

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

Volume Title: Education, Income, and Human Behavior

Volume Author/Editor: F. Thomas Juster, ed.

Volume Publisher: NBER

Volume ISBN: 0-07-010068-3

Volume URL: <http://www.nber.org/books/just75-1>

Publication Date: 1975

Chapter Title: Front matter, Education, Income, and Human Behavior

Chapter Author: F. Thomas Juster

Chapter URL: <http://www.nber.org/chapters/c3690>

Chapter pages in book: (p. -28 - 0)

*Education, Income,  
and Human Behavior*

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# *Education, Income, and Human Behavior*

edited by *F. Thomas Juster*

with chapters by

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A Report Prepared for  
The Carnegie Commission on Higher Education  
and the National Bureau of Economic Research  
A Conference  
of the National Bureau of Economic Research

**MCGRAW-HILL BOOK COMPANY**

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Montreal New Delhi Panama Paris São Paulo

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*The Carnegie Commission on Higher Education,  
2150 Shattuck Avenue, Berkeley, California 94704,  
and the National Bureau of Economic Research,  
261 Madison Avenue, New York, New York 10016,  
have sponsored preparation of this report as  
part of a continuing effort to obtain and present  
significant information for public discussion.  
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EDUCATION, INCOME, AND HUMAN BEHAVIOR

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This book was set in Vladimir by University Graphics, Inc.  
It was printed and bound by The Maple Press Company.  
The designers were Elliot Epstein and Edward Butler.  
The editors were Nancy Tressel and Michael Hennelly  
for McGraw-Hill Book Company and Verne A. Stadtman  
and Sidney J. P. Hollister for the Carnegie Commission  
on Higher Education. Audre Hanneman supervised preparation  
of the index. Milton J. Heiberg supervised the production.

Library of Congress Cataloging in Publication Data

Juster, Francis Thomas, date  
Education, income, and human behavior.

"A report prepared for the Carnegie Commission on  
Higher Education."

"A Conference of the National Bureau of Economic Research."

1. College graduates—United States. 2. Education,  
Higher—Economic aspects—United States. I. Beaton,  
Albert E. II. Carnegie Commission on Higher Education.  
III. National Bureau of Economic Research. IV. Title.

LB2424.J87 301.44'5 73-85442

ISBN 0-07-010068-3

1 2 3 4 5 6 7 8 9 MAMM 7 9 8 7 6 5

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# Foreword

by Clark Kerr, Chairman

*Carnegie Commission on Higher Education*

The precise measurement of the influence of educational attainment on behavior is one of the most important and sensitive issues facing decision makers in many areas of our society. From the private citizen who must decide how much to invest in higher education, to the government official who is charged with the planning and implementation of public policy, most of us are faced at one time or another with investment decisions regarding education.

In a recent Carnegie Commission publication, *Estimating the Returns to Education: A Disaggregated Approach*, Richard Eckaus warns that higher education may not "pay off" as much as we in the United States have traditionally assumed. He urges that no decision on the degree of educational "payoff" be made until a lot more hard evidence has been collected and evaluated. In making this recommendation, Eckaus not only calls for a closer look at one of the fundamental assumptions of American society, he also underlines the need for quantitative and qualitative judgments about the nature and extent of education's influence on human behavior.

Particularly timely, therefore, is this collection of essays edited by F. Thomas Juster, which makes a significant start toward providing the kind of evaluation Eckaus recommends.

The first group of essays in this wide-ranging book focuses on the direct financial returns to individuals, emphasizing in particular the degree to which educational attainment produces higher annual and lifetime earnings by increasing the value of time spent in the labor market. But these essays also examine such related questions as: Does the contribution of ability to income vary with the level of formal schooling and other factors, or is it independent of those factors? What spe-

cific types of formal schooling or ability influence earnings and how can they be measured? What are the effects of both formal schooling and informal training and learning on lifetime earnings? In seeking answers to these and other questions, Mr. Juster and his colleagues have examined from several viewpoints how the development and investment of human skills and knowledge (human capital) determine differences in the level and time-profile of labor market earnings.

If education does enhance productivity in the job market, as this first group of essays suggests, it most likely influences behavior in other areas as well. Attitudes, values, and behavior, many have suggested, are significantly altered by education, but studies of the influence of educational attainment on these "noneconomic" aspects of human behavior have been largely subjective evaluations. The six essays in the second part of this book begin to replace these evaluations with empirical findings, looking at such traditionally "noneconomic" areas as fertility and family size, political attitudes, and participation in illegal activities.

