-level Regulatory Analysis Review Group, which was granted the authority to review proposed rules.⁵⁶ He also issued Executive Order 12,044 in March 1978, replacing Ford’s Economic Impact Statement with the Regulatory Analysis.⁵⁷ The Executive Order was remarkably similar to the Nixon and Ford efforts: it

⁴⁸ *Id.* at 49.

⁴⁹ *Id.* at 50.

⁵⁰ Weidenbaum, *supra* note 32, at 20.

⁵¹ EADS & FIX, *supra* note 37, at 51.

⁵² *Id.*

⁵³ Weidenbaum, *supra* note 32, at 20.

⁵⁴ *Id.* It should be noted that whether an executive order mandating regulatory review can apply to independent regulatory agencies remains a debated question. See Robert W. Hahn & Cass R. Sunstein, *A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis*, 150 U. PA. L. REV. 1489, 1531 (2002).

⁵⁵ Weidenbaum, *supra* note 32, at 20.

⁵⁶ EADS & FIX, *supra* note 37, at 55–56.

⁵⁷ Exec. Order No. 12,044, 3 C.F.R. 152, 154 (1979).

subjected proposed rules with an economic effect of \$100 million or more to review before they were published in the Federal Register.

It was during President Ronald Reagan's administration, however, that the modern regulatory review process crystallized. The stage for this was set during the last year of the Carter administration with the passage of the Paperwork Reduction Act.⁵⁸ That Act created OIRA,⁵⁹ whose primary purpose was to enforce the Act's limits on the amount of reporting agencies could require from the private sector.⁶⁰ Reagan, however, expanded the role of OIRA.

One month into his presidency, Reagan signed Executive Order 12,291, entitled Federal Regulation, mandating that "[r]egulatory action shall not be undertaken unless the potential benefits to society for the regulation outweigh the potential costs to society."⁶¹ The Executive Order required agencies to prepare regulatory impact analyses for proposed "major rules."⁶² Defining a "major rule" was left largely to the discretion of the OMB.⁶³ The Executive Order did not specifically delegate regulatory impact analysis to OIRA; instead it referenced the OMB generally.⁶⁴ Nevertheless, this review power was granted to OIRA.⁶⁵ As a result, "[a] federal agency could not publish a notice of proposed rulemaking until an OIRA review was complete and its concerns had been addressed."⁶⁶

Reagan also established a Task Force on Regulatory Relief, which provided direction to OIRA.⁶⁷ Unlike the Nixon, Ford, and Carter programs of regulatory review,⁶⁸ the Reagan system placed the power to hold back regulations in the hands of OIRA, thus resolving the issue of how an impasse between a regulating agency and the reviewing agency should be resolved. As a result, "[t]he Task Force on Regulatory Relief often acted as a court of appeals for issues on which the OIRA and the regulatory agencies could not agree."⁶⁹

⁵⁸ Paperwork Reduction Act of 1980, Pub. L. No. 96-511, 94 Stat. 2812 (codified as amended at 44 U.S.C. §§ 3501–20 (2000)).

⁵⁹ 44 U.S.C. § 3503.

⁶⁰ *Id.* § 3504.

⁶¹ Exec. Order No. 12,291, § 2(b), 3 C.F.R. 127, 128 (1982).

⁶² *Id.* § 3(c), 3 C.F.R. at 128.

⁶³ *Id.* §§ 1(b)(1), 3(b), 3 C.F.R. at 127–28. Although "major rule" was defined as any regulation with an annual effect on the economy of \$100 million or more in section 1(b), section 3(b) gives the director authority to treat other rules as major rules. *Id.*

⁶⁴ *Id.* § 6(a)(2), 3 C.F.R. at 131.

⁶⁵ Curtis W. Copeland, *The Role of the Office of Information and Regulatory Affairs in Federal Rulemaking*, 33 *FORDHAM URB. L.J.* 1257, 1263 (2006).

⁶⁶ Weidenbaum, *supra* note 32, at 22.

⁶⁷ Copeland, *supra* note 65, at 1260.

⁶⁸ EADS & FIX, *supra* note 37, at 48–50. Prior to the Reagan administration, the White House staff and the president were often the mediators. *Id.*

⁶⁹ Weidenbaum, *supra* note 32, at 22.

The regulatory review process established in Executive Order 12,291 and carried out by OIRA went largely unchanged throughout the presidency of George H. W. Bush.⁷⁰ The only exception was that the Task Force on Regulatory Relief was replaced by the Council on Competitiveness.⁷¹

President William Clinton made significant changes to the regulatory review process by abolishing the Council on Competitiveness and rescinding President Reagan's Executive Order 12,291.⁷² Clinton issued Executive Order 12,866 in September 1993, articulating a new regulatory review process that was less a radical departure and more an evolution consistent with past programs.⁷³ The most significant change was the removal of the OMB's authority to treat any rule it deemed appropriate as if it were a "major rule."⁷⁴ "Significant regulatory actions" such as those that might "have an annual effect on the economy of \$100 million or more" were now subject to OIRA review.⁷⁵ Predictably, this caused a marked drop in the number of rules reviewed by OIRA.⁷⁶

Although it changed the process of regulatory review, the Clinton Executive Order maintained the substance of regulatory analysis that had been developing since the Nixon Quality of Life reviews. The framework of Clinton's Executive Order continued to emphasize the importance of identifying all practical alternatives to a proposed regulation and selecting the most cost-effective option:

Each agency shall identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public. . . . When an agency determines that a regulation is the best available method of achieving the regulatory objective, it shall design its regulations in the most cost-effective manner to achieve the regulatory objective. . . . Each agency shall assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. . . . Each agency shall identify and assess alternative forms of regulation and shall, to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt.⁷⁷

Additionally, Executive Order 12,866 embodied the evolution of modern regulatory analysis by adding a new first step—identifying the market failure

⁷⁰ Copeland, *supra* note 65, at 1269–70.

⁷¹ *Id.*

⁷² *Id.* at 1270.

⁷³ Exec. Order No. 12,866, 3 C.F.R. 638 (1993), *reprinted in* 5 U.S.C. § 601 (1994).

⁷⁴ *Id.* § 6(a)(3)(A), 3 C.F.R. at 645.

⁷⁵ *Id.* § 3(f), 3 C.F.R. at 641.

⁷⁶ OIRA reviews decreased from an average of 2500 rules reviewed annually before 1993, to an average of 600 rules reviewed annually after 1993. Copeland, *supra* note 65, at 1272.

⁷⁷ Exec. Order No. 12,866, § 1, 3 C.F.R. at 639.

or other problem—to the regulatory analysis framework. As such, “[e]ach agency shall identify the problem that it intends to address (including, where applicable, the failures of private markets or public institutions that warrant new agency action) as well as assess the significance of that problem.”⁷⁸

President George W. Bush issued Executive Order 13,422 in 2007, amending Executive Order 12,866, which, among other procedural changes, underlines the importance of identifying the problem to be addressed by regulation.⁷⁹ This new order requires agencies to “identify in writing the specific market failure (such as externalities, market power, or lack of information) or other specific problem that it intends to address (including, where applicable, the failures of public institutions)”⁸⁰ This requirement highlights the insight first expressed in Clinton’s Executive Order 12,866 that cost-benefit analysis is not the only criterion used to assess whether a regulation is necessary.⁸¹ That is, a market failure or some other systemic problem must also be identified.

Finally, it should be noted that recent federal performance management initiatives, which emphasize articulation and measurement of actual outcomes produced for the public, will likely place additional pressure on agencies to analyze the consequences of proposed regulations. The Government Performance and Results Act (“GPRA”) requires most federal agencies to articulate the principal outcomes they seek to achieve, measure progress, and report annually on the measures.⁸² The OMB’s Program Assessment Rating Tool (“PART”) evaluates the design, efficiency, and effectiveness of federal programs.⁸³ GPRA and PART apply to independent as well as executive branch agencies.⁸⁴ To the extent that an agency achieves some of its most significant outcomes

⁷⁸ *Id.* § 1(b)(1), 3 C.F.R. at 639.

⁷⁹ Exec. Order No. 13,422, § 1(a)(1), 72 Fed. Reg. 2763, 2763 (Jan. 23, 2007).

⁸⁰ *Id.*

⁸¹ Exec. Order No. 12,866, § 1, 3 C.F.R. at 639.

⁸² Government Performance and Results Act of 1993, Pub. L. No. 103-62, 107 Stat. 285. Section 3 of the GPRA requires agencies to produce strategic plans that state their missions, goals, and objectives. Section 4(b) requires agencies to produce annual performance plans identifying measures that will be used to assess “the relevant outputs, service levels, and outcomes of each program activity” and resources required to produce those results. *Id.*

⁸³ See [ExpectMore.gov](http://www.whitehouse.gov/expectmore.gov), About Us, <http://www.whitehouse.gov/omb/expectmore/about.html> (last visited Nov. 14, 2007) (providing an explanation of the Program Assessment Rating Tool).

⁸⁴ For example, the OMB has assessed the FCC’s spectrum licensing and universal telecommunications service regulations. See [ExpectMore.gov, FCC Programs, http://www.whitehouse.gov/omb/expectmore/agency/356.html](http://www.whitehouse.gov/omb/expectmore/agency/356.html) (last visited Nov. 14, 2007). The OMB has also assessed the FTC’s antitrust and consumer protection regulations. See [ExpectMore.gov, Trade Regulation, http://www.whitehouse.gov/omb/expectmore/summary/10003816.2006.html](http://www.whitehouse.gov/omb/expectmore/summary/10003816.2006.html) (last visited Nov. 14, 2007).

through regulation, these initiatives create a demand for more rigorous regulatory analysis.

IV. APPLYING THE REGULATORY ANALYSIS FRAMEWORK TO NET NEUTRALITY

There are six key steps in regulatory analysis. First, identify the desired outcomes and establish ways of measuring those outcomes. Second, assess evidence of market failure or other systemic problems. Third, identify the uniquely federal role. Fourth, assess the effectiveness of alternative approaches. Fifth, identify costs, including unintended consequences. Sixth, compare costs with outcomes and ascertain whether the parties receiving the benefits are bearing the costs.

Commentators sometimes refer to this framework as “cost-benefit analysis,” as though its sole purpose is to develop a quantitative comparison that automates the decision about whether to regulate. This is, however, an exceedingly narrow and highly inaccurate depiction of the framework. Comparison of benefits and costs is just one element of the framework. Use of this framework allows decision makers to clarify objectives, assess the need for regulation, identify the nature of the problem they are trying to solve, and understand the consequences of alternative courses of action. Within the net neutrality context, this analysis can play an indispensable role in transforming heated debates over “values” into more thoughtful consideration of the available alternatives.

A. Identify Desired Outcomes

An outcome is the benefit to the public produced, or the harm avoided, as a result of a government action. For the purposes of regulatory analysis, an outcome may satisfy the economist’s definition of a “net social benefit,” or it may simply be some result that policymakers deem worthwhile.⁸⁵ An outcome indicates the ultimate effect of the regulation on human wellbeing. Reduced injuries or fatalities, improved health, decreased crime rates, or lower prices for consumers are all examples of outcomes. Pollutant emissions, enforcement cases brought, or regulations issued are outputs—products of regulation—that may affect outcomes, but they are not outcomes. Analysis that focuses only on

⁸⁵ Office of Mgmt. & Budget, Circular A-4, Regulatory Analysis, at 5 (Sept. 17, 2003) [hereinafter Circular A-4], *available at* <http://www.whitehouse.gov/omb/circulars/a004/a-4.pdf> (“Congress establishes some regulatory programs to redistribute resources to select groups.”).

processes or outputs does not examine whether or how the regulation affects the public's wellbeing.

To effectively identify how a proposed regulation would affect outcomes, decision makers must define the outcome they are attempting to achieve, outline a theory of causality or "logic model" that illustrates how the regulatory proposal is likely to achieve the desired outcome, and establish measures that indicate whether and how much of the outcome is achieved as a result of the regulation.⁸⁶

Decision makers' values determine which outcomes they deem worthwhile. In general, consumer welfare—a concept rigorously defined in the economics literature⁸⁷—is one critical value at stake in the net neutrality debate. However, an analysis of net neutrality that addresses the full panoply of concerns raised by major stakeholders involves additional values. Various individuals and organizations have voiced concerns about issues such as the First Amendment, political participation, privacy, and the economic competitiveness of the United States.⁸⁸

In many cases, measures that promote consumer welfare can also promote values other than consumer welfare, and it would be useful to know when this can be expected to occur. When tradeoffs between consumer welfare and other values must be made, analysis can inform the debate by explaining the costs, in terms of forgone consumer welfare, of achieving some other value.

