This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Studies of Supply and Demand in Higher Education

Volume Author/Editor: Charles T. Clotfelter and Michael Rothschild, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-11054-0

Volume URL: http://www.nber.org/books/clot93-1

Conference Date: May 17-19, 1991

Publication Date: January 1993

Chapter Title: Front matter, table of contents, preface

Chapter Author: Charles T. Clotfelter, Michael Rothschild

Chapter URL: http://www.nber.org/chapters/c6094

Chapter pages in book: (p. -11 - 0)



National Bureau of Economic Research Studies of Supply and Demand in Higher Education

Edited by Charles T. Clotfelter and Michael Rothschild This Page Intentionally Left Blank

Studies of Supply and Demand in Higher Education



A National Bureau of Economic Research Project Report

# Studies of Supply and Demand in Higher Education

Edited by

Charles T. Clotfelter and Michael Rothschild



The University of Chicago Press

Chicago and London

CHARLES T. CLOTFELTER is professor of public policy studies and economics at Duke University and a research associate of the National Bureau of Economic Research. MICHAEL ROTHSCHILD is professor of economics and dean of the Division of Social Sciences at the University of California at San Diego and a research associate of the National Bureau of Economic Research.

The University of Chicago Press, Chicago 60637 The University of Chicago Press, Ltd., London

© 1993 by the National Bureau of Economic Research All rights reserved. Published 1993 Printed in the United States of America

02 01 00 99 98 97 96 95 94 93 1 2 3 4 5 ISBN: 0-226-11054-0 (cloth)

#### Library of Congress Cataloging-in-Publication Data

Studies of supply and demand in higher education / edited by Charles T. Clotfelter and Michael Rothschild.

p. cm. — (A National Bureau of Economic Research project report)

Papers presented at a conference held in May 1991 in Williamsburg, Virginia.

Includes bibliographical references and index.

 Education, Higher—Economic aspects—United States— Congresses.
College attendance—United States—Congresses.
Education, Higher—United States—Finance—Congresses.
Clotfelter, Charles T. II. Rothschild, Michael. III. Series.
LC67.68.U6S78 1993
338.4'737873—dc20 92-3'

92-37932 CIP

Solution Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48−1984.

#### National Bureau of Economic Research

#### Officers

George T. Conklin, Jr., chairman Paul W. McCracken, vice chairman Martin Feldstein, president and chief executive officer

#### **Directors at Large**

John H. Biggs Andrew Brimmer Carl F. Christ George T. Conklin, Jr. Don R. Conlan Kathleen B. Cooper Jean A. Crockett George C. Eads Martin Feldstein George Hatsopoulos Lawrence R. Klein Franklin A. Lindsay Paul W. McCracken Leo Melamed Robert T. Parry Peter G. Peterson

Geoffrey Carliner, executive director Charles A. Walworth, treasurer Sam Parker, director of finance and administration

> Douglas D. Purvis Robert V. Roosa Richard N. Rosett Bert Seidman Eli Shapiro Donald S. Wasserman

#### **Directors by University Appointment**

Jagdish Bhagwati, Columbia William C. Brainard, Yale Glen C. Cain, Wisconsin Franklin Fisher, Massachusetts Institute of Technology Saul H. Hymans, Michigan Majorie B. McElroy, Duke James L. Pierce, California, Berkeley Andrew Postlewaite, Pennsylvania Nathan Rosenberg, Stanford Harold T. Shapiro, Princeton Craig Swan, Minnesota Michael Yoshino, Harvard Arnold Zellner, Chicago

#### **Directors by Appointment of Other Organizations**

Marcel Boyer, Canadian Economics	Charles Lave, American Economic
Association	Association
Rueben C. Buse, American Agricultural	Rudolph A. Oswald, American Federation
Economics Association	of Labor and Congress of Industrial
Richard A. Easterlin, Economic History	Organizations
Association	Dean P. Phypers, Committee for Economic
Gail Fosler, The Conference Board	Development
A. Ronald Gallant, American Statistical	James F. Smith, National Association for
Association	Business Economists
Robert S. Hamada, American Finance	Charles A. Walworth, American Institute of
Association	Certified Public Accountants