This thorough and multifaceted book provides us with a substantial body of evidence that formal schooling repays, in the monetary as well as in the nonmonetary sense, both the individual who receives the education and the society as a whole. Moreover, these "payoffs" for educational attainment are not, as some have assumed, restricted to those with favorable family background or exceptionally high ability. F. Thomas Juster and his colleagues have thrown much-needed light on the highly complex relationship between higher education and human behavior.

*June 1974*

# *Foreword*

*by John R. Meyer, President*

*National Bureau of Economic Research*

This book is the second published jointly by the Carnegie Commission on Higher Education and the National Bureau of Economic Research on the returns to investments in schooling. It contains two sets of essays written by NBER staff affiliates under the direction of F. Thomas Juster.

Both sets of essays are germane to the debate over the appropriate role of schooling as a social policy instrument for improving well-being. Well-being, in this context, can, or course, be defined in many, not necessarily mutually exclusive, ways: as enhancement of an individual's private ability to earn income; as a reduction in the general inequality of income in a society; or as an improvement in the general social and cultural milieu of a society.

Previous studies, at least those that have been quantitative in character, have largely concentrated on calculating the private returns realized by individuals from their personal investments in schooling (or, more formally, the augmentation of their own human capital). These calculations have focused mainly on determining the differential earnings, salaries, or wages received by individuals with different educational histories; the assumption has been that much of these observed differentials in earnings are attributable to the extra education. Needless to say, and as long recognized by those undertaking to make these measurements, many other factors, such as innate ability, preschool training, and on-the-job training, might also create earnings differentials.

The first set of essays in this volume is essentially concerned with measuring these private returns and, more particularly, with how to differentiate the contributions to income realized through education from those realized because of such other qualities as one's IQ, upbringing, or on-the-job experience.

Man, as has often been observed, does not live by bread alone. In the particular context of educational economics this has led to the observation that when an individual makes an investment in his own education, this is an act that is likely to benefit society as well as the individual. The educated person, in short, might be a better citizen, less prone to criminal activity, and a more effective contributor in the many civil and social roles that all of us assume outside our work places and, perhaps, in many activities not normally evaluated in market terms, such as the parental role in child upbringing. The expectation that these many social or other nonmarket benefits from education may often be large apparently underlies much of the public support for education in our and other societies. Even if these social advantages of education could not be identified, the educated person's economic benefits or contribution might extend well beyond those of the labor market: for example, into more enlightened and effective consumer or savings behavior.

A major difficulty in evaluating these and related arguments concerning the social, external, or non-labor market benefits of education is establishing their quantity. The second set of essays in this volume represents at least a beginning of such quantification. That is, these essays attempt to document some of the effects of education on savings behavior, on the propensity for illegal behavior, on fertility and family size, and on social, political, and economic attitudes.

Although these latter essays deal with their subjects quantitatively and adduce evidence of systematic relationships with schooling, no attempt is made to calculate an implied non-pecuniary "rate of return" to schooling. One reason is that it is not clear in all cases which effect should be labeled beneficial to the individual or to society. For example, less than complete consensus probably exists within any society, including our own, as to what is desirable fertility behavior—that is, the proper size for a typical family. Similarly, a higher savings rate may be deemed socially desirable by some and undesirable by others—and even individual views on this question may fluctuate with the economic or cyclical circumstances. In short, in judging the efficacy of schooling as an instrument for social policy, it may prove more difficult to select or agree upon the criteria for evaluation than to measure the actual influence.

Indeed, as the reader of these essays will quickly learn, the various contributors to this volume are hardly of one mind on these matters themselves. The authors and Mr. Juster held a series of meetings during the writing and revisions of the essays, sharing criticisms and suggestions, but they hardly came to full agreement among themselves on a number of issues. Several of these essays, in fact, deal with the same or similar questions, but from differing points of view and often with differing conclusions. The result is thus more in the nature of a conference volume than an integrated staff research report of the type more conventionally published by the National Bureau of Economic Research.

Accordingly, the Board of Directors of the National Bureau approved publication of these essays as a conference volume, which reflects the views of the respective authors, and which is exempted therefore from the rules governing submission of manuscripts for critical review and approval by the directors themselves. In short, this volume is offered as one more contribution, hopefully more quantitative, to the long-standing debate on the social and economic value of education, rather than as a definitive statement of quantitative findings about these issues.

*June 1974*

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*Relation of the National Bureau Directors  
to Publications Reporting Conference Proceedings*

Since the present volume is a record of conference proceedings, it has been exempted from the rules governing submission of manuscripts to, and critical review by, the Board of Directors of the National Bureau.

(Resolution adopted July 6, 1948,  
as revised November 21, 1949,  
and April 20, 1968)



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