The outcomes associated with values other than consumer welfare are often poorly defined. Competitiveness and economic development, for example, may be linked to consumer welfare, in which case the desirable outcome is the level of competitiveness or the economic development that maximizes long-term consumer welfare. Only a careful definition of desired outcomes will clarify

⁸⁶ Executive Order 12,866 requires agencies to identify the costs and benefits of proposed regulations and to choose the regulatory course of action "that maximize net benefits." 3 C.F.R. 638, 639 (1993), *reprinted* in 5 U.S.C. § 601 (1994). However, before a measure of the "net benefit" can be taken, an agency must determine the outcome it is attempting to achieve. OMB Circular A-4, promulgated in 2003 as a best practices guidance document for agencies tasked with complying with Executive Order 12,866, explains that there must be a "baseline" against which to measure cost and benefits of a proposed rule. Circular A-4, *supra* note 85, at 15 ("This baseline should be the best assessment of the way the world would look absent the proposed action.").

⁸⁷ *See, e.g.*, DENNIS W. CARLETON & JEFFREY M. PERLOFF, *MODERN INDUSTRIAL ORGANIZATION* 102–07 (2d ed. 1994) (1990).

⁸⁸ In February 2007, the FTC held a workshop at which many of these views were aired. *See* Transcript and Presentations by Harold Feld (First Amendment and political participation), Jeannine Kenney and Ronald B. Yokubaitis (privacy), and Harold Feld and Scott Wallsten (economic competitiveness of the United States), The FTC Broadband Connectivity Competition Policy Workshop (Feb. 14, 2007), *available at* <http://www.ftc.gov/opp/workshops/broadband/index.shtml>.

whether competitiveness is meant to be a means of promoting long-term consumer welfare or an alternative value that may require some sacrifice of consumer welfare. By defining outcomes, identifying causality, and establishing measures, regulatory agencies can help advance the discussion of values from a war of words to a cogent exploration of cause and effect.

B. Assess Evidence of Market Failure or Other Systemic Problems

Regulatory economists generally accept that government action can enhance consumer welfare when a clear “market failure”⁸⁹ exists that cannot be addressed adequately by other means.⁹⁰ Thus, regulatory analysis must explicitly identify market failures or other systemic problems underlying the need for action. If there is no market failure or other systemic problem, then government action will likely do more harm than good.

When outcomes are defined in terms of values other than consumer welfare, responsible analysis must articulate a systematic economic theory explaining why voluntary market behavior does not achieve the desired outcome. Such a theory should be accompanied by evidence that permits evaluation of whether the theory is actually true.

Some problems, which appear to be market failures, may arise as a result of barriers to entry or other constraints on private parties created by previously-existing policies. While such policy-driven problems are not technically market failures, the problems are likely to persist in the absence of additional government action. The fundamental solution is to correct the original policy.

A theory of market failure, accompanied by evidence that indicates whether the theory is actually true, should guide the analysis of competition and other clearly economic issues.⁹¹ Market power,⁹² a firm’s ability to control price, is the type of market failure most likely to create a need for net neutrality regula-

⁸⁹ The term “market failure” is perhaps an unfortunate piece of economics jargon, because to most people the term “market” implies some form of commercial business activity. Market failure then presumably refers to any situation in which commercial activity fails to solve a perceived problem. For many economists, however, the term “market” often has a much broader meaning, referring to any type of voluntary interaction in which people mutually coordinate their activities rather than take directions from a higher (governmental) authority. This article uses the term in this broader sense. A “market failure” occurs when voluntary activity fails to direct resources to the uses that people value most.

⁹⁰ See generally W. KIP VISCUSI, JOHN M. VERNON & JOSEPH E. HARRINGTON, JR., *ECONOMICS OF REGULATION AND ANTITRUST* 313–35, 337–58 (3d ed., 2000) (1992).

⁹¹ See Circular A-4, *supra* note 85, at 4–5 (providing substantial guidance on how to identify and describe a market failure).

⁹² The United States Supreme Court has defined market power as “the ability of a single seller to raise price and restrict output.” *Fortner Enters. v. U.S. Steel Corp.*, 394 U.S. 495, 503 (1969).

tion. Competition analysis will inevitably play a vital role in determining the need for new net neutrality regulation. The more vigorous the competition, the less likely it is that new net neutrality regulation can improve consumer welfare. Competition may also significantly contribute to the achievement of values other than consumer welfare. Competition concerns related to net neutrality fall into two categories: (1) vertical business practices; and (2) terminating access monopoly.

1. Vertical Business Practices

The implications of net neutrality regulation on vertical business practices are varied. When an Internet access provider treats different packets of information differently, it may either improve or reduce consumer welfare. Blocking packets allows the network operator to block viruses or other security threats, but it also allows the operator to block content that consumers might want to receive. Assigning different priorities to different types of packets could ensure the quality of services that are heavily dependent on transmission quality (such as VoIP or high-definition video), but it could also let the access provider degrade the quality of services that compete with services it might want to sell.⁹³

Charging different prices based on the identity of a packet's sender or receiver creates the potential for two types of price differences: (1) "tiering" of service; and (2) price discrimination. Tiering occurs when the access provider charges different prices for different speeds or service qualities. Price discrimination occurs when network owners charge different customers different prices based on users' differing sensitivities to price. Both tiering and price discrimination let the network owner recover its fixed investment costs in a way that least discourages people from using the Internet, because low-cost options are available to those who are only willing to pay a low price. However, if the network owner has market power, price discrimination may simply allow the owner to extract greater revenues from network users who value the service highly, thus generating monopoly profits. This can reduce consumer welfare even if it generates no loss of economic efficiency.

Because the effects of net neutrality regulations on consumer welfare are not obvious, regulators should apply the antitrust "rule of reason" analysis to these restrictive business practices.⁹⁴ First, regulators should define the relevant mar-

⁹³ For a more extensive list of the costs and benefits, see Jon M. Peha's presentation at the FTC Broadband Connectivity Policy Workshop (Feb. 13, 2007), *available at* <http://www.ftc.gov/opp/workshops/broadband/presentations/peha.pdf>.

⁹⁴ *Nat'l Soc'y of Prof's Eng'rs v. United States*, 435 U.S. 679, 691 (1978) ("[T]he in-

ket. Second, determine whether there is significant market power. Third, if there is market power, determine whether the business practice harms consumers. Fourth, if the business practice harms consumers, determine whether it creates any offsetting benefits to consumers. Fifth, evaluate the restrictive business practice's net effect on consumer welfare to determine whether the practice merits regulation.

When evaluating vertical business practices in the broadband market under a traditional antitrust-style rule of reason analysis, regulators should consider: (1) product market definition; (2) geographic market definition; (3) market power and concentration; (4) multi-margin competition; (5) contestability; and (6) dynamic competition and entry. A full-scale competition analysis is beyond the scope of this article, but the following observations might inform such an analysis.

a. Product Market Definition

The definition of the relevant product market should depend on actual evidence demonstrating which services consumers are likely to regard as substitutes. The FCC's definition of high-speed Internet service (200 kbps) has been widely criticized. Nevertheless, for broadband users who merely desire a service faster than dial up, the FCC definition may accurately define the relevant market as all providers offering speeds faster than 200 kbps.⁹⁵ Many broadband users, however, may desire a particular minimum or average speed, such as 500 kbps, 1 mbps, or 5 mbps. For those users, some of the slower broadband offerings might not be part of the relevant market. Depending on the evidence, consumers might be segmented into multiple product markets. In turn, a full assessment of non-neutral business practices must examine whether the practice is likely to arise in each market, and if so, whether it would create net harm for consumers in each market.

quiry mandated by the Rule of Reason is whether the challenged agreement is one that promotes competition or one that suppresses competition.”).

⁹⁵ Press Release, FCC, Federal Communications Commission Releases Data on High-Speed Services for Internet Access: High-Speed Connections to the Internet Increased 27% During the First Half of 2002 for a Total of 16.2 Million Lines in Service (Dec. 17, 2002), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-229568A1.pdf (“[H]igh-speed lines are defined as those that provide services at speeds exceeding 200 kilobits per second (kbps) in at least one direction.”).

b. Geographic Market Definition

The FCC's practice of gathering data on the number of broadband providers by zip code offers substantially accurate information on the state of competition in relevant geographic markets, notwithstanding wide criticism of the practice. A major criticism derives from the observation that even though a broadband provider serves a particular customer in a zip code, the provider's service is not necessarily available to all consumers in that zip code.⁹⁶ For example, while DSL is available in many suburban areas, some homes cannot receive the DSL service because they are too far from the phone company's switching office. This criticism implies that the relevant geographic market is smaller than a zip code, and, therefore, the zip code data must be rejected.

However, given the manner in which broadband companies price their services, this inference is incorrect. Cable companies usually offer cable modem service for the same price and speeds across the service territory. Phone companies do the same for DSL service. Satellite broadband providers offer uniform national pricing plans at various speeds. For this reason, broadband companies with a significant degree of overlap are likely to constrain each others' prices, even if every consumer in a given service area cannot receive service from every provider.⁹⁷ Therefore, the FCC's zip code-based data may present a fairly accurate picture of the state of competition in relevant geographic markets—at least in non-rural areas. In fact, the relevant geographic market may be much larger than the zip code in urban areas. Rural areas in which a single zip code covers a large geographic area may require a different treatment if multiple broadband providers typically serve completely non-overlapping areas within zip codes.

c. Market Power and Concentration

Oligopoly theory unequivocally demonstrates that when the number of competitors is small, anything can happen with regard to market competitiveness. There is no automatic relationship between market structure and consumer welfare. But if firms lack significant market power, then it is unlikely

⁹⁶ See James E. Prieger, *The Supply Side of the Digital Divide: Is There Equal Availability in the Broadband Internet Access Market?*, *ECON. INQUIRY* 346, 349 (2003).

⁹⁷ In the past, cable television companies may have engaged in targeted predatory pricing, or at least significant price discrimination, when local franchising authorities forced potential market entrants to disclose which areas the entrants intended to serve first. See Thomas W. Hazlett, *Predation in Local Cable TV Markets*, 40 *ANTITRUST BULL.* 609, 616–17 (1995). Since local franchising authorities do not have regulatory authority over broadband, this occurrence is much less likely for broadband.

that their restrictive vertical arrangements, discriminatory treatment of packets, or price discrimination will actually harm consumers.

Recent studies on the relationship between concentration and prices have produced a wide variety of results that depend on the facts and circumstances of the industry studied and the types of information buyers and sellers have.⁹⁸ Some empirical research on railroads, for example, finds that two competitors are sufficient to produce the results one would expect in a competitive market.⁹⁹ Laboratory experiments have found that four sellers are usually enough to produce a competitive market outcome.¹⁰⁰

The Horizontal Merger Guidelines issued by the FTC and Department of Justice (“DOJ”) reflect the fact that there is no simple or mechanical relationship between the number of competitors and the competitiveness of the market.¹⁰¹ The guidelines indicate that mergers in more concentrated markets face a heightened level of review, but such mergers can still be legal.¹⁰² The anti-trust agencies attempt to consider all relevant facts and circumstances in determining whether a merger would reduce competition and harm consumers.¹⁰³

Oligopoly poses the potential danger that firms will collude on prices or other terms of service. Thus far, experience with duopolies in cable television, broadband, and telephone service suggests that two competitors often compete vigorously.¹⁰⁴ Two decades of economic research find that the presence of a second wireline video competitor reduces rates by fifteen percent or more.¹⁰⁵ Competition from satellite and a second cable provider also prompted cable firms to increase the number of channels, upgrade plants to provide digital service, and otherwise improve the quality of service.¹⁰⁶ A General Accounting Office (renamed Government Accountability Office in 2004) case study found

⁹⁸ See generally Paul A. Pautler, *Evidence on Mergers and Acquisitions*, ANTITRUST BULL. 119, 166–85 (2003) (outlining studies in different industries).

⁹⁹ *Id.* at 181–82.