#### **Directors Emeriti**

Moses Abramovitz	Gottfried Haberler	George B. Roberts
Emilio G. Collado	Geoffrey H. Moore	William S. Vickrey
Thomas D. Flynn	James J. O'Leary	

#### Relation of the Directors to the Work and Publications of the National Bureau of Economic Research

1. The object of the National Bureau of Economic Research is to ascertain and to present to the public important economic facts and their interpretation in a scientific and impartial manner. The Board of Directors is charged with the responsibility of ensuring that the work of the National Bureau is carried on in strict conformity with this object.

2. The President of the National Bureau shall submit to the Board of Directors, or to its Executive Committee, for their formal adoption all specific proposals for research to be instituted.

3. No research report shall be published by the National Bureau until the President has sent each member of the Board a notice that a manuscript is recommended for publication and that in the President's opinion it is suitable for publication in accordance with the principles of the National Bureau. Such notification will include an abstract or summary of the manuscript's content and a response form for use by those Directors who desire a copy of the manuscript for review. Each manuscript shall contain a summary drawing attention to the nature and treatment of the problem studied, the character of the data and their utilization in the report, and the main conclusions reached.

4. For each manuscript so submitted, a special committee of the Directors (including Directors Emeriti) shall be appointed by majority agreement of the President and Vice Presidents (or by the Executive Committee in case of inability to decide on the part of the President and Vice Presidents), consisting of the three Directors selected as nearly as may be one from each general division of the Board. The names of the special manuscript committee shall be stated to each Director when notice of the proposed publication is submitted to him. It shall be the duty of each member of the special manuscript committee signifies his approval within thirty days of the transmittal of the manuscript committee withholds his approval, the President shall then notify each member of the Board, requesting approval or disapproval of publication, and thirty days additional shall be granted for this purpose. The manuscript shall then not be published unless at least a majority of the entire Board who shall have voted on the proposal within the time fixed for the receipt of votes shall have approved.

5. No manuscripts may be published, though approved by each member of the special manuscript committee, until forty-five days have elapsed from the transmittal of the report in manuscript form. The interval is allowed for the receipt of any memorandum of dissent or reservation, together with a brief statement of his reasons, that any member may wish to express; and such memorandum of dissent or reservation shall be published with the manuscript if he so desires. Publication does not, however, imply that each member of the Board has read the manuscript, or that either members of the Board in general or the special committee have passed on its validity in every detail.

6. Publications of the National Bureau issued for informational purposes concerning the work of the Bureau and its staff, or issued to inform the public of activities of Bureau staff, and volumes issued as a result of various conferences involving the National Bureau shall contain a specific disclaimer noting that such publication has not passed through the normal review procedures required in this resolution. The Executive Committee of the Board is charged with review of all such publications from time to time to ensure that they do not take on the character of formal research reports of the National Bureau, requiring formal Board approval.

7. Unless otherwise determined by the Board or exempted by the terms of paragraph 6, a copy of this resolution shall be printed in each National Bureau publication.

(Resolution adopted October 25, 1926, as revised through September 30, 1974)

## Contents

	Preface	ix
	Introduction Charles T. Clotfelter and Michael Rothschild	1
1.	The University in the Marketplace: Some Insights and Some Puzzles Michael Rothschild and Lawrence J. White Comment: Martin Feldstein	11
2.	Adolescent Econometricians: How Do Youth Infer the Returns to Schooling? Charles F. Manski Comment: Eric A. Hanushek	43
3.	<b>Trends in College Entry among Whites,</b> <b>Blacks, and Hispanics</b> Robert M. Hauser <i>Comment:</i> Stephen V. Cameron and James J. Heckman	61 n
4.	<b>The Growing Concentration of Top Students</b> <b>at Elite Schools</b> Philip J. Cook and Robert H. Frank <i>Comment:</i> Malcolm Getz	121
5.	Future Graduate Study and Academic Careers Jerry R. Green <i>Comment:</i> Charlotte V. Kuh	145

