

## About the Authors

DARON ACEMOGLU is Professor of Economics at the Massachusetts Institute of Technology. Before joining the faculty at MIT, he was a lecturer in economics at the London School of Economics. Acemoglu's fields of interest include income and wage inequality, human capital and training, economic growth, technical change, labor economics, search theory, and political economics. The recipient of numerous fellowships and grants, he has published in the *American Economic Review*, the *Journal of Economic Literature*, and other scholarly journals. His most recent article, "Directed Technical Change," is forthcoming in the *Review of Economic Studies*. Acemoglu received both his M.Sc. and his Ph.D. from the London School of Economics.

MICHAEL BARBER is Head of the British Prime Minister's Delivery Unit and Chief Adviser to the Prime Minister on Delivery. His role is to ensure that the government has in place the plans and capacity to deliver its priorities in four areas of public service: health, education, law and order, and transport. Until June 2001, he was head of the Standards and Effectiveness Unit at the Department for Education and Skills and chief adviser to the British Secretary of State for Education and Skills on School Standards. In this role, Barber was responsible for the implementation of the government's school reform agenda. His work has been published widely in both academic journals and the press, and he speaks regularly on radio and television about education policy. After attending Bootham School in York, Barber studied at Oxford University and the Georg August University in Göttingen, Germany.

JULIAN R. BETTS is Professor of Economics at the University of California at San Diego. He is also a senior fellow at the Public Policy Institute of California, where he helps to direct the Institute's K-12 education research effort. Much of his research has focused on the economic analysis of public schools. Betts has written extensively on the link between student outcomes and measures of school spending, including class size, teachers' salaries, and teachers' level of education. More recently, he has examined the role that standards and expectations play in student achievement. His other main areas of research include higher education; immigration; the economics of unions; and technology, skills, and the labor market. In 2001, Betts was one of 14 people appointed to the National Working Commission on Choice in K-12 Education. Betts holds an M.Phil. in economics from Oxford University and a Ph.D. in economics from Queen's University, Ontario.

JOHN H. BISHOP is Associate Professor of Human Resource Studies at Cornell University. Additionally, he is executive director of the Educational Excellence Alliance, a consortium of over 400 high schools that is studying ways to improve student engagement and school climate. He has published numerous articles on education reform, the impact of education quality on individual and national productivity, and the impact of business policies on creating incentives for student achievement. A recent article by Bishop, "Why Do Students Learn More When Achievement Is Examined Externally?" is forthcoming in *EdMatters*. Bishop's current research focuses on the national and international development of curriculum standards and testing to hold school systems accountable. Bishop holds a Ph.D. in education from the University of Michigan.

PETER J. DOLTON is Professor of Economics at the University of Newcastle and at the Institute of Education at the University of London. He is also a research fellow

at the Centre for the Economics of Education at the London School of Economics. He has had visiting fellowships at the University of Paris and the University of Amsterdam. He is currently an associate editor of the *Economics of Education Review* and *Education Economics*. His research interests include the economics of education, labor economics, and applied econometrics. His work has focused on the graduate labor market, teacher supply, discrimination, job tenure, survival data, and the youth labor market. Dolton's current projects involve the teacher labor market, teacher pay and performance, and school inputs and outputs. He has consulted for the Lord Chancellor's Department, the World Bank, and the OECD. Dolton received his Ph.D. from the University of Cambridge.

THOMAS A. DOWNES is Associate Professor of Economics at Tufts University and was a visiting scholar at the Federal Reserve Bank of Boston. His major research interests include the evaluation and construction of state and local policies to more efficiently and equitably deliver publicly provided goods, with particular attention paid to the provision of public education. Downes has researched the roles of the public and private sectors in the provision of education and the potential outcomes of school choice, as well as the impact on student outcomes of various school finance reforms. His published research has appeared in such journals as the *Public Finance Review*, *National Tax Journal*, *RAND Journal of Economics*, and *Journal of Urban Economics*. Downes received his Ph.D. from Stanford University.