¹⁰⁰ *Id.* at 200.

¹⁰¹ See U.S. DOJ & FTC, HORIZONTAL MERGER GUIDELINES (U.S. Gov’t Printing Office 1997) (1992), available at <http://www.usdoj.gov/atr/public/guidelines/hmg.pdf> (outlining the agencies’ enforcement policy for horizontal acquisitions and mergers).

¹⁰² *Id.* at 15–17.

¹⁰³ See *id.* at 1–3.

¹⁰⁴ See Jerry Brito & Jerry Ellig, *Video Killed the Franchise Star: The Consumer Cost of Cable Franchising and Proposed Policy Alternatives*, 5 J. TELECOMM. & HIGH TECH. L. 199, 207–12 (2006); see also U.S. GEN. ACCOUNTING OFFICE, TELECOMMUNICATIONS: WIRE-BASED COMPETITION BENEFITED CONSUMERS IN SELECTED MARKETS 12–16 (2004) [hereinafter TELECOMMUNICATIONS REPORT], available at <http://www.gao.gov/new.items/d04241.pdf> (noting that consumers enjoy lower rates in markets with broadband service providers).

¹⁰⁵ See Thomas W. Hazlett, *Cable TV Franchises as Barriers to Video Competition*, VA. J.L. & TECH., Winter 2007, at 1, 9–16; see also Brito & Ellig, *supra* note 104, at 211.

¹⁰⁶ See Brito & Ellig, *supra* note 104, at 211–12.

that markets in which new broadband service providers compete with the existing cable and phone companies tend to have rates for video, Internet, and telephone services that are often lower than similar markets without such competition.¹⁰⁷

The argument that two broadband firms would compete vigorously is logical because the costs of these networks are largely fixed. The firms face strong pressures to cut prices, increase channel capacity, or offer other inducements to acquire or retain customers.

d. Multi-Margin Competition

Competition is not just about price. In some cases, price may be a less important factor than various aspects of quality or performance. In assessing market power, regulators should consider whether price, performance, or some type of price/performance ratio best represents the most relevant margin(s) on which competition occurs.

Performance, rather than price, might be the relevant attribute for identifying whether different service providers are in the same market or determining whether a firm has market power.¹⁰⁸ Competitive businesses seek to continually improve performance—or even develop new aspects of performance that were not previously thought capable of improvement. For broadband, performance includes factors such as speed, security, parental controls, filtering, copyright protection, wireless range, customer service, and quality.

Speed is perhaps the most measurable aspect of performance, and it illustrates the complexities of taking performance into account. Tremendous variation exists in posted prices and maximum download speeds of various broadband services—from 128 kbps offered by the slower wireless systems to 30 mbps offered by some fiber and cable systems.¹⁰⁹ Prices ranged from approximately ten to two hundred dollars per month in 2005-2006.¹¹⁰ The price/performance ratio—price per kilobit of transmission speed—also varied greatly. Except for the relatively slow entry-level DSL offerings, the phone companies' DSL services cost one or two cents per kilobit.¹¹¹ Cable modems

¹⁰⁷ See TELECOMMUNICATIONS REPORT, *supra* note 104, at 4. See Brito & Ellig, *supra* note 104, and Hazlett, *supra* note 105, for a detailed discussion of cable franchising issues.

¹⁰⁸ See generally Christopher Pleatsikas & David Teece, *New Indicia for Antitrust Analysis in Markets Experiencing Rapid Innovation*, in DYNAMIC COMPETITION AND PUBLIC POLICY 95 (Jerry Ellig ed., 2001).

¹⁰⁹ JERRY ELLIG, REASON FOUND., A DYNAMIC PERSPECTIVE ON GOVERNMENT BROADBAND INITIATIVES 29-33 (2006), available at <http://www.reason.org/ps349.pdf>.

¹¹⁰ See *id.*

¹¹¹ *Id.* at 12.

cost the same or less, and fiber optic service costs tenths of a cent per kilobit.¹¹² Most of the wireless services cost between five and fifteen cents per kilobit.¹¹³ In many cases, different services look as though they are close substitutes, depending on whether one considers price, speed, or the price/speed ratio. This underscores the need to discover which services consumers treat as substitutes.

e. Contestability

Several stakeholders in the net neutrality debate have asserted that broadband access markets are contestable.¹¹⁴ That is, they argue that the market is open to anyone who is willing to make the necessary investments.

In economic theory, a contestable market is one in which there are no sunk costs. A sunk cost is an initial investment that cannot be recovered if the firm decides to leave the market. In a contestable market, the mere threat of entry is sufficient to prevent monopolistic behavior—actual entry need not occur.¹¹⁵ Broadband access markets are not contestable because entrants must make substantial investments that may never be recovered. The mere possibility of entry, therefore, is unlikely to control market power fully. Instead, such control must occur as a result of actual entry, a credible investment-backed commitment to enter, or the possibility of entry by a competitor possessing some advantage over the incumbents.

f. Dynamic Competition and Entry

Broadband is a relatively new service subject to significant innovation. Consequently, economic analysis of this industry needs to consider dynamic competition. The most prominent dynamic concept of competition is associated with economist Joseph Schumpeter. Schumpeter suggested that:

competition from the new commodity, the new technology, the new source of supply, the new type of organization . . . competition which commands a decisive cost or

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ See Walter B. McCormick, Jr., Presentation at the FTC Broadband Connectivity Competition Policy Workshop (Feb. 13, 2007), available at http://www.ftc.gov/opp/workshops/broadband/transcript_070213.pdf; see also Joseph W. Waz, Jr., Presentation at the FTC Broadband Connectivity Competition Policy Workshop (Feb. 14, 2007), available at http://www.ftc.gov/opp/workshops/broadband/transcript_070214.pdf.

¹¹⁵ See generally WILLIAM J. BAUMOL ET. AL., CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE (1982).

quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives¹¹⁶

triggers most significant advances in human well being. Other scholars have also developed dynamic theories of competition.¹¹⁷ In evolutionary competition theories, different firms have different abilities, novelty constantly arises, innovation occurs as firms grow more experienced, and there are limits to the amount of information decision makers can acquire and process.¹¹⁸ Evolutionary theorists believe that competition is an open-ended process of innovation, experimentation, and feedback, and the purpose of competition is to reveal what services, costs, and prices are possible.¹¹⁹ The firms that survive and grow are those that better anticipate what consumers want and find the best ways to produce it.¹²⁰

Strategic management scholars view competition as continuous striving to develop superior capabilities to serve consumers in cost-effective ways.¹²¹ In a dynamically competitive market, some of the most important capabilities are the abilities to innovate, to change business strategy rapidly, to drop and add services in response to customer needs, to upgrade products with new technology and features, and to change prices as market conditions change.

Dynamic competition has the potential to reduce the significance of sunk costs as a barrier to entry. In dynamically competitive markets with heterogeneous firms, innovation allows new entrants to overcome some of the incumbent's sunk cost advantage.¹²² If a new entrant can provide service comparable to the incumbent's at a lower total cost, or if the entrant can offer new performance features that are valuable to consumers, then entry can occur despite the presence of sunk costs.

¹¹⁶ JOSEPH A. SCHUMPETER, *CAPITALISM, SOCIALISM, AND DEMOCRACY* 84 (3d ed. 1950) (1942).

¹¹⁷ See generally Jerry Ellig & Daniel Lin, *A Taxonomy of Dynamic Competition Theories*, in *DYNAMIC COMPETITION AND PUBLIC POLICY*, *supra* note 108, at 16 (summarizing dynamic competition theories).

¹¹⁸ *Id.* at 21.

¹¹⁹ See Richard R. Nelson, *The Tension Between Process Stories and Equilibrium Models: Analyzing the Productivity-Growth Slowdown of the 1970s*, in *ECONOMICS AS A PROCESS: ESSAYS IN THE NEW INSTITUTIONAL ECONOMICS* 135, 147 (Richard N. Langlois ed., 1986).

¹²⁰ See generally F.A. HAYEK, *NEW STUDIES IN PHILOSOPHY, POLITICS, ECONOMICS AND THE HISTORY OF IDEAS* 179–90 (1978); ISRAEL M. KIRZNER, *DISCOVERY AND THE CAPITALIST PROCESS* 119–49 (1985); ISRAEL M. KIRZNER, *COMPETITION AND ENTREPRENEURSHIP* (1973).

¹²¹ See Jay B. Barney, *Competence Explanations of Economic Profits in Strategic Management: Some Policy Implications*, in *DYNAMIC COMPETITION AND PUBLIC POLICY*, *supra* note 108 at 45.

¹²² The economic theory that posits sunk costs to be entry barriers assumes that both incumbents and potential entrants have access to the same technology, so that all can produce at the same total cost.

Some evidence indicates that dynamic competition may have reduced the significance of sunk costs as a barrier to entry in the broadband market. In many cases, the first firms to offer high-speed lines were cable companies selling cable modem service. They initially acquired a very high market share, but this market share corresponded to a tiny penetration rate as not many people subscribed. Cable modem's 58.7% market share at the end of 2004 corresponded to a penetration rate of only 16.7%.¹²³

Phone companies offering DSL service were usually the second or third market entrants, and they gradually built their market share. Initially, phone companies had much lower broadband market shares than the cable companies. In 2005, new DSL subscriptions (5.7 million) exceeded new cable modem subscriptions (4.2 million) for the first time.¹²⁴ This trend continued through the first half of 2006, which saw 3.1 million additional DSL lines compared to 2 million additional cable modems.¹²⁵ DSL had a market share of almost 35% at midyear 2006.¹²⁶ Mobile wireless firms that have expanded their broadband offerings after acquiring additional spectrum in the Advanced Wireless Service auction may be the next major players to offer a significant cost or quality improvement.

Entry prohibitions by government, on the other hand, can still deter entry by a firm that has a cost or quality advantage over the incumbent. DSL often sells at a lower price than cable modem, but the cable companies enjoyed a substantial lead over the phone companies due to uncertainty over the regulatory status of DSL service.¹²⁷ Since there are several significant government-erected entry barriers—most notably cable franchising and federal spectrum allocation for

¹²³ MICHAEL J. BALHOFF & ROBERT C. ROWE, MUNICIPAL BROADBAND: DIGGING BENEATH THE SURFACE 24 (2005), available at <http://www.balhoffrowe.com/documents.htm> (follow hyperlink to document). From the first quarter of 2003 to the first quarter of 2005, the percentage of households using DSL more than doubled, from 6% to 12.9%. The percentage using cable modem during that same period increased from 10.5% to 17.6%. *Id.*

¹²⁴ INDUS. ANALYSIS & TECH. DIV., FCC, HIGH-SPEED SERVICES FOR INTERNET ACCESS: STATUS AS OF DECEMBER 31, 2005, at 2 (2006), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-266596A1.pdf.

¹²⁵ This was likely due to the substantial price reductions offered on DSL. INDUS. ANALYSIS AND TECH. DIV., FCC, HIGH-SPEED SERVICES FOR INTERNET ACCESS: STATUS AS OF JUNE 30, 2006, at 2 (2006), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/DOC-270128A1.pdf.

¹²⁶ *Id.* at 6 tbl.1 (percentage calculated from data).

¹²⁷ Thomas W. Hazlett, Coleman Bazelon, John Rutledge & Deborah Allen Hewitt, Sending the Right Signals: Promoting Competition Through Telecommunications Reform 94–99 (2004), available at <http://www.uschamber.com/portal/teleconsensus/041006telecommstudy.htm> (follow hyperlink to report).

wireless services—it is not clear that dynamic competition has had as strong an effect on entry as it could have had in the absence of these other barriers.

When dynamic competition is possible, firms have additional reasons to engage in rivalry rather than collusion. In dynamic competition, the firm that first introduces a cost-reducing or quality-enhancing technology, feature, or service can temporarily earn higher profits—until its success is imitated. Broadband exhibits significant progress in price and speed, suggesting that dynamic competition is strong and collusion is weak.