6.	How Would Universities Respond to Increased Federal Support for Graduate Students? Ronald G. Ehrenberg, Daniel I. Rees, and Dominic J. Brewer Comment: Michael S. McPherson	183
7.	<b>Optimal Investment Strategies for University</b> <b>Endowment Funds</b> Robert C. Merton <i>Comment:</i> George M. Constantinides	211
8.	<b>Public Choices in Public Higher Education</b> John M. Quigley and Daniel L. Rubinfeld <i>Comment:</i> Helen F. Ladd	243
	Contributors	285
	Author Index	287
	Subject Index	291

### Preface

In 1989 the National Bureau of Economic Research launched a program on the economics of higher education. Although numerous NBER studies have touched on economic aspects of education, previous to this effort the National Bureau had sponsored only a limited number of studies focused solely on education.1 Similar to those operating in other areas of applied economic analysis, such as labor and public economics, the NBER program in higher education has sponsored research projects and periodic meetings at which scholars discuss ongoing and completed research. The program's first research project focused on three topics of current policy significance: the demand for undergraduate education, the supply of faculty, and the rise in the cost of higher education. This investigation culminated in the publication of Economic Challenges in Higher Education (1991, University of Chicago Press), by Charles T. Clotfelter, Ronald G. Ehrenberg, Malcolm Getz, and John J. Siegfried. The aim of this volume was to frame each of these questions in economic terms and to discuss data and empirical research that would be useful in answering them.

The program's working group on higher education met three times in 1989 and 1990 in Cambridge, Massachusetts, with some 35 NBER research associates and other economists participating. Unlike most groups of economists who study an industry, all of the participants had first-hand experience with "firms" in this industry, and a few were current or past administrators, includ-

1. Among these sponsored studies are Education, Income, and Human Capital (1970), edited by W. Lee Hansen; Schooling, Experience, and Earnings (1974), by Jacob Mincer; Higher Education and Earnings: College as an Investment and Screening Device (1974), by Paul J. Taubman and Terence Wales; The Effect of School Quality on Achievement, Attainment Levels, and Lifetime Earnings (1975), by Paul Wachtel; The Definition of College Quality and Its Impact on Earnings (1975), by Lewis C. Solomon; and Education as an Industry (1976), edited by Joseph T. Froomkin, Dean T. Jamison, and Roy Radner. ing several deans and provosts and one former president. While some of the participants brought with them considerable experience in research on higher education, others were experts in fields such as labor economics and industrial organization who were applying economic models to higher education for the first time. It became clear from the meetings of this group that higher education offered numerous questions to which economic analysis might be fruitfully applied.

In light of these possibilities for applying economic approaches, the editors in 1990 invited a number of scholars to write papers for a conference devoted specifically to research on the economics of higher education. Authors were encouraged to present new empirical findings and to discuss issues of methodology that arise in the study of higher education. The authors could also consider the effects of public policy, but in accordance with the practice followed in Bureau studies, published papers can offer no policy recommendations. In commissioning these studies, we did not attempt to achieve comprehensive coverage of all aspects of the economics of higher education. Rather we sought to have solid research done on important topics, particularly topics that had previously not received a great deal of careful analysis by economists. The conference was held in May 1991 in Williamsburg, Virginia, with drafts presented and discussed that corresponded to the chapters in the current volume. Following the conference, the authors revised their papers, and the assigned discussants put their comments into written form.

The objective of a conference such as this one is to foster research on an important topic of study in two ways—directly, through the published papers themselves, and indirectly, through the subsequent research that this work will stimulate. We believe not only that the first objective has been achieved but that there is every propect for success on the second as well. The chapters contained here provide new insights on important issues and raise a host of questions that should motivate future research.

We are grateful to the Andrew W. Mellon Foundation for its support of this project.

Charles T. Clotfelter and Michael Rothschild