DAVID N. FIGLIO is Walter J. Matherly Professor of Economics at the University of Florida and a faculty research fellow at the National Bureau of Economic Research. Prior to joining Florida's faculty, Figlio was an assistant professor at the University of Oregon. Figlio's research focuses on topics in the economics of education and social policy and on the political economy of policy formation and implementation. Much of his current research concerns the unintended consequences of school accountability systems. Additionally, he is studying outcomes as disparate as school lunch programs, student disability classification, school zoning, and house prices. Figlio's research has been published extensively in leading journals, including the *American Economic Review*, the *Journal of Public Economics*, and the *Journal of Law and Economics*, as well as several policy-oriented outlets. He received his Ph.D. in economics from the University of Wisconsin-Madison.

CHESTER E. FINN, JR., is President of the Thomas B. Fordham Foundation and is John M. Olin Fellow at the Manhattan Institute. His primary focus of concern in both these capacities is the reform of primary and secondary schooling. Finn is also a fellow of the International Academy of Education, a distinguished visiting fellow at Stanford's Hoover Institution, and an adjunct fellow at the Hudson Institute. Earlier, Finn was founding partner and senior scholar at the Edison Project, and he served as assistant secretary for research and improvement at the U.S. Department of Education. Finn has written extensively on educational reform; he is the author of over 13 books and 300 articles. Most recently he has co-edited *Rethinking Special Education for a New Century*. Finn received his master's degree in social studies teaching and his doctorate in education policy, both from Harvard University.

CLAUDIA GOLDIN is Henry Lee Professor of Economics at Harvard University and director of the Development of the American Economy program at the National Bureau of Economic Research. Before joining the faculty at Harvard, she taught at Princeton University and the University of Pennsylvania. Her research

has been funded by the National Science Foundation and the Spencer Foundation, and she was a Guggenheim Fellow. Goldin's research is in the general area of American economic history and has covered topics that range widely, including slavery, women in the economy, technological change, and most recently, education. She is the author and editor of several books and numerous academic articles. Her most recent work is on the rise of mass education in the United States and its impact on inequality; this work will form the core of her book in progress, *The Race between Education and Technology*. Goldin received her M.A. and Ph.D. in economics from the University of Chicago.

ELLEN C. GUINEY is Executive Director of the Boston Plan for Excellence, an education foundation that supports Boston's public schools in their transformation of core teaching activities, their efforts to make more strategic use of existing resources, and their accountability to parents and the public. She also serves as co-director of the Boston Annenberg Challenge. As executive director of the Boston school district's primary partner in its reform effort, Guiney provides leadership for and oversees the work of 26 "effective practice" schools. Prior to joining Boston Plan for Excellence, Guiney was chief education advisor to the U.S. Senate Committee on Labor and Human Resources. She also served as education advisor to Boston Mayor Raymond L. Flynn during the transition to an appointed school board. Guiney is a former high school English teacher with degrees from Boston College and LeMoyne College.

ERIC A. HANUSHEK is Paul and Jean Hanna Senior Fellow at the Hoover Institution of Stanford University, as well as a research associate at the National Bureau of Economic Research. He is a leading expert on educational policy, specializing in the economics and finance of schools. Hanushek's books include *Improving America's Schools*, *Making Schools Work*, and *Education and Race*. In addition, he has published numerous articles in professional journals. He previously held academic appointments at the University of Rochester, Yale University, and the U.S. Air Force Academy. His government service includes posts as deputy director of the Congressional Budget Office, senior staff economist for the Council of Economic Advisers, and senior economist for the Cost of Living Council. Hanushek is a distinguished graduate of the United States Air Force Academy and holds a Ph.D. in economics from the Massachusetts Institute of Technology.

ROBERT H. HAVEMAN is John Bascom Professor in the Department of Economics and the LaFollette Institute of Public Affairs at the University of Wisconsin-Madison. He is also a research affiliate at the University's Institute for Research on Poverty, and was appointed adjunct research professor at Australian National University. Haveman served as senior economist on the Subcommittee on Economy in Government, Joint Economic Committee, U.S. Congress. He was a fellow at the Netherlands Institute for Advanced Study and at the Russell Sage Foundation, and research professor at the Brookings Institution. Haveman has published widely in the fields of public finance, benefit-cost analysis, and the economics of poverty and social policy. His work has appeared in numerous professional and academic publications, including the *American Economic Review*, the *Quarterly Journal of Economics*, and *Journal of the American Statistical Association*. Haveman holds a Ph.D. in economics from Vanderbilt University.