Indeed, substantial price reductions have occurred in recent years.¹²⁸ Maximum speeds have also increased. In its first report on the extent of broadband deployment, issued in 1999, the FCC noted that the maximum speeds were 3 mbps for cable modem service, 1.5 mbps for DSL, and under 500 kbps for satellite.¹²⁹ Speeds have continued to improve greatly since then.¹³⁰ In 2006, Comcast offered a maximum download speed of 6 mbps; Cox offered 15 mbps; and Cablevision offered 30 mbps.¹³¹

Successful competitors appear to earn rents, or payments that exceed the opportunity costs of the resources the firm uses.¹³² The prospect of earning these rents motivates firms to strive for superior performance. Profits that appear to be “mere rents” may actually be a risk premium or a return on the successful firm’s investment in unique capabilities. Restrictive or discriminatory business practices may be the most effective means of generating these rents. As a re-

¹²⁸ Between 2004 and 2005, BellSouth reduced the monthly price of 1.5 mbps DSL from \$39.95 to \$32.95. Qwest decreased its promotional price from \$26.99 to \$19.99, and extended the term from three months to one year. SBC lowered its promotional price, good for one year, from \$26.95 to \$14.95. BALHOFF & ROWE, *supra* note 123, at 25. Verizon Wireless reduced the monthly fee for wireless broadband service using a PC card by twenty-five percent, from \$79.99 to \$59.99. Press Release, Verizon Wireless, Verizon Wireless Extends its Lead in Wireless Broadband by Bringing its EV-DO Network to More Markets (Aug. 29, 2005), available at <http://news.vzw.com/news/2005/08/pr2005-08-26h.html>.

¹²⁹ *In re* Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, *Report*, 14 F.C.C.R. 2398, 2431 (Jan. 28, 1999).

¹³⁰ Between 2004 and 2005, a number of major broadband providers increased the speeds of their services. These changes represent performance improvements of between twenty-five percent and two hundred percent in one year. SBC increased the upload speed of its DSL service threefold, from 128 kbps to 384 kbps. Cablevision increased its download speed from 5 mbps to as much as 10 mbps. Comcast increased its download speed from 3 mbps to 4 mbps and its upload speed from 256 kbps to 384 kbps. Time Warner increased download speed from 3 mbps to as much as 8 mbps. BALHOFF & ROWE, *supra* note 123, at 25.

¹³¹ See ELLIG, *supra* note 109, at 29–33.

¹³² See generally Harold Demsetz, *Industry Structure, Market Rivalry, and Public Policy*, 16 J. L. & ECON. 1, 1–2 (1973).

sult, business practices that at first glance appear merely to transfer wealth from consumers to broadband firms, may actually be the means by which the firm collects its reward for successful innovation. Dynamic competition theory suggests that such practices should be given the benefit of the doubt if they do not demonstrably reduce economic efficiency.

2. *Terminating Access Monopoly*

The possibility of terminating access monopoly in the broadband market raises issues distinct from the aforementioned vertical issues. As long as each customer subscribes to only one Internet access provider, at any given time that provider has a monopoly over its customers, even if the market for Internet access is competitive. If the Internet access provider can charge other parties (such as content or applications providers) when they send data packets to its customers, it may be able to collect monopoly profits. The concept of terminating access monopoly was originally developed to analyze the incentives faced by local telephone exchange carriers. Regulators should ensure that any analogies between phone service and broadband account for critical differences between these services and the pre-existing regulatory environment.

A local phone company that provides an individual subscriber with access to the rest of the telephone network has a monopoly over access to that individual. An unregulated company could exploit this position by charging all other carriers high rates to terminate calls to its customers.¹³³ Because the callers ultimately paying the termination charges are not customers of the network that is imposing the charges, competition may not deter this practice.¹³⁴ A customer who initiates a long-distance call, for example, is the customer of the long-distance company, which pays an access charge to the call recipient's local phone company. The recipient does not see this access charge; therefore, the recipient has little incentive to select a local phone company that imposes low access charges.

Economic theory suggests several ways in which terminating access monopoly can ultimately harm consumers. First, an established incumbent firm facing an entrant that initially serves only a small portion of the market can find it profitable to charge a very high access price that effectively curbs the

¹³³ To terminate a call is to "provid[e] the facilities for the last segment of the call from the central office serving the called party to the called party's premises." Patrick DeGraba, *Central Office Bill and Keep as a Unified Inter-Carrier Compensation Regime*, 19 YALE J. ON REG. 37, 41 n.12 (2002).

¹³⁴ Jerry Ellig, *Intercarrier Compensation and Consumer Welfare*, 2005 J.L. TECH & POL'Y 97, 103 (2006).

entrant's ability to compete, thus cornering the market.¹³⁵ Second, access charges can facilitate collusion on retail prices when networks charge customers per call or by another unit of usage.¹³⁶ Third, access charges could ultimately increase the price of a service whose demand is very price-sensitive, while decreasing the price of a service whose demand is not very sensitive to price. This reduces overall consumer welfare, because the cost to consumers who decrease purchases of the price-sensitive services is much larger than the gains to consumers who buy more of the service whose demand is not sensitive to price. Historically, access charges on long-distance phone service have had precisely this effect.¹³⁷

One solution to this problem advocated by many telecommunications economists and the FCC staff¹³⁸ is mandatory interconnection at a zero price, also known as "bill and keep."¹³⁹ Phone companies would interconnect, but they could not impose access charges on each other or on each others' customers; each company's revenues would come solely from its own customers.

When attempting to address the terminating access monopoly within the broadband context, many net neutrality proposals rely on false analogies to telecommunications. These proposals reason that if broadband Internet access providers can charge providers when customers download their content or applications, such charges would resemble access charges imposed by local phone companies. If consumers see only the price of Internet access—not the charges imposed on the content or applications providers—they may have little incentive to shop for an access provider who charges content or applications providers the most competitive rates. Instead, the costs of these access charges are spread among all the customers of the content or applications providers. If the Internet access provider happens to sell some similar content or applications, it may even find itself in a position to raise its rivals' costs by charging them for access to its customers. Proponents of the analogy advocate manda-

¹³⁵ Jean-Jacques Laffont, Patrick Rey & Jean Tirole, *Network Competition: I. Overview and Nondiscriminatory Pricing*, 29 RAND J. ECON. 1, 19–20 (1998).

¹³⁶ Jean-Jacques Laffont, Patrick Rey & Jean Tirole, *Competition Between Telecommunications Operators*, 41 EUR. ECON. REV. 701, 704–05 (1997) (demonstrating that usage-sensitive access charges give competing communications carriers incentives to increase their *net* access revenues by raising the usage-based prices they charge their own subscribers, thus reducing the volume of calls on which they have to pay access charges to their competitors).

¹³⁷ See Jerry Ellig, *Costs and Consequences of Federal Telecommunications Regulations*, 58 FED. COMM. L.J. 37, 52–56 (2006).

¹³⁸ See *In re Developing a Unified Inter-carrier Compensation Regime, Further Notice of Proposed Rulemaking*, 20 F.C.C.R. 4685, 4781 (Feb. 10, 2005) [hereinafter *Unified Inter-carrier Compensation*].

¹³⁹ An author of this article has advocated "bill and keep" as the appropriate policy to govern interconnection of telephone networks. See Ellig, *supra* note 134.

tory interconnection, coupled with a bill and keep policy that prevents Internet access providers from charging anyone other than their own customers, as possible ways to curb the terminating access monopoly.

Despite seeming similarities, broadband Internet contrasts markedly from the economic environment and institutional structure in telecommunications. In telecommunications, bill and keep would remedy a problem created by the historical legacy of preexisting price regulation and incumbent local phone companies' "provider of last resort" obligations. Basic local telephone service is still subject to regulation that holds prices below some measure of long-run incremental cost for many customers.¹⁴⁰ Competitive local carriers must also hold their prices for local service artificially low because they are competing with incumbents who are required by regulation to sell basic local phone service at prices that are often below cost. Usage-based access charges from long-distance service, which exceed the costs of switching, help cover the costs of the local network that the local rates themselves do not cover.¹⁴¹ Since demand for local phone service is not very sensitive to price, but demand for long-distance minutes is, bill and keep pushes the regulated price structure in the direction that maximizes consumer welfare.

Bill and keep counteracts additional perverse incentives created by law and regulation that are unique to telecommunications. The situation facing long-distance carriers illustrates this problem. Federal law and regulation require that interexchange carriers offer rural customers the same rates as urban customers and charge the same rates in all states.¹⁴² These requirements force long-distance carriers to average access charges over all customers. Thus, the access charge regime concentrates benefits on local phone companies that collect high access charges while dispersing costs among all long-distance customers. When laws and regulations prevent consumers from seeing the full price associated with their choice of local telephone company, and access charges must be averaged among all of the long-distance company's customers, it should be no surprise that excessive access charges result. Barring phone

¹⁴⁰ ROBERT W. CRANDALL & LEONARD WAVERMAN, WHO PAYS FOR UNIVERSAL SERVICE?: WHEN TELEPHONE SUBSIDIES BECOME TRANSPARENT 109–27 (2000); ROBERT W. CRANDALL & JERRY ELLIG, TEX. PUB. POL'Y FOUND., TEXAS TELECOMMUNICATIONS: EVERYTHING'S DYNAMIC EXCEPT THE PRICING 38 (2005), *available at* <http://www.texaspolicy.com/pdf/2005-01-telecom.pdf>.

¹⁴¹ *See, e.g.*, Billy Jack Gregg, A Survey of Unbundled Network Element Prices in the United States, at tbl.1A (2006), *available at* http://www.nrri.ohio-state.edu/Telecom/documents/intro_to_matrix_03-06.pdf (showing in column F of Table that cost-based unbundled network element switching rates are usually in tenths of a cent per minute).

¹⁴² *See* Unified Intercarrier Compensation, *supra* note 138, ¶ 83.

companies from imposing access charges on each others' customers might help remedy this problem.

No similar regulations exist in the market for Internet service. If an Internet access provider imposes a fee on content or applications providers, those providers can choose to pass this cost directly to the users of their services who subscribe to that particular Internet access provider. The consumer can see the full price charged by the Internet access provider and can respond accordingly. Competition in the Internet access market is critical to preventing exploitation of the terminating access monopoly.

If Internet access providers could charge application or content providers to reach their customers, then the economics literature on two-sided markets may become relevant. Generally, a two-sided market is one in which an intermediary connects two different groups of customers, and the value of the service to each customer depends on how many and what types of customers are on the "other" side of the market.¹⁴³ Dating services, newspapers, stock exchanges, computer operating systems, Internet search engines, and credit card networks are commonly-cited examples of two-sided markets.¹⁴⁴ If the Internet is a two-sided market, then competition in the market for Internet access plays a key role in safeguarding overall consumer welfare.

Evaluating market power in a two-sided market requires assessment of both sides of the market. If the Internet access market is competitive, for example, it is difficult to understand why any rents the access providers might earn from charges on content or applications providers would not be returned to consumers in the form of lower prices for Internet access.¹⁴⁵ One article outlines the issue as follows:

Suppose that in a market without multihoming [i.e., each Internet user connects via only one access provider], there is limited competition on side *A* because customers cannot easily switch between vendors on that side, but there is intense competition on side *B* because customers can and do switch between vendors based on price and quality. If competitors on side *B* cannot differentiate their products and otherwise compete on an equal footing, then the ability to raise prices on side *A* will not lead to an increase in profits. Any additional profits on side *A* will be wiped away by competition on side *B*.¹⁴⁶

¹⁴³ See generally Symposium, *Conference on Two-Sided Markets*, 2005 COLUM. BUS. L. REV. 509 (2005).

¹⁴⁴ David S. Evans & Michael Noel, *Defining Antitrust Markets When Firms Operate Two-Sided Platforms*, 2005 COLUM. BUS. L. REV. 667, 674–84 (2005).

¹⁴⁵ See Prof. Marius Schwartz, Georgetown Univ., Address at the FTC Broadband Connectivity Competition Policy Workshop 250–59 (Feb. 13, 2007), available at http://www.ftc.gov/opp/workshops/broadband/transcript_070213.pdf.

¹⁴⁶ Evans & Noel, *supra* note 144, at 695.

Internet access competition might not prevent access providers from charging content or applications providers for access to their customers. However, for the following reasons, it should help ensure that such charges will occur only when they improve consumer welfare.

