



J O I N T C E N T E R
AEI-BROOKINGS JOINT CENTER FOR REGULATORY STUDIES

Economists' Statement on Network Neutrality Policy

**William J. Baumol, Martin Cave, Peter Cramton, Robert Hahn,
Thomas W. Hazlett, Paul L. Joskow, Alfred E. Kahn, Robert Litan,
John Mayo, Patrick A. Messerlin, Bruce M. Owen, Robert S. Pindyck,
Vernon L. Smith, Scott Wallsten, Leonard Waverman and
Lawrence J. White***

**Related Publication 07-08
March 2007**

This paper can be downloaded without charge from the Social Science Research Network (SSRN) electronic library at: <http://ssrn.com/abstract=976889>

* The views in this paper represent those of the authors and not necessarily those of the institutions with which they are affiliated. Support for this statement was provided by the AEI-Brookings Joint Center.



J O I N T C E N T E R
AEI-BROOKINGS JOINT CENTER FOR REGULATORY STUDIES

In order to promote public understanding of the impact of regulations on consumers, business, and government, the American Enterprise Institute and the Brookings Institution established the AEI-Brookings Joint Center for Regulatory Studies. The Joint Center's primary purpose is to hold lawmakers and regulators more accountable by providing thoughtful, objective analysis of relevant laws and regulations. Over the past three decades, AEI and Brookings have generated an impressive body of research on regulation. The Joint Center builds on this solid foundation, evaluating the economic impact of laws and regulations and offering constructive suggestions for reforms to enhance productivity and welfare. The views expressed in Joint Center publications are those of the authors and do not necessarily reflect the views of the Joint Center.

ROBERT W. HAHN

Executive Director

ROBERT E. LITAN

Director

COUNCIL OF ACADEMIC ADVISERS

KENNETH J. ARROW
Stanford University

MAUREEN L. CROPPER
University of Maryland

JOHN D. GRAHAM
*Pardee RAND Graduate
School*

PHILIP K. HOWARD
Common Good

PAUL L. JOSKOW
*Massachusetts Institute
of Technology*

DONALD KENNEDY
Stanford University

ROGER G. NOLL
Stanford University

PETER PASSELL
Milken Institute

RICHARD SCHMALENSEE
*Massachusetts Institute
of Technology*

ROBERT N. STAVINS
Harvard University

CASS R. SUNSTEIN
University of Chicago

W. KIP VISCUSI
Vanderbilt University

All AEI-Brookings Joint Center publications can be found at www.aei-brookings.org

© 2007 by the authors. All rights reserved.

Executive Summary

Network neutrality is a policy proposal that would regulate how network providers manage and price the use of their networks. Congress has introduced several bills on network neutrality. Proposed legislation generally would mandate that Internet service providers exercise no control over the content that flows over their lines and would bar providers from charging more for preferentially faster access to the Internet. These proposals must be considered carefully in light of the underlying economics. Our basic concern is that most proposals aimed at implementing net neutrality are likely to do more harm than good.

Economists' Statement on Network Neutrality Policy

AEI-Brookings Joint Center

Introduction

Network neutrality is a policy proposal that would, among other things, regulate how network providers manage and price the use of their networks.

Net neutrality proponents sometimes assert that if Internet service providers are allowed to charge content providers, they will block web sites for their own private gain—thus crippling the Internet. They also have raised concerns about whether an Internet service provider might charge different prices to different content providers for the same service. Those opposing net neutrality mandates sometimes suggest the opposite—that allowing experimentation with new business models is the key to Internet innovation and the deployment of expanded networks needed to handle rapidly growing Internet traffic.

Congress has introduced several bills on network neutrality. Proposed legislation generally would mandate that Internet service providers exercise no control over the content that flows over their lines and would bar providers from charging particular services more than others for preferentially faster access to the Internet.

These proposals must be considered carefully in light of the underlying economics. Our basic concern is that most proposals aimed at implementing net neutrality are likely to do more harm than good.

Analysis

Regulation of prices and services has often resulted in costs that exceed benefits, especially in competitive markets. Highly dynamic markets, such as those for high-speed Internet services, pose particular problems because they change so quickly. In such dynamic markets, it is difficult for regulators to determine appropriate prices because technology and consumer demands are so difficult to forecast; and introducing price regulation risks discouraging the healthy process of risk-taking innovation—which is especially important in telecommunications.