THOMAS J. KANE is Professor of Policy Studies and Economics at the University of California at Los Angeles. Much of his work has focused on topics in higher

education—estimating the labor market payoff to a community college education, estimating the impact of tuition and financial aid policy on college enrollment rates, and estimating the impact of affirmative action in college admissions. Kane's book, *The Price of Admission: Rethinking How Americans Pay for College*, examines state and federal financial aid policies. His current work focuses on the design of accountability systems in elementary and secondary education. Prior to his affiliation with UCLA, Kane was an associate professor of public policy at Harvard University. Additionally, he has been a visiting fellow at the Brookings Institution and at the Hoover Institution at Stanford University. Kane served as senior staff economist for labor, education, and welfare policy issues for President Clinton's Council of Economic Advisers. Kane holds a Ph.D. in public policy from Harvard University.

LAWRENCE F. KATZ is Professor of Economics at Harvard University and a research associate at the National Bureau of Economic Research. His research involves topics in the general areas of labor economics and the economics of social problems, including wage and income inequality, unemployment, the economics of education, and the evaluation of the effectiveness of social and labor market policies. Katz is the author of numerous articles in scholarly journals. Currently, he is examining the role of technological change and the pace of educational advance in affecting the wage structure. Katz has been editor of the *Quarterly Journal of Economics* for over ten years. He served as chief economist of the U.S. Department of Labor and was the first director of the program on children at the National Bureau of Economic Research. Katz holds a Ph.D. in economics from the Massachusetts Institute of Technology.

YOLANDA K. KODRZYCKI is Assistant Vice President and Economist at the Federal Reserve Bank of Boston, where she specializes in regional, labor, and public sector economics. Her most recent research has examined migration of recent college graduates and causes of regional differences in educational attainment. Kodrzycki serves as an advisor to the Massachusetts Technology Collaborative, the Massachusetts Division of Employment and Training, and the New England Board of Higher Education, and she is a member of the editorial board of *Massachusetts Benchmarks*, an economics magazine issued by the University of Massachusetts. She is a past president of the New England Economic Project, a nonprofit organization dedicated to analyzing and forecasting the regional economy. Kodrzycki served as consultant to the U.S. Treasury advisory program in Central and Eastern Europe. Prior to joining the Boston Fed, she taught economics at Amherst College. Kodrzycki received her Ph.D. in economics from the University of Pennsylvania.

ALAN G. MERTEN is President of George Mason University. Previously, he was dean and professor of information systems at the Johnson Graduate School of Management at Cornell University. He was also affiliated with the University of Florida and the University of Michigan. Merten serves as a director of the Greater Washington Board of Trade, INOVA Health System, several information technology companies, and a mutual fund trust. He has been recognized for his contributions to the Northern Virginia technology community and for his contributions to the use of information technology in the federal government. Merten received his master's degree in computer science from Stanford University and holds a Ph.D., also in computer science, from the University of Wisconsin.

CATHY E. MINEHAN is President and Chief Executive Officer of the Federal Reserve Bank of Boston. As one of the nation's central bankers, she contributes to policy decisions that promote the safety and soundness of the U.S. financial system and the health of the nation's economy. Minehan is an expert in payment systems, a major Fed responsibility, and currently chairs the System's Financial Services Policy Committee, which directs the strategic efforts of the Reserve Banks in providing payments and other services. She also serves on the boards of many civic, professional, and educational organizations, including the Boston Private Industry Council, Jobs for Massachusetts, the United Way, the University of Rochester, and Bentley College. Minehan began her career with the Federal Reserve System following graduation from the University of Rochester. She received her M.B.A. from New York University and holds several honorary degrees.

RICHARD J. MURNANE is Thompson Professor of Education and Society at Harvard University's Graduate School of Education. An economist who specializes in education issues, he has written extensively about how changes in the economy affect the education sector. Murnane's books include *The Impact of School Resources on the Learning of Inner City Children*, *Who Will Teach: Policies That Matter*, and, with his colleague, Frank Levy of MIT, *Teaching the New Basic Skills*. Levy and Murnane are currently completing a book describing how the computerization of work makes some human skills more important and others less important. Murnane is also currently working half-time with the Boston public schools, helping schools to make more effective use of student assessment data in diagnosing students' achievement problems and planning instructional interventions. Murnane received both his M.A. and his Ph.D. in economics from Yale University.