The simplest reason is that firms are likely to turn to demand-sensitive pricing to cover fixed costs. In the presence of fixed costs that must be covered via a markup over marginal costs, the pricing structure that maximizes consumer welfare is the one that imposes a higher markup over marginal cost on services whose demand is less sensitive to price.¹⁴⁷ Generally, this is also the more profitable pricing strategy for the firm. In two-sided markets, a similar type of pricing arrangement occurs: “[T]he side with less elastic demand will typically face the higher price, because raising the price for those with more elastic demand will lead to more lost sales.”¹⁴⁸ In addition, the side of the market that pays the lower price tends to be whichever side creates the most value for the other side when it uses more of the service.¹⁴⁹ In the broadband market, customers who use Internet content or applications are likely more price-sensitive, and an increase in subscription by this group is likely to create value for content and applications providers. If an Internet access provider gained the ability to charge content or applications providers under such conditions, it likely would want to reduce prices or offer other inducements to increase subscriptions.

Whether a higher price for some content or applications, coupled with a lower price for Internet access, would improve consumer welfare, is an empirical question. Several studies find that the elasticity of demand for DSL broadband service exceeds -1.0; that is, a one percent change in price leads to a greater than one percent change in subscribership.¹⁵⁰ Most attempts to measure the overall elasticity of demand for broadband in general have found that it is highly elastic, ranging from -1.5 to -3.76.¹⁵¹ If elasticities of demand for at least

¹⁴⁷ See Frank P. Ramsey, *A Contribution to the Theory of Taxation*, 37 *ECON J.* 47, 58–59 (1927).

¹⁴⁸ Timothy J. Muris, *Payment Card Regulation and the (Mis)Application of the Economics of Two-Sided Markets*, 2005 *COLUM. BUS. L. REV.* 515, 519 (2005).

¹⁴⁹ *Id.* The principal difference between Ramsey pricing and elasticity-sensitive pricing in two-sided markets is that, unlike Ramsey pricing, optimal pricing in two-sided markets may not be related to marginal cost. One side of the market may even receive a “subsidy” due to the value it creates for the other side. *Id.*

¹⁵⁰ Robert W. Crandall, J. Gregory Sidak & Hal J. Singer, *The Empirical Case Against Asymmetric Regulation of Broadband Internet Access*, 17 *BERKELEY TECH. L. J.* 953, 973–74 (2002) [hereinafter *Asymmetric Regulation*]; Robert W. Crandall, Robert W. Hahn & Timothy J. Tardiff, *The Benefits of Broadband and the Effect of Regulation*, in *BROADBAND: SHOULD WE REGULATE HIGH-SPEED INTERNET ACCESS?* 301 (Robert W. Crandall & James H. Alleman eds., 2002).

¹⁵¹ Austan Goolsbee, *Subsidies, the Value of Broadband, and the Importance of Fixed*

some content or applications are lower than this, then allowing Internet access providers to charge content or applications providers could increase consumer welfare simply by recovering more of the fixed costs from the less price-sensitive services.

There are additional opportunities to improve consumer welfare if some content or applications function better when their data packets receive a higher priority of service. Charging a premium for better service allows the Internet service provider to cover the costs associated with such service and allocate scarce capacity to uses that consumers value more highly. Consumers might be required to pay higher prices for content or applications if the provider is required to pay the Internet service provider a fee for priority service. Competition among content and applications providers helps ensure that the higher-priced service will survive only if the additional value to consumers exceeds the additional cost.

C. Identify the Uniquely Federal Role

The fact that a market failure or other systemic problem prevents the achievement of desired policy outcomes does not necessarily mean that the federal government can provide the most effective remedy to that failure. As OMB Circular A-4 explains:

In assessing whether Federal regulation is the best solution, you should also consider the possibility of regulation at the State or local level. In some cases, the nature of the market failure may itself suggest the most appropriate governmental level of regulation. For example, problems that spill across State lines (such as acid rain whose precursors are transported widely in the atmosphere) are probably best addressed by Federal regulation. More localized problems, including those that are common to many areas, may be more efficiently addressed locally.¹⁵²

The interstate—indeed, international—nature of the Internet suggests there are strong reasons to believe that the federal government should play the primary role, if not the exclusive role, in its regulation. Indeed, when the Maryland legislature considered a broadband discrimination law in early 2007, the State's Attorney General's Office issued an opinion that the proposed bill would likely be preempted by existing FCC rules and might also violate the

Costs, in BROADBAND: SHOULD WE REGULATE HIGH-SPEED INTERNET ACCESS?, *supra* note 150, at 283–86.

¹⁵² Circular A-4, *supra* note 85, at 6; *see also* Exec. Order 12,866 § 1(b)(9), 3 C.F.R. 638, 640 (1993), *reprinted in* 5 U.S.C. § 601 (1994) (directing agencies to “assess the effects of Federal regulations on State, local, and tribal governments, including specifically the availability of resources to carry out those mandates, and seek to minimize those burdens that uniquely or significantly affect such governmental entities, consistent with achieving regulatory objectives.”).

Commerce Clause of the United States Constitution.¹⁵³ Regulation of discrimination in broadband networks is likely a task to be accomplished exclusively by the federal government. At a minimum, judicial and FCC decisions have virtually guaranteed that the federal government will take the lead.¹⁵⁴

Both the FCC and FTC have jurisdiction over broadband. In theory, either could promulgate and enforce regulations. However, two differences between the agencies might guide the division of labor.

First, the FCC likely has broader latitude to regulate because the Communications Act of 1934, as amended¹⁵⁵ permits the FCC to issue regulations under a relatively elastic public interest standard.¹⁵⁶ This standard allows the FCC to assess diverse values—certainly consumer welfare, but also concerns such as the degree of public discourse, broadband penetration, and economic competitiveness.¹⁵⁷ To the extent that promoting these values requires a decrease in consumer welfare, the FCC can choose to make that sacrifice. Arguably, however, the FCC is not empowered to choose a regulatory option that sacrifices more consumer welfare than is necessary to advance its other public interest goals.¹⁵⁸

Second, the Federal Trade Commission Act¹⁵⁹ grants the FTC broad authority to promote competition and protect consumers.¹⁶⁰ However, in practice, the

¹⁵³ See Letter from Kathryn M. Rowe, Assistant Att’y Gen. of Md., to Mary Ann Love, Member of Md. House of Delegates (Feb. 27, 2007), available at <http://www.publicknowledge.org/pdf/md-ag-letter-20070227.pdf>.

¹⁵⁴ See, e.g., *Vonage Holdings Corp. v. Minn. Pub. Util. Comm’n*, 290 F. Supp. 2d 993, 1001–03 (D. Minn. 2003).

¹⁵⁵ Communications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064.

¹⁵⁶ See, e.g., 47 U.S.C. § 157 (2000).

¹⁵⁷ See, e.g., Presentation of Harold Feld, *supra* note 88.

¹⁵⁸ Numerous commentators have emphasized this relationship between the public-interest standard and the consumer welfare standard. See, e.g., Jerry Ellig & Joseph P. Rontondi, *Outcomes and Alternatives for Universal Telecommunications Service: A Case Study of Texas*, 12 TEX. REV. L. & POL’Y (forthcoming 2007); Jerry A. Hausman & J. Gregory Sidak, *A Consumer-Welfare Approach to the Mandatory Unbundling of Telecommunications Networks*, 109 YALE L.J. 417, 422–24 (1999); Jerry Hausman & Howard Shelanski, *Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal-Service Subsidies*, 16 YALE J. ON REG. 19, 28 (1999); Calvin S. Goldman, Ilene Knable Gotts & Michael E. Piaskoski, *The Role of Inefficiencies in Telecommunications Merger Review*, 56 FED. COMM. L.J. 87, 113 (2003); Reza Dibadj, *Saving Antitrust*, 75 U. COLO. L. REV. 745, 816–17 (2004); Thomas G. Krattenmaker, *The Telecommunications Act of 1996*, 29 CONN. L. REV. 123, 172 (1996).

¹⁵⁹ Federal Trade Commission Act, Pub. L. No. 63-203, 38 Stat. 717 (1914) (codified as amended at 15 U.S.C. §§ 41–58).

¹⁶⁰ FED. TRADE COMM’N, BROADBAND CONNECTIVITY COMPETITION POLICY: FTC STAFF REPORT 38 (2007) [hereinafter FTC STAFF REPORT], available at <http://www.ftc.gov/reports/broadband/v070000report.pdf>.

FTC usually limits its focus to consumer welfare.¹⁶¹ The FTC, unlike the FCC, tends to pursue its mission by enforcing the basic competition and consumer protection policies enunciated in the Federal Trade Commission Act, as defined and limited by evolving antitrust and consumer protection jurisprudence.¹⁶² As FTC Chair Deborah Majoris noted in her speech announcing the formation of the FTC's Broadband Task Force:

[T]he FTC is primarily a law enforcement agency and exercises its jurisdiction mainly by conducting investigations and bringing law enforcement actions. This means that the FTC does not exercise "regulatory" jurisdiction in the sense of economic regulation or industry management. The FTC has the responsibility to ensure that consumers are protected not *from* markets but *through* markets unburdened by anticompetitive conduct.¹⁶³

Although the FTC has the power to write and enforce regulations, it tends to view new regulations as a last resort—pursuing them only if a significant problem persists even after the FTC undertakes significant education and enforcement initiatives.¹⁶⁴ If the FTC issued net neutrality regulations, they would likely prohibit certain problematic practices, but would not regulate prices.

Each of the two regulatory agencies, therefore, possesses different comparative advantages. The FCC tends to write and enforce detailed, industry-specific regulations that may sacrifice consumer welfare to advance other values, while the FTC tends to favor enforcement of widely applicable rules intended to promote competition and consumer welfare across the entire economy. A natural division of labor would allow the FTC to take the lead on any net neutrality problems that can be solved simply by enforcing existing antitrust and consumer protection laws, leaving regulation to the FCC. The FCC would enact new regulations only if other public interest values required a sacrifice of consumer welfare, or if the FCC could demonstrate ways of improving consumer welfare via targeted regulations that extend beyond existing antitrust and consumer protections.

¹⁶¹ See *id.* at 4 ("The statutory mission of the FTC is to protect both competition and consumers by safeguarding and encouraging the proper operation of the free market. In carrying out that mission, the FTC primarily is focused on maximizing consumer welfare . . .").

¹⁶² *Id.* at 38–41.

¹⁶³ Deborah Platt Majoris, Chair, Fed. Trade Comm'n, *The Federal Trade Commission in the Online World: Promoting Competition and Protecting Consumers*, Address at the Progress & Freedom Foundation's Aspen Summit 7 (Aug. 21, 2006), available at <http://ftc.gov/speeches/majoras/060821pffaspenfinal.pdf>.

¹⁶⁴ See Timothy J. Muris, Chairman, Fed. Trade Comm'n, "Do the Right Thing" (*Apologies to Spike Lee*), Remarks Before the Cable Television Advertising Bureau (Feb. 11, 2003), available at <http://www.ftc.gov/speeches/muris/030211rightthing.shtm> ("While FTC law enforcement and consumer education will continue full force, the regulatory powers of government should be the last, not the first, resort.").

D. Assess Effectiveness of Alternative Approaches

A finding that market failure justifies some federal role does not mean that any conceivable federal action will do. For any postulated outcome and market failure, regulators should assess which alternative is likely to achieve the goal most effectively.¹⁶⁵

There are several alternative solutions should regulators decide to influence outcomes in the broadband market. The FCC could adopt rules that explicitly prohibit certain practices. Alternatively, the FCC could specify outcomes it hopes to achieve, and network owners could remain free to engage in non-neutral behavior so long as they can demonstrate that it does not undermine those outcomes. The FCC's Policy Statement may not be enforceable,¹⁶⁶ but it likely influences network owners' behavior by warning what types of behavior might lead the FCC to initiate a rulemaking. The FTC could conduct enforcement activities under the Federal Trade Commission Act, whereby practices alleged to violate net neutrality would be analyzed under the antitrust rule of reason. Another potential solution would be for multiple levels of government to vigorously promote new entry into the broadband market, thus eliminating opportunities for firms to engage in anticompetitive behavior.