The market for high-speed Internet services, or broadband, is the key concern. While not all geographic markets are served yet by multiple broadband providers, the data suggest that broadband markets are, in general, dynamic and competitive. By December 2005, according to the FCC's latest statistics, 93 percent of all zip codes in the U.S. had two or more broadband providers, and 82 percent had three or more. Just because a zip code has multiple providers does not mean that those providers compete directly, so whether "enough" firms compete yet is debatable; the trend, however, is positive. Furthermore, consumers are making greater use of new technologies. Mobile wireless use went from fewer than half a million subscribers in 2005 to more than 10 million subscribers in 2006. In short, more people are getting served by more providers and more platforms.

Consumers are benefiting from this competition. For example, between 2001 and 2005, the average price of a digital subscriber line dropped by about one-third. In the case of cable, the quality-adjusted price declined significantly, as cable connection speeds increased significantly while prices held steady.

In most, but not all, cases, we believe these markets are workably competitive. Moreover, even if some service providers could exercise some market power, the multi-sided nature of the market means that they still have powerful incentives not to block content. In particular, providers need content in order to attract subscribers. If a provider restricted access, its product would be less valuable and attract fewer subscribers. The point is that even firms with market power in one part of the market will not necessarily be able to control content.

Recommendations

We offer three recommendations related to preventing abuses in the broadband market, pricing flexibility, and facilitating more competition.

Recommendation 1: The antitrust enforcement agencies should be directed to investigate and, if the evidence warrants, file actions to prevent abuses by Internet service providers with market power that distort competition on the Internet.

Where competition remains insufficient to discipline providers, the government's existing authority can police an Internet service provider's behavior. If, for example, a service provider with monopoly power offered high quality service to an online gaming provider but refused to sell the same level of service to an unaffiliated voice over Internet protocol provider in order to protect its own subsidiary in the voice phone business, the antitrust laws should open the service provider to a suit.

Recommendation 2: Firms should be allowed to experiment with different pricing schemes for providing Internet access.

One advantage of giving Internet service providers pricing flexibility is that it will give them incentives to make new investments in next-generation Internet services. Without such incentives, investment may be discouraged, and the Internet may develop more slowly than would be optimal.

Another advantage of pricing freedom is that it can lead to a more economically efficient allocation of the existing Internet resource base. For example, some people may be willing to pay for high-speed access only when they need it, say, for streaming a movie. Other consumers may want the ability to use large amounts of bandwidth on an ongoing basis. Firms should be allowed to price these services as they wish and consumers should be allowed to purchase plans that best meet their needs.

There is not one right way to charge different customers in these high-speed markets. That is precisely why broadband providers should be allowed to charge market prices, unless

there is a clear showing of threatened impairment of competition and consequent injury to consumers.

Recommendation 3: Congress and federal regulators should promote policies that increase the opportunities for competition and foster Internet innovation. One such policy would be spectrum liberalization.

High-speed Internet connections may be provided using wireless networks. Much of the potentially most valuable spectrum, however, is not available for its most productive uses. The Federal Communications Commission should make additional licensed spectrum available for flexible use as soon as possible and allow it to be traded so that spectrum can be allocated to its highest-valued uses (see www.aei-brookings.org/publications/abstract.php?pid=1044).

Conclusion

We believe the issues raised in the net neutrality debate can be effectively addressed by using antitrust authority where appropriate, allowing Internet pricing flexibility, and fostering more efficient use of spectrum to facilitate entry into the broadband market.

Our basic message is that government should allow firms to experiment with different business models for Internet services. Allowing such market flexibility is likely to be the best way to insure efficient innovation on the information superhighway.

William J. Baumol
New York University

John Mayo
Georgetown University

Martin Cave
The University of Warwick

Patrick A. Messerlin
Sciences Po

Peter Cramton
University of Maryland

Bruce M. Owen
Stanford University

Robert Hahn
AEI-Brookings Joint Center

Robert S. Pindyck
Massachusetts Institute of Technology

Thomas W. Hazlett
George Mason University

Vernon L. Smith
George Mason University

Paul L. Joskow
Massachusetts Institute of Technology

Scott Wallsten
The Progress & Freedom Foundation

Alfred E. Kahn
Cornell University

Leonard Waverman
London Business School

Robert Litan
AEI-Brookings Joint Center

Lawrence J. White
New York University