MARGARET E. RAYMOND is Research Fellow at the Hoover Institution at Stanford University. There, she directs CREDO (formerly the Center for Research on Education Outcomes), which analyzes education reform efforts around the country. The Center originated at the University of Rochester, where Raymond was associate professor of political science and public policy analysis. Raymond has done extensive work in public policy and education reform and is currently researching the development of competitive markets and the creation of reliable data on program performance. Raymond's extensive list of research publications includes the first national evaluation of *Teach for America*. In addition to her work at CREDO, she has served as consultant to federal, state, and local agencies. Raymond holds a Ph.D. in political science from the University of Rochester.

MICHAEL A. REBELL is Executive Director and Counsel of the Campaign for Fiscal Equity, Inc. An experienced litigator, administrator, researcher, and scholar, he specializes in the field of education law. His research includes an ongoing examination of fiscal equity and adequacy reform issues throughout the nation and the use of public engagement techniques to effectively implement institutional reform remedies in class action litigations. Rebell is the co-author of two books, *Equality and Education* and *Educational Policy Making and the Courts*, and has authored dozens of articles on issues of law and education. Rebell is a frequent lecturer and consultant on education law. He has taught courses on law and education for many years at the Yale Law School, and currently he is an adjunct professor and lecturer in law at Teachers' College and Columbia Law School. Rebell holds an L.L.B. from Yale Law School.

T. PAUL SCHULTZ is Malcolm K. Brachman Professor of Economics at Yale University. He is affiliated with the Economic Growth Center at Yale, and previously served as its director. Prior to joining the faculty at Yale, Schultz was a professor of economics at the University of Minnesota. His current research interests include schooling, health, and mobility in development; income distribution and endogenous household composition; and gender inequalities. He has written numerous articles for professional and academic publications on these subjects. One of his recent articles, "School Subsidies for the Poor: Evaluating the Mexican Progresa Poverty Program," is forthcoming in the *Journal of Development Economics*. Schultz received his Ph.D. from the Massachusetts Institute of Technology.

WARREN SIMMONS is Executive Director of the Annenberg Institute for School Reform at Brown University. The Institute strives to improve conditions and outcomes in American schools, particularly in urban areas and in schools serving disadvantaged students. Before joining the Institute, Simmons was executive director of the Philadelphia Education Fund, a nonprofit organization that helped the Philadelphia school district fund, develop, and implement new academic standards, content-based professional development, standards-based curriculum resources, and comprehensive school reform, as part of the Children Achieving reform agenda. Simmons serves on the boards and advisory groups of numerous education-reform initiatives, including the Public Education Network and the Cross-City Campaign for Urban School Reform. His publications have addressed the interaction of culture, cognitive development, and achievement, as well as literacy technologies and assessment. Simmons received his Ph.D. in psychology from Cornell University.

PAULO RENATO SOUZA is Minister of Education for the federal government of Brazil. Previously, he was operations manager for Inter-American Development Bank in Washington, D.C., president of the State University of Campinas, and secretary of education for the state government of São Paulo. As professor of economics, Souza has taught at several prestigious institutions, including State University of Campinas, Catholic University of São Paulo, and the Federal University of Rio de Janeiro. He was the invited director of studies at Ecole de Hautes Etudes en Sciences Sociales in Paris and a visiting researcher at the Institute of Advanced Study in Princeton, New Jersey. He has written various articles on education, economic development, and labor economics. Souza earned a doctorate in economics from the State University of Campinas.

BARBARA L. WOLFE is Professor in the Departments of Economics and Population Health Sciences and for the LaFollette School of Public Affairs at the University of Wisconsin–Madison. She is also a research associate at the National Bureau of Economic Research. Since joining the faculty at Wisconsin, Wolfe conducted research abroad as a visiting professor at the University of Amsterdam, a visiting fellow at Australian National University, and a fellow-in-residence at Netherlands Institute for Advanced Study. Her areas of interest include health economics and public economics. She has written widely on these topics and is the editor and author of several books and numerous articles in professional and academic journals, including the *American Economic Review*, the *Journal of Public Economics*, and the *International Journal of Educational Research*. Wolfe received both her M.A. and her Ph.D. in economics from the University of Pennsylvania.