Economic analysis is useful for assessing the effectiveness of proposed solutions even when the desired outcome is something other than consumer welfare. Consider, for example, the financial incentives of a profit-maximizing Internet access provider who considers blocking political speech over its network. If many individuals purchase Internet access because they want to engage in political speech, then Internet access providers have a strong financial incentive to avoid hampering political speech on the Internet. They earn more customers and revenues if the customers are confident that they can use the Internet for political speech. Technology may give companies the ability to block or censor political speech, but they would pay a financial price for doing so. This does not mean that the profit motive will guarantee net neutrality for political speech, but it does suggest that Internet service providers would prevent their customers from sending or receiving political speech only in extraordinary circumstances. Identifying those circumstances would allow regu-

¹⁶⁵ Exec. Order 12,866, §1(b)(5), 3 C.F.R. 638, 639 (1993), *reprinted in* 5 U.S.C. § 601 (1994); *see also id.* § 6(a)(3)(C)(iii), 3 C.F.R. at 646 (requiring agencies to assess "alternatives to the planned regulation, identified by the agencies or the public (including improving the current regulation and reasonably viable nonregulatory actions), and an explanation why the planned regulatory action is preferable to the identified potential alternatives."); *see also* Circular A-4, *supra* note 85, at 7-9 (describing possible alternatives agencies should consider).

¹⁶⁶ *See* discussion *supra* Part II.

lators to craft a more targeted remedy that would focus enforcement resources on the most significant problems likely to occur.

This example would imply that net neutrality might not be the most effective means of promoting important public discourse values. Of course, net neutrality cannot be accepted or rejected solely upon a testable hypothesis. If public discourse values are important, net neutrality should not be accepted until decision makers actually know—based on coherent theory and evidence—whether it is the most effective means of promoting specific outcomes derived from these values.

E. Identify Costs

The accurate measure of the cost of any government action is its opportunity cost: what society would give up in order to devote resources to taking the action. Government and private expenditures only partially measure the costs associated with a particular course of action. Sound regulatory analysis also identifies the hidden and indirect costs that are less obvious than the direct expenditures.¹⁶⁷

When federal agencies and private firms spend money to enforce and comply with regulations, the money has to come from somewhere. Government, of course, earns revenue through taxes. Businesses and other entities ultimately have to acquire the needed funds by charging customers or reducing payments to the owners of resources. In both cases the costs of regulation are likely to affect the prices that consumers pay.¹⁶⁸

When prices or taxes increase because regulation increases costs, consumers pay more. Some consumers may also pay higher prices than they otherwise would due to regulations intended to prevent discriminatory pricing. In addition to these direct costs are the indirect costs that arise when consumers respond to the price increases by purchasing less of the products or services

¹⁶⁷ Exec. Order 12,866, §6(a)(3)(C)(ii), 3 C.F.R. at 646 (requiring agencies to assess “costs anticipated from the regulatory action (such as, but not limited to, the direct cost both to the government in administering the regulation and to businesses and others in complying with the regulation, and any adverse effects on the efficient functioning of the economy, private markets . . . , health, safety, and the natural environment”)); *see also* Circular A-4, *supra* note 85, at 14–42 (explaining how to identify and calculate costs and explaining the concept of opportunity cost).

¹⁶⁸ Analyzing the effects of cost-increasing regulation is similar to analyzing the incidence of a tax. One of the most well-known tenets of the economics of taxation is that the party who formally pays a tax does not necessarily bear the burden of the tax. The incidence of the tax—who really pays—depends on the elasticities of supply and demand, as well as the competitiveness of the market. *See* EDGAR K. BROWNING & JACQUELENE M. BROWNING, *PUBLIC FINANCE AND THE PRICE SYSTEM* 83–89 (1979).

whose prices have increased. The value that this lost output would have created for consumers and producers is called the “deadweight loss” or “excess burden” associated with the tax or regulation. Scholarly research finds that the deadweight loss associated with general taxation ranges from an estimated twenty-six to forty cents per dollar raised.¹⁶⁹ In general, the OMB assumes that the deadweight loss associated with federal taxation equals twenty-five percent of revenues.¹⁷⁰

To the extent that broadband regulation increases costs for some consumers or distorts prices, the deadweight loss is likely to be high.¹⁷¹ Deadweight losses are high when the additional costs of providing additional service are low, the value of the additional service to consumers exceeds these costs, and consumer purchasing decisions are sensitive to price. Indeed, most of broadband’s costs are fixed, the incremental cost of serving more consumers is likely low compared to the price they pay, and elasticities of demand are high.¹⁷²

F. Compare Costs with Outcomes

Cost information cannot be considered in isolation. An expensive regulation may, nevertheless, create significant positive outcomes that are valuable to policymakers and citizens. Information on outcomes and costs can be combined in a variety of ways to aid decision making, such as analysis of cost-effectiveness or comparison of costs and benefits.¹⁷³

Comparing costs and benefits does not automate decisions, because different decision makers may ascribe different values to the benefits. Even when benefits can be expressed in monetary terms, the dollar amounts usually reflect the value of the benefits to the average person. Therefore, cost-benefit analysis

¹⁶⁹ Jerry Hausman, *Efficiency Effects on the U.S. Economy from Wireless Taxation*, 53 NAT’L TAX J. 733, 739–40 (2000).

¹⁷⁰ Office of Mgmt. & Budget, Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, § 11 (Oct. 29, 1992), available at <http://www.whitehouse.gov/omb/circulars/a094/a094.html>.

¹⁷¹ Economic research finds that deadweight losses associated with the FCC regulation of price-sensitive telecommunications services are quite high as compared with the deadweight losses associated with general taxation. See Ellig, *supra* note 134, at 98–99 (providing an analysis of regulations that apply to long-distance and wireless services).

¹⁷² See *Asymmetric Regulation*, *supra* note 150, at 973; see also Goolsbee, *supra* note 151, at 283–87 (providing studies of demand elasticity).

¹⁷³ Exec. Order 12,866, § 1(b)(6), 3 C.F.R. 638, 639 (1993), reprinted in 5 U.S.C. § 601 (1994) (requiring agencies to assess “both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.”); see also Circular A-4, *supra* note 85, at 9–12 (explaining the differences between cost-benefit analysis and cost-effectiveness analysis).

may mask significant diversity in the value that different people attach to the benefits.

Consumer welfare is an important value, but it need not be the only value of interest to decision makers. Responsible decisions require a clear understanding of the terms of the tradeoffs, including how much consumer welfare gets sacrificed to promote competitiveness or public discourse, and which regulatory policies accomplish desired objectives with the least sacrifice of other values. Decision makers must understand the realistic implications of these tradeoffs. Government accountability demands that citizens have a transparent accounting of the tradeoffs. Regulatory analysis provides the tools necessary to provide that accounting.

A comparison of the costs and benefits of net neutrality regulation will depend on the specific values regulators deem important to the debate. Focusing the net neutrality debate on consumer welfare allows for straight-forward comparisons. One relevant consideration is whether total benefits outweigh total costs. This would demonstrate whether net neutrality regulation would improve or reduce net consumer welfare. Another consideration is that net neutrality regulation would likely affect the mix of services network owners offer different customers and the prices they charge, and as a result, regulation could benefit some consumers as it harms others. Therefore, the incidence of costs and benefits—who receives the benefits, and who bears the costs—may matter just as much as the overall impact of net neutrality.¹⁷⁴

If achievement of other values requires a sacrifice of consumer welfare, then the comparison of costs and outcomes becomes more complicated, and also more controversial. One solution would be to monetize the value of the outcomes, following well-established economic methodology.¹⁷⁵ If the value cannot be monetized—or if significant stakeholders find such analysis unconvincing—decision makers could still calculate the amount of consumer welfare sacrificed per unit of successful outcome. This cost-effectiveness analysis could aid decision makers in determining whether new regulation is worth the cost, or which regulatory alternative presents the most attractive tradeoff between consumer welfare and other values.

¹⁷⁴ SUSAN E. DUDLEY, MERCATUS CTR., PRIMER ON REGULATION 43 (2005).

¹⁷⁵ See Circular A-4, *supra* note 85, at 9–11.

V. MEASURING THE FTC'S AND FCC'S ANALYSIS OF NET NEUTRALITY AGAINST THE REGULATORY ANALYSIS FRAMEWORK

A. Federal Trade Commission

1. The Federal Trade Commission Approach to Net Neutrality

The FTC announcement of the Broadband Connectivity Competition Policy workshop was extremely brief and provided little prospective guidance about the Broadband Task Force's approach, beyond stating that the workshop would focus on competition and consumer protection.¹⁷⁶ In her speech announcing the formation of the Task Force, however, FTC Chair Deborah Majoris noted four factors to consider when evaluating the need for new regulation. First, demonstrated harm must be shown. Clear evidence of "market failure or consumer harm" is needed to justify any kind of blanket prohibition on particular business conduct or business models.¹⁷⁷ Second, regulators must examine regulatory costs, including unintended or perverse consequences.¹⁷⁸ Third, regulators must assess market forces, and answer the question whether markets or governments will produce results most favorable to consumers.¹⁷⁹ Finally, regulators must evaluate existing agency oversight. Regulators must determine whether existing policies and oversight by the FCC, FTC, and DOJ are sufficient.¹⁸⁰

Majoris' speech also discussed the roles of the FCC, FTC, and DOJ, highlighting the ways in which the FCC's approach can be different from those of the antitrust agencies.¹⁸¹ She emphasized the FTC's focus on consumer welfare, but noted that "the FCC's mandate goes beyond competition and consumer protection."¹⁸² Without explicitly saying so, she also implicitly signaled that the FTC staff was prepared to voluntarily produce a Task Force report consistent with the regulatory analysis framework in Clinton's Executive Order 12,866. In essence, she discussed most elements of the regulatory analysis framework propounded by this article.

¹⁷⁶ Press Release, Fed. Trade Comm'n, FTC To Host Workshop on Broadband Connectivity Competition Policy (Dec. 7, 2006), *available at* <http://www.ftc.gov/opa/2006/12/broadbandworkshop2.shtm>.

¹⁷⁷ Majoris, *supra* note 163, at 15.

¹⁷⁸ *Id.* at 16–17.

¹⁷⁹ *Id.* at 17–19.

¹⁸⁰ *Id.* at 19–20.

¹⁸¹ *Id.* at 4–11.

¹⁸² *Id.* at 20.

In June 2007, the FTC released its Staff Report on Broadband Connectivity and Competition Policy.¹⁸³ The report extensively summarized FTC and FCC legal authority, the Internet technologies that have given rise to the net neutrality issue, and the arguments for and against net neutrality regulation that were presented at the FTC Broadband Connectivity Competition Policy Workshop. It also assessed the state of competition in broadband, provided an antitrust analysis of potential broadband provider conduct, discussed salient consumer protection issues, and outlined different policy proposals on net neutrality.

2. Analyzing the Staff Report on Broadband Connectivity and Competition Policy in Light of the Regulatory Analysis Framework

a. Step 1: Identify the Desired Outcomes

In defining outcomes, the FTC Staff Report explicitly focused on consumer welfare, stating:

[T]he FTC primarily is focused on maximizing consumer welfare, as that term is defined in an economic sense in modern antitrust and consumer protection jurisprudence. . . . In this Report, however, we do not attempt to balance consumer welfare (as we use it, in the economic sense) and free expression. Instead, the Report focuses on the consumer welfare implications of enacting some form of net neutrality regulation.¹⁸⁴

Thus, while acknowledging at least one other outcome that may be of interest to policymakers, the FTC staff concentrated on the outcome most closely linked to its existing expertise.

b. Step 2: Assess Evidence of Market Failure or Other Systemic Problems

The FTC staff searched for market failure, but found little. The report noted that there is little evidence of actual discrimination (beyond *Madison River*¹⁸⁵) and little empirical evidence that would help assess whether harmful consumer discrimination is likely.

The FTC Staff Report concluded that there is little evidence of actual anti-competitive conduct by broadband providers: “[T]here is little evidence to date of consumer harm from anticompetitive practices by ISPs or any other network

¹⁸³ FTC STAFF REPORT, *supra* note 160.

¹⁸⁴ *Id.* at 4.

