

**MICROSOFT, ANTITRUST  
AND THE NEW ECONOMY:  
SELECTED ESSAYS**

# **The Milken Institute Series On Financial Innovation And Economic Growth**

## Series Editors

**James R. Barth**

Auburn University

Senior Fellow at the Milken Institute

**Glenn Yago**

Director of Capital Studies at the

Milken Institute

**Other books in the series:**

Barth, James R., Brumbaugh Jr., R. Dan and Yago, Glenn:

*Restructuring Regulation and Financial Institutions*

# **MICROSOFT, ANTITRUST AND THE NEW ECONOMY: SELECTED ESSAYS**

*edited by*

**David S. Evans**

*National Economic Research Associates, U.S.A.*

**KLUWER ACADEMIC PUBLISHERS**  
NEW YORK, BOSTON, DORDRECHT, LONDON, MOSCOW

eBook ISBN: 0-306-47600-2  
Print ISBN: 0-7923-7667-6

©2002 Kluwer Academic Publishers  
New York, Boston, Dordrecht, London, Moscow

Print ©2002 Kluwer Academic Publishers  
Dordrecht

All rights reserved

No part of this eBook may be reproduced or transmitted in any form or by any means, electronic, mechanical, recording, or otherwise, without written consent from the Publisher

Created in the United States of America

Visit Kluwer Online at: <http://kluweronline.com>  
and Kluwer's eBookstore at: <http://ebooks.kluweronline.com>

# Contents

**About the Authors** ..... **vii**

**Introduction** ..... **1**

*by David S. Evans*

## Section 1

***U.S. v. Microsoft Corp.: The Economics*** ..... **23**

An Analysis of the Government's Economic Case  
in *U.S. v. Microsoft Corp.* ..... 23

*by David S. Evans, Albert L. Nichols, and Richard Schmalensee*

Why Does Microsoft Charge So Little for Windows? ..... 93

*by Bernard Reddy, David S. Evans, and Albert L. Nichols*

*U.S. v. Microsoft Corp.: Remedy or Malady?* ..... 127

*by Kenneth G. Elzinga, David S. Evans, and Albert L. Nichols*

DOS Kapital: Has Antitrust Action Against Microsoft  
Created Value in the Computer Industry? ..... 193

*by George Bittlingmayer and Thomas W. Hazlett*

The Price of Unanimity:  
The D.C. Circuit's Incoherent Opinion in  
*U.S. v. Microsoft Corp.* ..... 221

*by John E. Lopatka and William H. Page*

Judicial Misconduct and the Microsoft Case ..... 239

*by Leonard Orland*

## Section 2

### **Antitrust Policy and the New Economy ..... 253**

Antitrust and the New Economy ..... 253

*by David S. Evans*

The Rise and Fall of Leaders in  
Personal Computer Software ..... 265

*by David S. Evans, Albert L. Nichols, and Bernard Reddy*

The Failure of Structural Remedies in Sherman Act  
Monopolization Cases ..... 287

*by Robert W. Crandall*

Economic Perspectives on Software Design:  
PC Operating Systems and Platforms ..... 361

*by Steven J. Davis, Jack MacCrisken, and Kevin M. Murphy*

Preserving Competition: Economic Analysis,  
Legal Standards, and Microsoft ..... 421

*by Ronald A. Cass and Keith N. Hylton*

The Returns to Investments in Innovative Activities:  
An Overview and an Analysis of the Software Industry ..... 463

*by Josh Lerner*

## About the Authors

**George Bittlingmayer** is the Wagon Distinguished Professor of Finance at the University of Kansas School of Business, whose research interests include stock market volatility and antitrust. He is an associate editor of the *Journal of Corporate Finance*.

**Ronald A. Cass** is dean and Melville Madison Bigelow Professor of Law at the Boston University School of Law. From 1988 to June 1990, he served as a member of the United States International Trade Commission and, in 1989-90, as the Commission's vice chairman.

**Robert W. Crandall** is a senior fellow at the Brookings Institution who specializes in regulatory policy. He is the co-author of *Who Pays for Universal Service?* (Brookings Press).

**Steven J. Davis** is the William H. Abbott Professor of International Business and Economics at the University of Chicago Graduate School of Business. His research interests include the business cycle and the economics of software.

**Kenneth G. Elzinga** is a professor of economics at the University of Virginia. He has written extensively about antitrust and industrial organization.

**David S. Evans** is a senior vice president at National Economic Research Associates in Cambridge, Massachusetts, and a consultant to Microsoft and Visa. Among other works, he is the co-author of *Paying with Plastic: The Digital Revolution in Buying and Borrowing* (MIT Press).

**Thomas W. Hazlett** is a resident scholar at the American Economic Enterprise Institute specializing in regulation. He served as the chief economist for the Federal Communications Commission in 1991-92. He is co-author of *Public Policy Towards Cable Television: The Economics of Rate Controls* (MIT Press).

**Keith N. Hylton** is a professor of law at the Boston University School of Law. He specializes in the field of law and economics.

**Josh Lerner** is a professor of business administration at the Harvard Business School and a faculty research fellow at the National Bureau of

Economic Research. Much of his research on technology and innovation is collected in his book, *The Venture Capital Cycle* (MIT Press).

**John E. Lopatka** is the Alumni Professor of Law at the University of South Carolina School of Law. He served as Assistant Director for Planning in the Federal Trade Commission's Bureau of Competition.

**Jack MacCracken** is a technology consultant at Chicago Partners who has served as a consultant to Microsoft. His published research includes work on data compression.

**Kevin M. Murphy** is the George Pratt Shultz Professor of Economics and Industrial Relations at the University of Chicago Graduate School of Business and a faculty research associate at the National Bureau of Economic Research. He is a winner of the American Economic Association's John Bates Clark medal for the most promising economist under age 40.

**Albert L. Nichols** is a vice president at National Economic Research Associates in Cambridge, Massachusetts, and a consultant to Microsoft. His fields of expertise include the economics of the environment and antitrust policy.

**Leonard Orland** is professor of law at the University of Connecticut School of Law and a member of the Federal Courts Study Committee.

**William H. Page**, formerly a trial attorney with the Antitrust Division of the Department of Justice, is the Marshall M. Criser Eminent Scholar at the University of Florida's Levin College of Law. He is currently revising and supplementing the Kintner treatise on Federal Antitrust Law.

**Bernard Reddy** is a vice president at National Economic Research Associates in Cambridge, Massachusetts, and a consultant to Microsoft. His fields of expertise include electric power regulation and the economics of information technology.

**Richard Schmalensee** is dean and professor of economics at the MIT Sloan School of Management, and the expert economic witness for Microsoft in the antitrust trial. He served as a member of the President's Council of Economic Advisors in the first Bush administration.