¹⁸⁵ In *Madison River*, a rural DSL provider was investigated for allegedly blocking VoIP services that competed with its parent company’s telephone service. *In re* Madison River Communications, LLC and Affiliated Companies, *Order*, 20 F.C.C.R. 4295, 4295–98 (Mar. 3, 2005).

operators; the allegations of anticompetitive conduct focus mainly on effects that may occur if certain actions, such as exclusive agreements or vertical integration, are undertaken in the future.¹⁸⁶ Aside from *Madison River*, the closest examples of discrimination the FTC staff found were statements made by network operators. These operators stated that they would like to prioritize certain data traffic, or provide other types of quality-of-service assurances to content and applications providers or end users in exchange for a premium fee.¹⁸⁷

Many observers have, of course, claimed that it is possible for network operators to engage in discrimination that harms consumers, but possible does not mean likely. “With respect to data discrimination,” the FTC staff noted, “broadband providers have conflicting incentives relating to blockage of and discrimination against data from non-affiliated providers of content and applications.”¹⁸⁸ For example, “[w]hile a broadband provider with market power may have an incentive to limit its end-user customers’ access to competing content and applications, the broadband provider also may have an incentive to maximize the value of its network to end users.”¹⁸⁹

There are several reasons why economic theory alone cannot prove that a network owner will have incentives to discriminate in ways that harm consumers. First, it is not clear whether individual broadband providers have market power. If consumers have options and competitors do not collude, a broadband provider is unlikely to sustain discrimination that harms consumers.¹⁹⁰ Second, blocking or discriminating against third-party content would likely reduce the value of the broadband provider’s network, thus reducing its revenues.¹⁹¹ Finally, data discrimination or prioritization is often hypothesized to occur when a network owner vertically integrates into content, but vertical integration itself can benefit consumers.¹⁹²

Whether network owners have sufficient incentive to discriminate against others’ content and applications in ways that harm consumers is ultimately an empirical question.¹⁹³ Unfortunately, little or no empirical analysis exists to guide policymakers: “It appears that, thus far, little attention has been paid in the net neutrality debate to the question how possible harms and benefits from

¹⁸⁶ FTC STAFF REPORT, *supra* note 160, at 122.

¹⁸⁷ *Id.* at 31, 53.

¹⁸⁸ *Id.* at 157.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.* at 157.

¹⁹¹ *Id.*

¹⁹² *Id.* at 158.

¹⁹³ *Id.* at 74–76.

such discrimination might be assessed in the broadband Internet access context.”¹⁹⁴

Given the lack of evidence of market failure, the FTC staff urged caution:

The primary reason for caution is simply that we do not know what the net effects of potential conduct by broadband providers will be on all consumers, including, among other things, the prices that consumers may pay for Internet access, the quality of Internet access and other services that will be offered, and the choices of content and applications that may be available to consumers in the marketplace.¹⁹⁵

These difficulties arise because discriminatory behavior does not, per se, harm consumers; a market failure exists only if network owners are likely to discriminate in ways that harm consumers.

c. Step 3: Identify the Uniquely Federal Role

The report provided a brief summary of the laws and court decisions that give the FCC and the antitrust agencies jurisdiction over broadband.¹⁹⁶ It persuasively argues that the FTC can address, and has addressed, antitrust and consumer protection problems in broadband under the general authority contained in the Federal Trade Commission Act.¹⁹⁷ The report did not explicitly advocate any particular division of labor between the FCC and FTC, but its description of the two agencies’ background and expertise is consistent with the division of labor suggested by this article. With regard to net neutrality, the report argued that the FCC should conduct regulation, while the FTC should enforce existing antitrust and consumer protection laws in promotion of net neutrality principles.

d. Step 4: Assess Effectiveness of Alternative Approaches

One chapter of the FTC Staff Report described a large number of alternative regulatory and legislative proposals regarding net neutrality.¹⁹⁸ These alternatives range from “wait and see” to rather aggressive new regulation. An ensuing chapter of the report unequivocally endorsed the idea that policymakers should find ways to increase broadband competition, although it did not advocate a specific method of doing so.¹⁹⁹ The report’s authors recognized the importance of considering diverse alternatives rather than just tweaks on the same

¹⁹⁴ *Id.* at 75.

¹⁹⁵ *Id.* at 9–10.

¹⁹⁶ *See id.* at 38–49.

¹⁹⁷ *Id.* at 41.

¹⁹⁸ *See id.* at 138–54.

¹⁹⁹ *Id.* at 156.

basic regulation. The report did not, however, directly analyze the effectiveness of these alternatives.

A significant reason that the report did not support a specific net neutrality framework is that the FTC staff concluded that no one has yet demonstrated the existence of a market failure or quantified the effect on consumers. The identification of desired outcomes (Step 1) and the assessment of market failure (Step 2) are prerequisites for proceeding to the assessment of effectiveness of alternatives (Step 4).

e. Step 5: Identify Costs

The report identified three interrelated costs associated with net neutrality regulation: (1) prohibition of business practices that actually benefit consumers; (2) reduced incentives for innovation or investment; and (3) unspecified, unintended consequences that are difficult to predict in advance.²⁰⁰ It did not, however, definitively state whether net neutrality regulation in general, or certain variants, would lead to specific costs; nor did it quantify any costs.

f. Step 6: Compare Costs with Outcomes

As outlined in the discussion of assessment of effectiveness of alternatives (Step 4) and identification of costs (Step 5), the report did not assess the effectiveness of alternatives or identify the specific costs of alternatives. Without this information, it is not possible to compare costs with outcomes.

B. Analyzing the Federal Communications Commission Notice of Inquiry Regarding Broadband Industry Practices in Light of the Regulatory Analysis Framework

1. The Notice of Inquiry

The purpose of the FCC's 2007 Notice of Inquiry ("NOI") was to gather data about broadband industry practices to help the FCC determine whether regulatory intervention is necessary.²⁰¹ The NOI generated information potentially useful to identify desired outcomes (Step 1), assess market failure (Step 2), assess effectiveness of alternatives (Step 4), and help identify costs (Step 5) in the regulatory analysis framework. The NOI did not ask about the uniquely

²⁰⁰ *Id.* at 157–60.

²⁰¹ *Broadband NOI*, *supra* note 3, ¶ 1.

federal role (Step 3) or ask for commenters to compare costs with outcomes (Step 6).

a. Step 1: Identify the Desired Outcomes

In the NOI, the FCC asked whether it has the authority to enforce the Internet Policy Statement “in the face of market failures or other specific problems” and requested advice as to how it should tailor rules “only to reach any identified market failures or other specific problems.”²⁰² The NOI also asked whether regulations would help promote the deployment of “advanced telecommunications capability to all Americans.”²⁰³ The FCC thus left open the question of whether its sole focus is consumer welfare, or whether it also seeks to promote other values.

The NOI did not explicitly ask which values or outcomes the FCC should seek to promote. Nevertheless, the statements in the NOI suggest that any further rulemaking will explicitly articulate the outcomes the FCC seeks to produce—either increases in consumer welfare due to mitigation of market failures or outcomes linked to other values that may be of concern to the FCC.

b. Step 2: Assess Evidence of Market Failure or Other Systemic Problems

The evaluation of market failure can be approached in two different ways. One approach is to seek evidence as to whether market failure or another problem is likely, even if the failure has not yet occurred. Some of the comments submitted in the proceeding were directed toward such a question. However, the NOI took the most direct approach, and asked whether companies currently engage in specific problematic practices.²⁰⁴ Essentially, the FCC asked whether a market failure or other problem already exists.

The NOI asked commenters to provide specific, empirical information about broadband industry practices that may be evidence of market failure or other systemic problems.²⁰⁵ The NOI also asked what market characteristics would justify adoption of rules in the future (if rules are not justified at this time).²⁰⁶

²⁰² *Id.* ¶ 11.

²⁰³ *Id.*

²⁰⁴ *Id.* ¶¶ 8, 9 (requesting specific information regarding packet management and pricing practices).

²⁰⁵ *See id.* ¶¶ 1, 8–9, 11.

²⁰⁶ *Id.* ¶ 11.

c. Step 4: Assess Effectiveness of Alternative Approaches

The FCC appeared to be considering at least four approaches: (1) maintain the status quo; (2) add a new, non-binding non-discrimination principle to the Internet Policy Statement; (3) adopt the Internet Policy Statement as a set of rules; or (4) adopt the Internet Policy Statement as a set of rules with some additions or deletions.

d. Step 5: Identify Costs

The NOI requested examples of “potential challenges in tailoring the rules only to reach any identified market failures or other specific problems, and not to prevent policies that benefit consumers.”²⁰⁷ This demonstrates a desire to avoid some of the most significant costs of regulation: the unintended consequences that harm the very people the rules are supposed to help. While such consequences are not the only costs associated with regulation, it is refreshing to see that the FCC explicitly acknowledged and sought to avoid such costs.

Ultimately, the NOI addressed some, but not all, aspects of the regulatory analysis framework commonly employed by other federal agencies to assess significant regulations. Most importantly, the FCC explicitly sought empirical evidence on the existence of market failure, which is a critical consideration in determining whether regulation can advance consumer welfare or other values the FCC decides are important.

The FCC asked very specific questions. Among other questions, it asked whether “providers treat different packets in different ways” and “how and why.”²⁰⁸ It questioned whether “there [are] specific examples of packet management practices that commenters consider reasonable or unreasonable.”²⁰⁹ It asked whether “providers deprioritize or block packets containing material that is harmful to their commercial interest, or prioritize packets relating to applications or services in which they have a commercial interest.”²¹⁰ It also posed whether “broadband providers charge upstream providers for priority access to end users.”²¹¹

The FCC asked such specific questions in an attempt to cut through the rhetoric on all sides of the net neutrality debate and to obtain clear empirical evidence of broadband industry practices. In fact, the FCC explicitly pled with commenters to “provide specific, verifiable examples with supporting docu-

²⁰⁷ *Id.*

²⁰⁸ *Id.* ¶ 8.

²⁰⁹ *Id.*

²¹⁰ *Id.*

²¹¹ *Id.* ¶ 9.

mentation, and [to] limit their comments to those practices that are technically feasible today.”²¹² Unfortunately, that call was not heeded.

2. Responses to the Notice of Inquiry

a. No Empirical Evidence Found of Existing Discriminatory or Otherwise Harmful Practices by Broadband Providers

Approximately ten thousand comments were submitted in response to the FCC’s NOI.²¹³ The vast majority of these comments were brief text comments or e-mails akin to form letters sent at the urging of groups such as SavetheInternet.com Coalition,²¹⁴ Common Cause,²¹⁵ and FreedomWorks.²¹⁶ These template comments do nothing but express the sender’s political views on net neutrality regulation and ignore the empirical questions asked in the NOI.²¹⁷

If one uses the FCC’s comment search engine to exclude these brief comments, only 143 comments remain.²¹⁸ Of those 143, many are simply letters on behalf of an organization expressing support for one side of the issue and offering no answers to the FCC’s specific questions.²¹⁹ Only sixty-six of the 143 are longer than two pages.²²⁰ Of those sixty-six, only twenty comments suggest the need for regulation of broadband industry practices, and of those twenty none puts forth any significant empirical evidence to suggest that there currently exists a market failure justifying regulatory intervention.²²¹

²¹² *Id.* ¶ 8.

²¹³ *See* FCC, Electronic Comment Filing System, http://fjallfoss.fcc.gov/prod/ecfs/comsrch_v2.cgi (Search proceeding 07-52 from Mar. 22, 2007 to June 15, 2007) (yielding 9541 results for the comment period from the date the Broadband NOI was adopted until the date the comment period was closed).

²¹⁴ *See* Save the Internet, Tell Your Story and Save the Internet!, <http://www.savetheinternet.com/yourstory> (last visited Nov. 14, 2007).

²¹⁵ *See* Common Cause, Keep the Internet Open to All, <http://www.commoncause.org> (follow “Take Action” hyperlink; then follow “Keep the Internet Open to All” hyperlink) (last visited Nov. 14, 2007).

²¹⁶ *See* FreedomWorks, FreedomWorks Campaign: Submit Official Comments to the FCC, <http://www.freedomworks.org/action/fcc> (last visited Nov. 14, 2007).

²¹⁷ *See* Save the Internet, Tell Your Story and Save the Internet!, *supra* note 214; Common Cause, Keep the Internet Open to All, *supra* note 215; FreedomWorks, *supra* note 216.

²¹⁸ Perhaps aware of the prevalence of such template comments, the FCC’s own comment search engine provides the option to “Eliminate Brief Text Comments.” *See* FCC, Electronic Comment Filing System, *supra* note 213 (search proceeding 07-52 from Mar. 22, 2007 to June 15, 2007 with “Eliminate Brief Text Comments” box checked) (yielding 143 results).

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ *Id.*

At 137 pages, the lengthiest filing alleging a market failure was the combined comment of the Consumer Federation of America, Consumers Union, and Free Press.²²² This comment is characteristic of others in the docket that ignore the FCC's plea for empirical and verifiable data, and instead recite a philosophical rationale for neutrality regulation. In fact, this particular comment chastises the FCC for asking what the respondents believe to be the wrong questions, namely the NOI's narrow focus on actual business practices and empirical evidence of harmful behavior.²²³ Instead of answering the FCC's questions, the respondents take issue with previous FCC decisions that classify broadband as an information service, and then proceed to offer their own theory of structural market failure.²²⁴ The respondents call not just for some net neutrality regulation, but also for reversing current policy and subjecting broadband to Title II of the Communications Act of 1934, as amended.²²⁵

The Center for Democracy and Technology's ("CDT") comments, in contrast, specifically address why CDT does not offer empirical evidence of existing harmful business practices. CDT suggests that "a span of two years under the current legal framework, with merger-related and political considerations operating as significant constraints, is not an adequate period for problematic forms of discrimination to make themselves evident."²²⁶ CDT therefore offers a list of potentially harmful business practices.²²⁷ Google makes a similar argument, stating that "the problem to be solved is inherent in the concentrated nature of the broadband market itself, rather than in a roster of actual and potential 'bad acts.'" In other words, the flaw is structural, not behavioral.²²⁸ Neither CDT nor Google, however, offer evidence of discriminatory or otherwise harmful practices by broadband providers.

In contrast to most of the comments in this proceeding, the comment of the National Association of State Utility Consumer Advocates ("NASUCA") directly addresses many of the FCC's questions. NASUCA highlights a legiti-

²²² See *In re Broadband Industry Practices, Comments of the Consumer Federation of America, Consumers Union, and the Free Press*, WC Docket No. 07-52 (June 15, 2007) (accessible via FCC Electronic Comment Filing System) [hereinafter *Consumer Federation Comments*].

²²³ *Id.* at 17-24.

²²⁴ *Id.* at 20.

²²⁵ *Id.* at 10, 28.

²²⁶ *In re Broadband Industry Practices, Comments of the Center for Democracy & Technology*, WC Docket No. 07-52, at 5 (June 15, 2007) (accessible via FCC Electronic Comment Filing System) [hereinafter *CDT Comments*].

²²⁷ *Id.* at 7-12 (focusing on packet management and pricing practices).

²²⁸ See *In re Broadband Industry Practices, Comments of Google, Inc.*, WC Docket No. 07-52, at 10 (June 15, 2007) (accessible via FCC Electronic Comment Filing System) [hereinafter *Google Comments*].

mately worrisome industry practice: unclear disclosure of limits to broadband offerings.²²⁹ However, this is a discrete consumer protection issue best left to FCC or FTC enforcement. This issue was also discussed at the FTC Broadband Connectivity Competition Policy Workshop. Without explicitly offering an opinion on whether such limitations are illegal if not disclosed, the FTC staff's report on the topic opines, "material omissions that are likely to mislead consumers acting reasonably under the circumstances are deceptive in violation of Section 5 of the FTC Act."²³⁰

The FCC's questions were clear and well-crafted to elicit evidence of market failure, if indeed such problems currently exist. Yet the meager responses fail to make a case for net neutrality regulation on the basis of existing abuses.

b. Speculation Regarding Possible Market Failure and Calls for Prophylactic Regulation—What is Likely and What is Possible

Many commenters seemed to suggest a prophylactic justification for net neutrality regulation by appealing to the possibility of harmful behavior. The Open Internet Coalition stated that "a network provider may have the ability and incentive to exclude rival content, applications or portals from its network"²³¹ Google claims that broadband incumbents have "the incentives and ability to discriminate against third party applications and content providers."²³²

At best, such claims could be interpreted as allegations that market failure is likely to occur in broadband markets and that firms with market power will eventually choose to exercise such power by engaging in various types of discriminatory behavior. The flaw in such claims is that other, more competitive, outcomes are equally plausible—even in markets with a small number of competitors. Commenters have offered numerous theories suggesting what could happen—but could is not the same as likely.

Rigorous analysis demonstrating that market failure is likely must define the relevant market, determine whether there is significant market power in that

²²⁹ See *In re Broadband Industry Practices, Comments of the National Association of State Utility Consumer Advocates*, WC Docket No. 07-52, at 17, 20–21 (June 15, 2007) (accessible via FCC Electronic Comment Filing System) [hereinafter *NASUCA Comments*]; see also *In re Broadband Industry Practices, Comments of the Information Technology Industry Council*, WC Docket No. 07-52, at 2–3 (June 15, 2007) (accessible via FCC Electronic Comment Filing System).

²³⁰ FTC STAFF REPORT, *supra* note 160, at 132.

²³¹ *In re Broadband Industry Practices, Comments of the Open Internet Coalition*, WC Docket No. 07-52, at 9 (June 15, 2007) (accessible via FCC Electronic Comment Filing System).

²³² *Google Comments, supra* note 228, at *i*.

market, and determine whether profit incentives for discriminatory behavior outweigh profit incentives for avoiding such behavior. Finally, decision makers must determine whether the net effect of such behavior would be likely to help or harm consumers.²³³

Commenters favoring regulation tend to define the market narrowly, excluding wireless broadband because it is (allegedly) not fast enough and excluding satellite because it is (allegedly) too expensive.²³⁴ Those favoring a narrow market definition also contend that the FCC's practice of counting competitors in zip codes makes the market appear more competitive than it really is.²³⁵ Sound market definition, consistent with the methods used in antitrust analysis, requires evidence demonstrating which services consumers regard as substitutes.²³⁶

Market power is not necessarily a function of market structure. In turn, counting competitors, calculating market shares, or calling broadband a "duopoly" is not sufficient to prove a structural market failure.

There are three reasons that market structure is only one part of the puzzle. First, economic theory and empirical evidence both demonstrate that markets with a small number of competitors can still produce competitive behavior.²³⁷ Second, there is substantial evidence of competitive conduct in consumer broadband, such as rapid price reductions and increases in speeds.²³⁸ Third, additional competition, in the form of wireless broadband backed by substantial investment, has just begun to enter the market.²³⁹

Barriers to entry also require subtle analysis. Broadband markets are not perfectly contestable and entrants must bear some sunk costs that they might not recover if they leave the industry.²⁴⁰ However, the presence of multiple competitors using a variety of technological platforms suggests that broadband is unlikely to be a natural monopoly. The relevant issue, therefore, is not whether barriers to entry exist, but whether they are so high as to make monopolistic behavior likely to succeed.

"The notion that two competitors are enough to ensure a vigorously competitive market is inconsistent with economic theory and decades of empirical evidence."²⁴¹ But equally fallacious is the notion that a small number of com-

²³³ FTC STAFF REPORT, *supra* note 160, at 123–28.

²³⁴ *See Google Comments*, *supra* note 228, at 13.

²³⁵ *See id.* at 11.

²³⁶ *See supra* Part IV.B.1.d.

²³⁷ Pautler, *supra* note 98, at 181–82.

²³⁸ *See supra* notes 128–30 and accompanying text.

²³⁹ *See* FTC STAFF REPORT, *supra* note 160, at 102–03.

²⁴⁰ *See supra* Part IV.B.1.e

²⁴¹ *Consumer Federation Comments*, *supra* note 222, at 52.

petitors guarantees monopolistic behavior. Actual results will depend on specific facts and circumstances, not just the number of competitors or market shares. This is why the federal government's merger guidelines impose a greater level of scrutiny on mergers in concentrated markets, but they do not prohibit such mergers.²⁴²

Commenters favoring regulation typically argue that network operators have the "incentive and ability" to engage in discriminatory behavior. Their comments typically cite theoretical economic models that demonstrate why, under certain assumptions, a dominant firm would have incentives to discriminate.²⁴³ If the FCC seeks to determine whether market failure is likely in the future, it cannot simply rely on theoretical possibilities. It must require empirical analysis that demonstrates whether network owners' incentives to discriminate are greater or less than their incentives to forego discrimination.

To support their contention that broadband providers have the potential to discriminate, several commenters make reference to the often-cited *Madison River*²⁴⁴ case, in which a rural DSL provider was investigated for allegedly blocking VoIP services that competed with its parent company's telephone service.²⁴⁵ However, this case is not entirely useful for two reasons. First, the case was never adjudicated and the DSL provider accepted a consent decree, so the FCC never established the exact facts of the case. Additionally, since the *Madison River* consent decree, the FCC issued its September 2005 DSL Order that classified DSL as an information service to which Title II common carrier regulations no longer apply.²⁴⁶ Because the law was different at the time of *Madison River's* alleged violation, its actions are not evidence of broadband provider behavior under the current law. The DSL Order, including the Policy Statement, changed the obligations and incentives faced by providers. What the FCC seeks is evidence of discrimination under the current regulatory regime.

Some commenters demonstrated that market failure and discriminatory practices that harm consumers are possible in broadband markets, but none offered

²⁴² See *supra* notes 101–03 and accompanying text.

²⁴³ See *Google Comments*, *supra* note 228, at 17–18; *Consumer Federation Comments*, *supra* note 222, at 57–59.

²⁴⁴ *In re Madison River Communications, LLC and Affiliated Companies*, Order, 20 F.C.C.R. 4295, 4295–98 (Mar. 3, 2005).

²⁴⁵ *In re Broadband Industry Practices*, *Comments of the National Association of Telecommunications Officers and Advisors, the National Association of Counties, and the National League of Cities in Response to the Notice of Inquiry*, WC Docket No. 07-52, at 7–8 (June 15, 2007) (accessible via FCC Electronic Comment Filing System); *CDT Comments*, *supra* note 226, at 6–7; *Consumer Federation Comments*, *supra* note 222, at 107; *NASUCA Comments*, *supra* note 229, at 11–12.

²⁴⁶ *DSL Order*, *supra* note 19.

a rigorous analysis proving that market failure exists or is likely to exist. Surveying the evidence gathered in response to the NOI, it is difficult to understand how the FCC could reach a conclusion substantially different from that reached by the FTC staff.

IV. CONCLUSION

Federal agencies concerned about net neutrality should employ a rational framework that identifies the values they seek to advance, establishes how alternative regulatory proposals would affect outcomes associated with those values, and clarifies any tradeoffs among competing values. The regulatory analysis framework already employed by most federal agencies would accomplish these goals. In keeping with this framework, regulatory agencies concerned about net neutrality should focus on six strategic elements. First, define the specific outcomes that net neutrality is supposed to produce. Second, assess evidence of market failures or other systemic problems. Third, identify the uniquely federal role. Fourth, compare the effectiveness of alternative approaches. Fifth, examine the costs of alternative regulatory approaches. Sixth, compare costs with outcomes.

If done properly, such an analysis should provide regulators with ample background to determine whether or what further rulemaking is warranted. Thus far, the actions of the two independent federal agencies concerned about net neutrality give some cause for hope.

The FTC Staff Report focuses on the outcome of consumer welfare, while acknowledging that regulators might also seek to accomplish other outcomes. It assesses evidence of market failure, and finds no evidence of an existing market failure and ambiguous evidence as to whether market failure is likely in the future. The report identifies the overlapping jurisdictions of the FCC and FTC, emphasizing the FTC's role and expertise in promoting consumer welfare. In its discussion of costs, the report also notes the perverse incentives and unintended consequences regulation can create. However, the absence of evidence of market failure, combined with the uncertain likelihood that market failure will occur in the future, precluded a quantification of costs and benefits of net neutrality regulation.

The FCC's NOI suggests that it seeks to analyze the net neutrality issue in similar fashion. The NOI asked commenters to identify specific actions the FCC could take to address market failures or other specific problems. Consistent with the FCC's statutory mandate, this language allows the FCC to consider outcomes other than consumer welfare. The notice focuses on identifying the FCC's options, rather than identifying the FCC's comparative advantages

vis-à-vis the FTC. But like the FTC, the FCC is cognizant that regulation can create unintended costs by altering incentives.

The comments submitted in the FCC's inquiry contain little new evidence or argument beyond what was considered in the FTC Staff Report. If the FCC reaches different conclusions than the FTC staff, such a result will say as much about the differing missions and cultures of the two agencies as it does about the objective evidence.